Army Aviation

JULY 31, 1969

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(See back cover)

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VOLUME 18, NUMBER 7

ARMY AVIATION

JULY 31, 1969

Endorsed by the Army Aviation Ass'n of America

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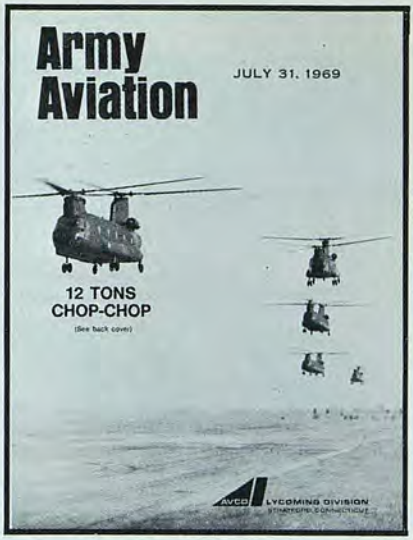

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The **"1969 Army Aviation Materiel Issue"** will be published as the August 31, 1969 issue of ARMY AVIATION.

SPEAKING OUT!

LOST, LOSTER, LOSTEST!

LIKE many of us whose present exposure to combat is obtained by crossing the street in the middle of a block, I was impressed by the televised report of *(Brig.) General Allen M. Burdett, Jr.* on the Huntley-Brinkley show.

General Burdett tried hard to develop the theme that one could lose more helicopters while still reducing the rate of loss. He was paid the ultimate compliment by the newscasters — they made no attempt to further explain, interpret, extrapolate, or confuse the listener.

Even so, *General Burdett* did not succeed in gathering all the rank and file into his camp. There is a certain reluctance on the part of some individuals to accept any official explanation of bad news, and the report did little to displace this non-belief. One conversation of a personal nature was begun by a skeptical individual:

"Who was that good-looking young man on TV?"

"That was General Allen Burdett," I responded. "You remember him from Fort Rucker. He was a Colonel then, and was head of the Combat Developments Agency."

"What was he talking about?"

"You heard him. What do you think he was talking about?"

"I wasn't really listening, and besides, I was waiting for Chet Huntley to come back on and tell us what he didn't say."

"Didn't say?"

"Yes, you know, although the authorities say that black is not red, they are careful not to say that black is not green! That sort of thing."

"Could we get back on track. Do you really want to know what he said?"

"If you're sure you know. I don't want to get confused and you always seem to get me mixed up."

"General Burdett said that although we had lost more helicopters this past month than in any other preceding month, the rate of loss was much improved."

"You mean he was happy that we were losing more?"

"Of course not. An improved loss rate means fewer losses."

"But you just said . . . "

"I said he said that the *rate* was improving. Had the rate not improved, we would have lost more."

By
AUSTIN GARLAND

Up Tight!

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LOST, LOSTER, LOSTEST!

(Continued from Page 4)

"He's just guessing and I think that's a terrible thing to guess about."

"No, he wasn't guessing. If the old rate had remained the same, we would have lost more helicopters than we did."

"That's silly. If he can tell how many he's going to lose based on a rate, why doesn't he just change the rate and not lose so many? Or not fly so many hours and keep the old rate? I don't think he knows what the rate is."

"You're right. He doesn't always know what the rate *is;* he only knows what the rate *was*."

"Then why was he on the news?"

"To explain that although we lost more than ever before, we still lost less than we would have, had we not gotten an improved loss rate."

"Who gave him the new rate?"

"No one gave it to him. He computed it by dividing the sorties flown by the number of losses."

"Arithmetic! You always fall back on arithmetic because you know it gets me mixed up. The way I see it, the pilots give him a new rate every so often so that he will have something to talk about on the news. Why don't they just give him a real low rate so that we wouldn't lose so many helicopters and he would have some good news once in a while instead of always having to try to convince people that black is really white, except that we see it through dirty eyes . . ."

Now, if push comes to shove, I'll admit with you that this conversation does not appear likely to impart any useful information to either party. Because there were other considerations involved – hot, cooked meals for example – I felt an obligation to stick around. You, of course, have no such obligation and are free to depart. It will be less embarrassing for me if you do. However, if you insist, let's continue:

"Uh, huh!"

"What is *that* supposed to mean? Do you agree that the pilots could give General Burdett a lower rate and make everybody happy?"

"Not exactly. It's true that a pilot is aboard every time the helicopter flies, and to that extent, they do establish the rate. But, there are losses which occur on the ground – losses which the pilot has nothing to do with."

"Now you really have got me confused. If we lose helicopters on the ground, why do you establish a rate based on the number of flying sorties?"

"That's a good question. I don't know the answer. Maybe the rate should be based on something else – hours of exposure, for instance."

"Yes, but you told me that the enemy was all around us over there and that no place was really secure. That means that everything is exposed all the time. If everything has equal exposure, then greater losses must mean an increasing loss rate. So, how can the General say that the rate is improving when we lose more helicopters?"

"Well, look. Suppose there were more helicopters being exposed. Now, if they were being lost at the old rate, we could forecast that so many would be destroyed. If less than that number were lost, then we could say the rate is improving."

"Boy, are you reaching! The fact is, you just don't want to account for the extra losses, and all of you men stick together in your excuses. You all think that because we don't believe in your arithmetic, we don't understand the problem!"

Usually, at about this stage of a conversation, I develop an urgent need to get off somewhere by myself. In this case, however, she was mixing martinis and opening the oven door now and then to check on those mys-

(Continued on Page 36)

PRESIDENTIAL UNIT CITATION

The Commander-in-Chief of the Armed Forces of the United States has awarded the Presidential Unit Citation to the 335th Assault Helicopter Company of the 1st Aviation Brigade. The award to the "Cowboys" is for extraordinary heroism during Operation MacArthur in Kontum Province in Nov., 1967.

THE THIRTEENTH DIRECTOR

John L. Klingenhagen was born in St. Louis, Missouri, on 2 May 1922. He was graduated from Christian Brothers College, St. Louis, and attended St. Louis University.

General Klingenhagen's service began in 1939 as an enlisted man with the 138th Infantry Regiment, Missouri National Guard, where he rose to the grade of sergeant. He attended the Army Engineer School at Ft. Belvoir to earn his commission as a second lieutenant in the Corps of Engineers in 1942.

During World War II, General Klingenhagen served with the combat engineers in five campaigns.

He graduated from the Command and General Staff College at Fort Leavenworth, Kansas, in 1946. He was assigned to the 307th Airborne Engineer Battalion, and then served as the Assistant Chief of Staff for Intelligence for the 82d Airborne Division for two years. He served as Commander of the 2d and 3d Battalions, 23d Infantry Regiment, in Korea during two campaigns in 1952.

After Korea, General Klingenhagen served the next six years on the Army General Staff and in the Office of the Secretary of Defense. He graduated from the National War College in 1960 and was assigned as Deputy for Research, Development, Testing and Evaluation Systems at the Transportation Materiel Command in St. Louis. In 1963 he was a member of the Tactical Mobility Requirements Board (Howze Board) studying logistical operations and support as related to tactical air mobility.

General Klingenhagen served for twenty-eight months in Vietnam as Chief of Logistics and Communications of the Army Concept Team and later as Deputy Commanding Officer of the U.S. Army Support Command.

In July 1965, he was appointed Commanding Officer of the U.S. Army Aviation Materiel Laboratories at Fort Eustis, Virginia.

In September 1966, General Klingenhagen became Chief of Operational Readiness in Headquarters, U.S. Army Materiel Command, Washington, D.C. where he served until January 1967 at which time he became Special Assistant for Logistical Support of Army Aircraft to the Deputy Chief of Staff for Logistics.

General Klingenhagen became Deputy Assistant Chief of Staff for Logistics (Supply & Maintenance) in December 1967, and remained in this position until June 1968 at which time he became the Assistant Deputy Chief of Staff for Logistics (Supply & Maintenance).

In October 1968, he was selected to be the Advanced Aerial Fire Support System Manager, Office of the Chief of Staff, U.S. Army, a position he held until 1 July 1969 when he was appointed Director of Army Aviation, Office, Assistant Chief of Staff for Force Development, Department of the Army.

He is a qualified combat infantryman, master parachutist, senior Army Aviator and gliderist, and was awarded the Special Forces Master Parachute Badge of the Republic of Vietnam.

The New AR 95-1

By Major General John L. Klingenhagen, Director of Army Aviation, OACSFOR, DA

IT is indeed an honor to become the 13th Director of Army Aviation and to follow in the footsteps of the outstanding Army Aviators who have held this position: *Hamilton H. Howze, Ernest F. Easterbrook, Hallett D. Edson, Clifton F. von Kann, Delk M. Oden, Robert H. Schulz, John J. Tolson, George P. Seneff, Delbert L. Bristol, Robert R. Williams, Edwin L. Powell, Jr., and Jack W. Hemingway.*

I am pleased and gratified to have *Colonel Jack Hemingway* remain in this office as Deputy Director. His experience and assistance will be invaluable to me.

There are several items this month that should be of interest to Army Aviators. You will recall the recent change in annual minimum flying requirements for Category B aviators. This was discussed in the May Newsletter.

Several other policy changes will be forthcoming shortly with the publishing of the new AR 95-1. As you know, the 95 series of regulations has grown topsy-like for years and it took a good operations officer to be able to gather a complete collection for the unit and then to keep up with the changes.

This new publication will supersede ten of the present 95 series regulations:

95-1, Army Aviation — General Provisions;

95-4, Flying Time, Duty, Transition Training, Proficiency Aircrew Checklist and Multiengine Operation;

95-6, Release of Information to Relatives of Persons Involved in Aircraft Accidents or Incidents;

95-10, Use of Army Aviation in Disaster Operations and Search and Rescue Operations;

95-13, Safety Procedures for Operation and Movement of Army Aircraft on the Ground;

Paragraph 3 and 4 of AR 95-15, Aerial Flights; Piloting Aircraft, Parachute Jumps;

95-17, Flight Time Limits and Crew Rest for Rated Crew Members;

95-29, Voluntary Aviation Hazard Reports, "Share It" Program;

95-32, Annual Flight Requirements for Army Aviators;

95-51, Aerial Observer Training.

This combination will eliminate the redundancy and the need for cross referencing that exists in these AR's. Additionally, the new regulation is organized to facilitate and simplify future changes. The AR will be in loose leaf form with five chapters, each of which is divided into sections, thus when a change is published a single page or an entire chapter can be replaced.

Policy changes . . .

The most significant policy changes which you will find in this regulation are as follows:

a. Changes in proficiency flying requirements as they relate to duty MOS (mentioned above).

b. Revision of the "Share it" program to make it more meaningful.

c. Making the use of flight orders for cross-country flights permissive in nature rather than mandatory.

d. Specifying when parachutes, safety, and survival equipment will be utilized, thereby relieving the field commander of the burden of having to waive their use.

e. Prescribing that only Department of the Army pilot and crew member checklists will be used in Army aircraft.

f. Authorizing use of Army single engine aircraft as launch vehicles for gliders.

g. Changes to requirements for use of oxygen above 10,000 feet. The overall time limit without oxygen between 10,000 and 14,000 remains at one hour; however, only 30 minutes of the total may be flown between 12,000 and 14,000 feet.

h. Authorization for rotary wing only aviators located in areas where sufficient instrumented helicopters are not available to utilize synthetic trainers to satisfy instrument minimums.

i. Requirement that personnel logging flight evaluator time be qualified in the aircraft in which they perform these duties.

The regulation was submitted to TAGO for publication on 3 July 1969 and should hit the field sometime in August or September.

While we are on the subject of regulations, *AR 95-64, Individual Flight Record and Flight Certificate,* is presently being revised and should be ready for final staffing sometime in August. One of the items of major interest in this regulation is the authorization of an *Individual Flight Record* folder. The folder is similar to the 201 record folder and should be available in August or September. The DA Form No. is 35-13.

Senior officer training

A second item of interest is the senior officer aviator training program. Several months ago, DA announced that twenty-five Colonels and Lieutenant Colonels (P) would be selected to attend initial flight training. Applicants had only to send a postcard to OPXAA stating that they volunteered for flight training.

More than 300 responses were received prior to the cut-off date of 15 July. A selection board was convened and twenty-five primary and twenty-five alternate names were selected. Notification will be made by worldwide message in early August. An entry will be made in the 201 file of those applicants not selected so that they may be considered if a similar requirement arises in the future.

During the period that these applications were being received, other senior officers were also showing interest in the Aviation Program. Since April of this year seven General Officers have been selected to become Army Aviators:

BG John C. Bennett, BG Thomas J. Camp, Jr., BG Harold G. Moore, Jr., BG Donald V. Rattan, BG Samuel L. Reid, BG John P. Traylor, and COL Sam S. Walker (P).

In addition to these, several other General Officers have applied for flight training. Their applications are presently being processed and will be announced in the near future.

The enthusiasm evidenced by the interest of these senior officers is particularly gratifying. Their participation will greatly benefit Army Aviation.

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New excellence in flying qualities. Smooth boost control, great stability and rapid control response.

Rugged honeycomb airframe design.

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Is flight pay equitable for WO's?
Would you fly without flight pay?
Some surprising survey answers . . .

IMPROVEMENTS IN INCENTIVE AND RETENTION

BY LIEUTENANT COLONEL SAMUEL P. KALAGIAN, USAAVNS, FORT RUCKER, ALA.

SAMPLE surveys are valuable tools of research sometimes because the answers given in response to the survey questions quite often vary drastically from the author's preconceived notions regarding the subject. Such was the case in a sample survey on flight pay, proficiency flying, and flight excusal conducted by the author as research for this study.

A total of 300 questionnaires were distributed to the Commandants of the Army Aviation Schools at Fort Rucker, Fort Wolters, and Fort Stewart. The fourteen aviator students in the current Army War College class also participated. Responses were excellent: 272 questionnaires were returned by 109 field grade aviators (40%); 68 by company grade officer aviators (25%); and 95 by warrant officer aviators (35%). The respondees included nine Master Army Aviators, 85 Senior Army Aviators, and 178 Army Aviators.

Major findings

1. The major motivating factors for entering Army aviation as a career, (Question 4) were adventure-challenge (53%) and money (43%). The monetary inducements were implied in such answers as "future job potential" and "promotion potential" as well as the obvious "extra money."

2. The current rates of flight pay were considered inequitable by 62% of all respondees answering Question 5. Further analysis indicated that while only 44% of the commissioned officer aviators felt that the current flight pay scales were inequitable, *95% of the warrant officers objected.* Of the 168 respondees who did not favor the current system-rates, most (56%) wanted all aviators to receive the same flat rate per month so that "equal pay was received for equal risk." Some 25% wanted flight pay to be based on a percentage of base pay as it was prior to 1949. When asked to select an equitable percentage rate, this group suggested a range from 25% to 50% of current base pay. The remainder of the respondees suggested a variety of schemes, to include basing flight pay on total flight hours, on aircraft qualifications, or on years of rated service.

When those who wanted everyone to receive the same flat rate of flight pay per month were asked to recommend a dollar amount, the selections ran from a low of $130

INCENTIVE AND RETENTION

(Continued from Page 13)

per month (recommended generally by W-1's, W-2's, O-1's and 0-2's) to a high of $500 per month (recommended generally by field grade aviators).

The inference drawn from the answers and additional remarks submitted in response to Question 5 is that "inequitable" rates of flight pay has the most deleterious effect on the warrant officer aviator's morale, and particularly on his retention motivation.

In a more comprehensive survey conducted by HumRRO (in 1967) for the U.S. Army, the question was asked: "*In your opinion, upon what should flight pay be based?*" The responses of 1,763 warrant officer aviators to this question indicated "*Amount of time as a rated aviator (47%)*" and "*Level of risk associated with flying (38%).*" To the second question, "*Should flight pay be the same for everybody?*" 54% of 1,942 warrant officer aviators replied "*Yes.*"

Fly without flight pay?

3. The same survey, as have a number of other surveys conducted by the Army and its sister services, has confirmed that there are a number of aviators (42%) who would continue to fly in the Army even if flight pay were discontinued. Analyzing this one step further, about 50% of the commissioned responded in the affirmative while only 33% of the warrant officers replied "Yes."

The main reasons given for continuing to fly without the inducement of flight pay were "*I love to fly*" and "*It's what I know best in the Army.*" The author believes that the affirmative answers given by the commissioned officers stem from the fact that many of them have served on tours of ground duty during their careers and are intimately aware of the menial monotony of the "ground-pounders' " life with its lack of variety.

However, in response to whether or not flying was considered more hazardous than any other duty in the military (Question 7), 61% replied in the affirmative. Judging by the number of similar extemporaneous remarks added to the pure "Yes" or "No" requirements of the question generally stating "But not as dangerous as an Infantry officer/enlisted man in combat," the survey question may have been poorly worded and should have had two parts, one for "*in combat*" and one for "*in peacetime.*"

The responses reflect, however, that the average Army Aviator does appreciate and is fully cognizant of the heinous mission of the Infantry "grunts" and that this may be the key factor in the willingness of the Army Aviators in Vietnam to exert the extra effort, regardless of danger to self or crew, to support the combat infantryman on the ground.

Flight Excusal

4. Flight excusal[1] was overwhelmingly endorsed by 80% of the respondees (Question 8). Perhaps it may have been better not to have explained the provisions of flight excusal or cite the authority from which it was derived and then questioned the respondees on their knowledge of the subject. Their answers may have differed greatly. This point could be considered in any follow-on research on the flight excusal subject.

Category B Assignments

5. The responses to the questions regarding proficiency flying in the Army (Question 9), were about what was expected. Just about all of the field grade aviators (83 out of 109) had served in a Category B assignment[2] whereas neither the company grade officers (15 out of 68) nor the warrant officers (9 out of 95) had much opportunity to serve in such assignments.

This is not unusual. Under current criteria, an officer entering the active Army today is promoted to the grade of Captain after about twenty-four months service.

An Army Aviator must also serve three consecutive years in Category A flying assignments upon graduation from flight school, excepting attendance at his branch career school and similar type assignments. The many requirements for Army Aviators in

[1]An aviator in *flight excusal status* does not pilot a military aircraft in any capacity, draws his flight pay each month, must maintain physical qualification to fly, and is eligible to be returned to flying duties if his full-time rated services are required.

Vietnam and at the flight training centers as flight instructors just about preclude Category B assignments for company grade aviators, except for the aforementioned career branch schooling.

The warrant officer, on the other hand, simply has no other choice but to serve in consecutive Category A flying assignments. Exceptions, such as those individuals serving as action officers in the Aviation Warrant Officer Career Branch, DA, are a rare case. Just recently, however, DA announced the establishment of a career branch schooling program for warrant officers, so a small number will soon begin to feel the effects of the dual role that so many commissioned aviators have experienced, "Schoolboy" and proficiency pilot, struggling to acquire an aircraft and the time to complete proficiency requirements. At a later time, this might make a difference in the warrant officers' responses to a question similar to Question 10 which is discussed in detail below.

Where to draw the line?

As was envisioned, the 107 aviators who had served on ground duty were split (49% affirmative) in their belief that the amount of proficiency flying (80-100 hours per year) they accomplished was sufficient to maintain their flying proficiency. This high affirmative percentage is understandable because Category B assignments in the Army have generally been limited to 12 consecutive months in the past.

The effect that flying proficiency – only aircraft, usually not tactical aircraft, and a limited number of hours in a year has on "forgetting" and on the deterioration of basic flying skills of individual aviators is closely related to (a) the total previous flying experience of the individual, (b) the constructive use of the flying hours available, and (c) the pride and responsible nature of the individual.

Navy experience

A recent study conducted by the U.S. Navy indicated that its proficiency flying program was a costly proposition due to the higher incident of aircraft accidents among the proficiency-flyer group and because there were no appreciable savings realized in usable flight experience carryover into their refresher flight training programs. Naval Aviators normally serve 24 to 36 consecutive months in a shore duty billet.

Six out of these 107 aviaitors suffered an aircraft accident within the first six months following their Category B tour of duty, and none of the six who had accidents had attended a formal refresher training course. The current Army aircraft accident rate is 1.9 per 100,000 hours. (Feb., 1969). Rough translation of the accident rate for these 107 Category B pilots compares to a rate of 22.2 per 100,000 hours! (Assuming each aviator flew 50 hours during the last six months of his Category B assignment and as much as 200 hours during his first six months on Category A duties, the total would equate to six accidents for 26,750 flying hours).

Limited refresher training

Only 22 percent (12) of those returning to flying assignments had ever been given refresher flight training before resuming Category A duties. Whether this training was accomplished at an Army flight training center or in a unit-sponsored local refresher course was not determined. No formal system currently exists within the Army Aviation Program to cycle all Category B personnel through a refresher flight training course prior to restoring them to Category A duties.

Sometimes an individual Army Aviator is

WARRANT CAREER COURSE

The U.S. Army's first career development course for warrant officers began in early July at Fort Rucker with an address and orientation by MG Delk M. Oden, CG of the post and commandant of the Army Aviation School.

The Aviation Warrant Officer Career Development Intermediate Class, 70-1, was told that it is the threshold of a series of such classes for Army warrant officers.

"The Army has many plans for warrant officers," he said. The general then predicted that warrant officer grades will be extended to W-5 and W-6; that flight pay increments will be equalized with that paid to commissioned officers; and that slots (for promotion) will be developed the same as for commissioned officers.

INCENTIVE AND RETENTION

(Continued from Page 15)

selected to attend a makeshift refresher training course at an Army flight center TDY in conjunction with PCS orders to a flying assignment in Vietnam; however, the Army normally relies on the gaining unit – and sometimes tasks the losing unit – to restore an Army Aviator's proficiency, as is deemed necessary.

Although the USAF, USN, and USMC formal refresher flight programs give their aviator trainees between 40-80 hours of flight training, Army Aviators (77% who responded) felt that 10-20 refresher hours was adequate to restore an Army Aviator's proficiency.

Warrants say, "No!"

6. Question 10 asked "*Should the Army authorize flight waiver or flight excusal for aviators serving in Category B duties?*" Overall, 52% replied in the affirmative; however, 68.4% of the warrants said, "No." In my opinion, the warrants' negative responses are interrelated with their vehement position concerning the inequity in the current flight pay scales (Question 5). The warrant community, perhaps, has acquired a built-in animosity toward the flight pay system which, in turn, has been transferred toward the commissioned aviators because they, the warrants, are not "*receiving equal pay for equal risk.*"

At the Army flight training centers where the majority of the questionnaires were sent for completion, the warrant aviators handle the bulk of the flying instruction but receive much less in monthly flight pay than their commissioned aviator supervisors, section and division commanders, and other rated staff officers on the various posts; and in some cases, *less* than the commissioned student officer trainees they may be instructing.

Tours of duty in Vietnam aggravate this feeling of second-class status. The warrant aviator is infinitely more vulnerable to repetitive tours in Vietnam than a commissioned field grade aviator and even when he serves in Vietnam, the warrant officer usually flies two to three times more combat hours than the field grade aviator.

This increased exposure, plus the fact that there are many more warrant officer aviators numerically now in Vietnam than previously, resulted in 400 warrant officer aviator casualties as compared to 262 commissioned aviator casualties during the period, 1 July 1966 to 30 November 1968.

On the other hand, the fact that 58 percent of the commissioned aviators agreed that the present flight pay scales were equitable might be an indication that the commissioned population is, in fact, being paid at an equitable rate; that they are not concerned with the overall ramifications of the current flight pay scales on the morale and retention motivation of their fellow aviators, the warrants; and that they may well be imbued with their own built-in prejudice believing that they deserve more flight pay than the warrant aviators because of the additional supervisory and command responsibilities inherent to their status as commissioned officers.

It can be said officer responsibility was recognized by the passage of the Military Pay Act of 1958 which contained special provisions for the payment of responsibility pay, ranging from $50 to $150 per month, to officers serving in positions of unusual responsibility. Regardless, if such prejudices do exist between the two major subgroups in Army Aviation, even if unbeknownst to the groups, the reputation and efficiency of the Army Aviation Program may well suffer degradation from within.

Conclusions

Army budgetary experts must stretch limited funds to ensure that the Army achieves the best buy. Every possibility for doubling up on available dollars must be explored so that training programs can continue; so that new, modern equipment can be added to the inventory; so that research and development can keep pace with an exploding technology; and so that military salaries can escalate to counter rising inflation.

There are ways to achieve real savings in the Army Aviation Program – ways that would add to its efficiency without degrading its current high standards. Savings so realized would accrue to the benefit of the entire Army and not just to aviation; how-

ever, the areas ripe for such savings are those most sacrosanct to Army Aviation: *incentive pay* and *proficiency flying*. Both are vulnerable to indiscriminate manipulation and change because of budgetary constraints. But if controlled manipulation and change were accomplished by Army planners in a judicious and timely sequence, the Army Aviation Program could shake the doldrums of the past, catch up with the present, and chart an effective course for the future.

Incentive (flying) pay rates and proficiency flying requirements have remained virtually unchanged for about twenty years. During that time, the advent of the helicopter gunship, VTOL and STOL aircraft; the concept of Army-wide air mobility; and the broadened integration of warrant officer aviators into every facet of Army Aviation have changed the scope and future posture of the entire program. To remain a modern and efficient supporting element of a forward-looking Army, Army Aviation must take a hard, uninhibited look at its policies and procedures and then purge old-fashioned concepts.

In particular, it must first consider a plan to update incentive pay scales to meet the challenges of the 70's. Second, it must reorient its proficiency flying programs in a manner to achieve maximum savings of limited funds and to insure that the program fulfills its primary purpose – that of combat readiness training.

And last, because flight excusal is interrelated with both incentive pay and proficiency flying to an extent that modifications in one triggers a need for change in the other, all three areas should receive equal priority and consideration. Each has a dynamic effect on retention of aviators. The Army Aviation Program cannot continue to suffer the low rates of retention prevalent over the past three fiscal years.

Incentive pay as catalyst

Considering the results of the survey just discussed, and comparing the total career flight pay received by a warrant officer aviator versus that of a commissioned aviator, we feel that an increase in the warrant officer's flight pay scales might be the proper catalyst to produce higher rates of retention among young warrants.

The rapid promotion cycle for commissioned officers quickly places that subgroup in a sound financial position capable of countering the temptations of civilian industry. Consideration must be given, however, to improving the pay and retention of lieutenant aviators, a subgroup important to maintain an adequate base for the commissioned aviator pool.

An equitable formula would be one that insures the warrant aviator sufficient flight pay in each grade and longevity pay step so that at the end of a twenty-year rated career he will have earned as much in total flight pay, (about $45,000) as his commissioned contemporary. Such a formula, related to current incentive pay scales, would be the easiest to legislate and fund at this time without upsetting planned increases to base pay and without adding a separate and distinctive pay schedule to the current apparatus.

For this reason, it is recommended that the flight pay for all warrant officers, grades W-1 through W-4, and all lieutenants, grades O-1 and O-2, be increased $50 per month in each and every pay grade and longevity step. Although this would add $9.84 million to the Army's current flight pay costs, complete recovery of the increase would be made by the possible retention of an additional 225 young aviators. Direct costs for training 225 new Army helicopter pilots average about $10 million.

These 225 young retainees represent only one percent of the total Army Aviator strength and about three percent of all new aviator trainees for one fiscal year. The increase is recommended for reasons other than retention – equity in pay for equal risk, countering inducements of civilian industry, and recognizing the services of a specific subgroup without whom Army Aviation may not survive.

Proficiency flying program

Army Aviation is not getting the maximum satisfactory results from its proficiency flying program now because the management concepts under which it is operating today are not sound nor premised on the lessons

This is the versatile Beechcraft 99, now in production as a part of the Beech planned program of product growth. Powered by two Pratt & Whitney PT6A-20 reverse flow, free turbine engines, it will carry pilot and 16 passengers in comfort—will cruise over 200 knots. The spacious interior is readily adaptable in the field for high-density seating, cargo, air ambulance, or executive transport use. Has growth potential to match tri-service Utility, Indirect Support and Air Attache requirements of the future.

Quickly convertible for multi-mission versatility

...for transporting personnel

...for transporting cargo

...for ambulance service

...with exceptional short-field capability!

Why production line modifications of this new Beechcraft 99 make it today's answer for tri-service indirect support:

The capabilities of the new Beechcraft 99 match basic tri-service Utility, Indirect Support and Air Attache requirements. Adaptation for specific service and function may be incorporated during production for true off-the-shelf economy. Available now as a direct replacement for older, reciprocating-engine transports, the Beechcraft 99 offers these advantages:

- Increases ton-miles per flight hour!
- Reduces cost per ton-mile!
- Will actually pay for itself in a few years!
- Offers turboprop speed and efficiency with quiet operation!
- Uses a variety of fuels!
- Offers conference-room seating, quickly convertible to high-density, cargo or aerial ambulance service!
- Has excellent short-field capability—with new reversible propellers.
- Has full all-weather capability.
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Write now for complete facts on the Beechcraft 99 and the remarkable in-service performance records of other Beech military transport and utility aircraft. Address Beech Aerospace Division, Beech Aircraft Corporation, Wichita, Kas. 67201, U.S.A.

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Beech Aircraft Corporation, Wichita, Kansas 67201, U.S.A.

INCENTIVE AND RETENTION

(Continued from Page 17)

learned from the past experiences of the Army's sister services. Except for an Army Regulation which is over ten years old, there is no centralized direction to the proficiency flying program. Ths Army loses in the deterioration of the flying skills of those aviators considered outstanding enough to place in a Category B status, in an increased number of accidents, in abuse of the equipment made available, and in its inability to define costs or value received.

Worse than this loss on the Army's part is the effect on the individual aviator who must fly second-rate, non-standard equipment; the imposition on his time away from duties that can well have a bearing on his retention in the service as well as on his future promotions; his out-of-pocket, non-reimbursable costs; the accident potential to which he is exposed by virtue of his forgetting certain basic fundamentals and basic flying skills; and the demand that he immediately return to full flying duties without the benefit of attending a formal refresher flight training program.

Real savings

The Army should seriously consider implementing the provisions of flight waiver and flight excusal to reduce the unnecessary proficiency flying that takes place, especially now that DOD has authorized an "excess" pilot pool as well as the supplement. By selective use of flight waiver and flight excusal for at least those aviators on short-term Category B assignments, those attending civil and military schools, and those senior aviators serving in terminal assignments, the Army could achieve a real savings of between $6 million and $10 million annually.

Further, a constructive and objective evaluation must be made of any existing refresher flight training programs with a view to establishing a formal system whereby aviators returning from Category B assignments to Category A duties will be given formal retraining before assuming a flying position. Neither legislation nor DOD approval is required to undertake both of these recommendations. Both can be accomplished by changes to current Army regulations and procedures.

Let's be realistic!

There have been many proposals to reduce overall costs by reducing the flight requirements necessary to qualify for flight pay and to complete proficiency flying minimums. The proposals have been made without penalties to the rated individual and without loss of these individuals to the lure of civilian industry, voluntary retirement, and voluntary grounding. None have been approved or available for as long a time as the "flight excusal" approach. The time has come for the Army to be realistic and to implement the provisions of "flight excusal."

The choice is becoming even more obvious as long as "excess" pilots are authorized by DOD. As soon as wartime requirements subside and peacetime standards apply, "excess" personnel will fall within the purview of the Flight Status Review Board's "excess to requirements" criteria. Aviation Program leaders would then be faced with a difficult choice – either declaring a young three-year man or a fifteen-year man as "excess".

Effect upon retention

However, if "flight excusal" were initiated, personnel in this category would still be available for flying assignments and duties without penalizing the program as a rated asset. "Flight excusal" has an intrinsic value in that the treatment of the Senior Aviator subgroup nearing retirement age can have an effect on

WARNING DEVICES

With options to purchase an additional 1,293 units under a total contract of $4.5 million, the U.S. Army took a major step forward in training safety with the award of a preliminary $775,71 contract for a radar-type device that warns helicopter crews of approaching aircraft. The award was made by the Army Aviation Center to the Honeywell Aerospace Division for 222 warning devices for TH-13T helicopters at USAAVNS and USAFTC. The units project an electronic screen extending as far as 3,000 feet around and 300 feet above and below a particular helicopter.

the retention motivation of the younger aviators.

By placing all those now eligible on an excused status, the Army can save about one million dollars annually. The simplicity of implementation lies in the fact that only an in-house action need be taken – revision of Army Regulations 95-32. The time is now.

Premium on experience

Productive management policies and procedures should be founded on the successes, not the failures, of those who have already trod the path. The Army cannot do less than to achieve parity with the proficiency flying programs, refresher flight training programs, and the flight excusal procedures of the USAF, USN, and USMC and to profit by their examples. Mediocrity will not do.

One salient feature regarding flying which has been frequently misunderstood is the requirement for experience in today's military aviation. A lesson learned from World War II was that even though Germany and Japan were adequately equipped with aircraft, both nations were defeated in the air primarily because they lacked the competent personnel during the last years of the war to meet their air crew requirements and to plan, lead, and direct their air power.

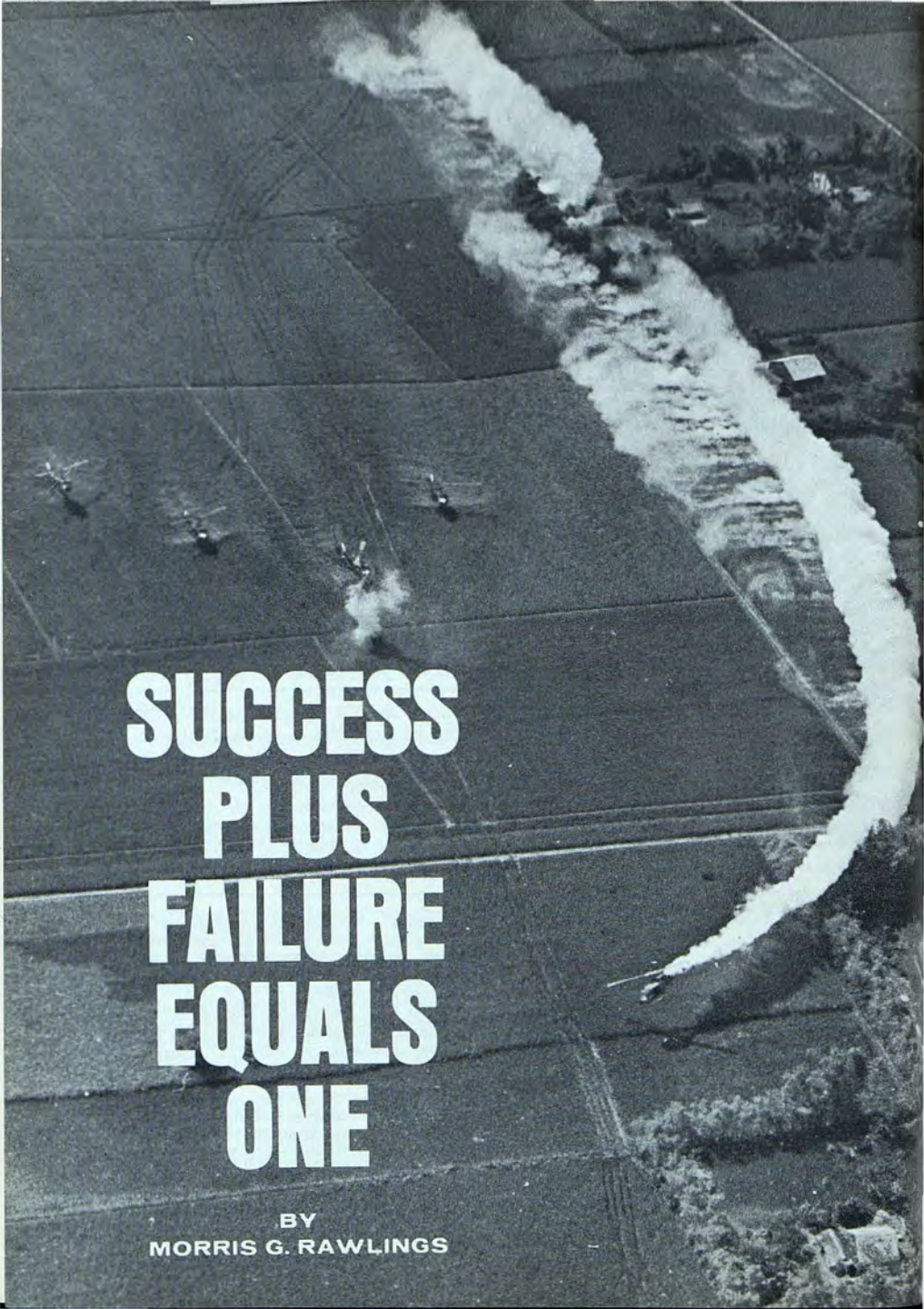
The time for correct decisions in the air has been drastically shortened as aircraft become faster and more complex and each air decision must be right the first time. This places a premium on experience and experience means age, family responsibility, and leadership. To ensure that the Army Aviation Program retains those capable of leading the program and to improve its capacity to support the combat infantryman, all necessary steps must be taken to enhance aviation as a career. The recommendations proposed herein are a contribution to improving the effectiveness of the Army Aviation Program.

ABOUT THE AUTHOR

A WW II fighter pilot who transferred to the Army in August of 1950, Lieutenant Colonel Samuel P. Kalagian graduated from the U.S. Army War College in June of this year prior to assuming the duties of Deputy Director of the Department of Rotary Wing Training at USAAVNS. Rated a Master Army Aviator in 1963, he has served as CO of the 25th and 14th Aviation Battalions, and DCO of the 12th Aviation Group during a 17-month tour in Vietnam during 1965-1966. Colonel Kalagian was born in Erie, Pa., in 1923, and completed the requirements for a Bachelor of Science degree at the University of So. Mississippi in 1961 after 1940-1941 attendance at the University of Pittsburgh.

FORT WORTH — Shown at Grand Prairie Airport inspecting the logbook of one of their new aircraft are pilots of the Army's new OH-58A New Equipment Training Team. Team pilots include, from left, 1LT Donald G. Monk, CPT Marquis D. Howell, MAJ Jack Hester (Team commander), and CW2 Cy A. Russum. Not shown is CPT Jimmy Arnold. The Team is charged with the mission of indoctrinating the Vietnam-based helicopter units in every aspect of the aircraft's operation and maintenance.

Six officers and 23 enlisted men comprise the Kiowa NET Team highly qualified for the task, team members are all Vietnam veterans and boast a combined flight total time of over 8,000 hours and almost 4,000 hours of total combat time. The new ships will be introduced to Vietnam later this year.



SUCCESS PLUS FAILURE EQUALS ONE

BY
MORRIS G. RAWLINGS

CHOPPER pilots, many of whom would not know a permutation from a combination and couldn't care less, have long and successfully played the game of probabilities. Their success has been, and happily remains, the despair of the analyst whose mathematical equations point toward a less favorable survivability rate.

The situation is proper – it is a whale of a lot more important that the chopper driver be correct than that the analyst have a proven equation – but it is important that the successful Army Aviator pass on his knowledge and experience to his successors.

The pilot is limited here: by his circle of friends, by his inability to communicate something he understands instinctively, by the inability of others to accept his experience as being applicable to their problems, and by the fact that his next assignment may well be in the Pentagon basement.

The analyst's equation, however, in one form or another, can attain wide distribution. Estimates of the situation, operations plans and orders, staff studies, tables and graphs in field manuals and training texts – all of these are but other forms of an equation in which the totals of all the factors considered are made to equal something being sought. In the context of probability, the analyst simply establishes a total value on one side of the equation, forcing all the factors on the opposide side to equal that value.

Two possibilities

Somewhat arbitrarily perhaps, but with good reason, he declares that there can be but two results for a helicopter flight in a combat environment; it is a *success (survives)*, or it is a *failure (does not survive)*. He does not admit the possibility of partial pregnancies, coins falling on edge, or helicopters which half-survive a mission. He says that *P (Success) + Q (Failure) = 1.*

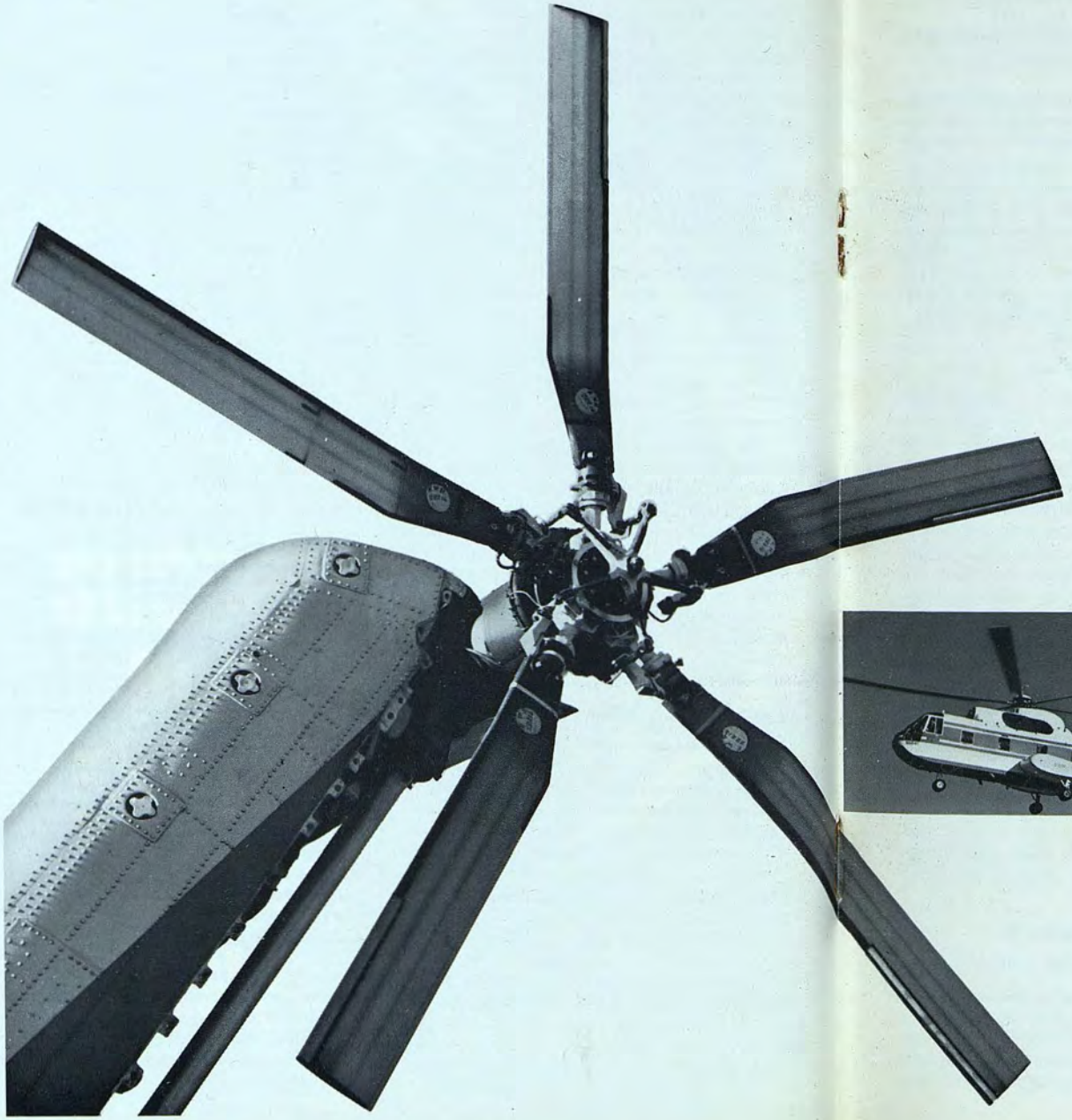
Then, he begins a search for those quantifiable factors which will furnish a value for either P or Q. Some look only for those things which accumulate under success, assigning to failure the difference in value between success and 1. Others, more conscientious, look for both sets of factors. The search could come out looking something like the table shown here.

P (SUCCESS) + Q (FAILURE) = 1

Factors Requiring Quantification	How Quantified
Size & Quantity of Targets (Helicopters)	
Size	Measurement
Quantity	Assumption
Size & Location of Vulnerable Areas	
Size as a percentage of total area	Computed
Location within total area	Examination
	"
Location of Target(s) at a Given Time	
On a pre-determined course	Computed
As changed while enroute	Varied parametrically
Defensive Actions at a Given Time	
Suppressive firing — organic weapons	Computed
Suppressive firing — supporting weapons	Varied parametrically
Direction changes, not pre-determined	"
Enemy Weapons at a Given Time	
Present in the area	
Capable of being fired	Computed
Within range of targets	Varied
Appropriately aimed	parametrically
Fired	"
Location of Enemy Projectiles at a Given Time	
Type	Computed
Quantity	Varied
Direction	parametrically
Results of Enemy Firing during a Given Time	**Computed from assumptions, measurements and parametric variations**
Hits on Target(s)	
Hits on Vulnerable Areas	
Target Losses	

In reality, each factor is itself composed of many sub-factors, each of which has derivatives of its own. For example, the assumption as to the number of targets begins with a known quantity and is then reduced by the number of ground or air aborts induced by

(Continued on Page 26)



At Sikorsky, advanced materials are already off the ground.

December 1968: first flight of a Sikorsky S-61 helicopter with boron and glass fiber reinforced tail rotor blades.

That was the first successful flight of a helicopter with a primary structure made of an advanced composite material. The new blades are lighter, stronger and stiffer than the metal ones now used in production aircraft. And they show remarkable resistance to fatigue and corrosion...promising substantial increases in blade life.

Now we're planning to use boron fiber composite in the tail cone of the U.S. Army CH-54 Skycrane. The result will be improved dynamic qualities and a weight saving of 100 pounds—which means extra payload.

Sikorsky has pioneered many advanced materials applications in plastics and titanium which are now in production aircraft.

For you, our work in advanced materials means lighter, stronger, faster, more versatile helicopters. Now and in the future.

Sikorsky Aircraft

DIVISION OF UNITED AIRCRAFT CORPORATION

STRATFORD, CONNECTICUT 06602

Pilot Judgmental Factors Which Influence The Probabilities Of Success

Factors	Degree of Influence
PRIOR TO TAKEOFF	
Develop alternatives to written plan	High
Anticipate changes in route or altitude at critical points	
Check availability and capability of fire support means	
Review or establish emergency plans	
Establish a personal upper risk limit	
Conduct a mental "war game" of the entire flight; locating and identifying danger areas and establishing behavior rules for each area	
Assume successful task completion	
DURING ENROUTE FLIGHT	
Implement alternatives as required	Very High
Change altitude, attitude, direction and/or speed without discernible pattern	
Skirt areas which present extraordinary hazards; real or anticipated	
Take advantage of terrain shielding	
Use crew and passengers as aids — not impedimenta	
Maintain communications with established control	
Assume successful task completion	
AT LANDING ZONE	
Reduce exposure time to a minimum	Most High
Present smallest possible target to the most dangerous threat	
Use suppressive fires to gain time, not maneuver room	
Perform rapid approach and quick unloading	
Follow planned departure route	
Consider opposition as a personal challenge to abilities and training	

SUCCESS + FAILURE

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failures of design, of maintenance, or of pilot judgment.

The analyst can say, barring arithmetical bloopers, that if *all* the conditions were as described, losses were probably as forecast. The probability that all conditions were as described – that his parameters included all variations – is fairly high. The probability that his parameters are as close together as they should be – that the result is a usable index to anticipated losses – is very low. The equation would be greatly improved *if* the judgmental values were assigned by the experienced, successful aviator.

Unqualified "No!"

However, pilot response to a request that he assign a quantitative value to a qualitative judgment is normally quite definite. It is most often a firm and unqualified "*No!*" The pilot is perfectly willing to analyze a past action, and can often determine that a single decision, made at the proper time and under proper circumstances, was most important to his survival. He is absolutely unwilling to extrapolate that decision to other circumstances and other times, allowing the decision to retain an equal value. He is right, of course.

The analyst *also* has a point – changed circumstances do not necessarily change the relative value of one decision as opposed to other decisions and actions taken at or near the same time. What the analyst wants to know is those factors which are the most important influences on the probabilities of success. Denying any ulterior motive, the analyst will pressure the pilot into listing those factors, assigning to each an arbitrary degree of influence.

Tabulating the factors

Let's try to give him such a tabulation:

Granted that the listing is not exhaustive and that the words "*High*", "*Very High*", and "*Most High*" do not meet the numerical requirements, the tabulation is definitive enough to permit an investigation of the

more influential judgmental factors which help determine the probabilities of success.

Judgmental values

Judgmental values can be sought for:

(1) The personal, upper risk limit mentally established by the pilot which will influence his further behavior.

(2) The mental attitude of the pilot toward the task; mainly the result of his taking success for granted based upon his earlier experience or upon the fact that his unit/army/country has never been known to lose the big ones.

(3) The agility of the equipment, which, coupled with a distinctive impulse pattern belonging to no other man, permits changes in direction, speed and altitude at intervals detectible only after the fact.

(4) The experience of the aviator; his ability to anticipate areas of extraordinary hazard based primarily on his knowledge of enemy tactics and their applications against his weaknesses or imposed constraints.

(5) The technical skill of the aviator; that which enables him to implement those instinctive, "right" moves as the necessity arises, and to obtain the ultimate from his equipment.

With these values inserted, the parameters surrounding success draw closer, and the equation improves. Further improvement comes from drawing the noose tighter about the box containing *failure*.

First comes a tabulation of those factors which have a pronounced influence:

A look at "Failure"

This one reads like a simplistic plea for a rally before racing out on the football field to do or die for Alma Mater. It is deadly serious, however. *The values attributed to mental attitudes are as important as is advertising to the sale of consumer goods.* Preparations for a fifty-year war of attrition do not instil the same mental attitudes toward a single engagement as do the no-alternative, must-win clashes of the Israelis last June. The former may run in order to fight another day; the latter have no place to go.

Enemy Judgmental Factors Which Influence The Probabilities Of Failure

Factors	Degree of Influence
BEFORE ENGAGEMENT	
Develop mental attitude	High
Reward for success / penalty for failure	
Rigidity of planning	
Area of responsibility	
Availability of weapons and ammunition	
Status of Training	
Conditioned reflex	
Free-thinker	
Familiarity with available weapons	
Previous Success	
Wins/losses	
Certainty of reward/ punishment	
Assumption of Success	
Certain	
Hoped-for	
Not expected	
DURING ENGAGEMENT	
Plan implementation	Very High
Enemy appearance	
As anticipated (direction and location)	
In expected strength	
As visible, in-range targets	
Appropriateness of Plan	
Position protected against suppressive fire	
Position maintains defensive advantage	
Success of Initial Defense	
As forecast — plan triumph	
Greater than forecast — personal triumph	
Less than forecast — officer failure	
Rapidity of Enemy Reactions	
As forecast	
Greater than forecast	

Further definition

The problem here is to define those most influential factors which cannot be judgmentally evaluated by the analyst, but must be established by someone more qualified:

(1) The urgency with which the de-

SUCCESS + FAILURE

(Continued on Page 27)

fender approaches his task and the motivations which determine his behavior.

(2) The surprise, or lack of it, with which the attacker approaches. Elements of surprise include the timing, the direction, the point of attack, the quantity of men and material, the type and volume of suppressive fires, and the overall shock action which accompanies the movement.

(3) The success, or lack of it, which accompanies the defender's initial efforts. The targets must be destroyed when fired upon; the requirement to shift fires constantly, returning over and over again to the same targets is disheartening and often results in an infectious despair.

(4) The attacker's reaction to the initial firing; if he withdraws in haste, the defender gains more than a win in a single engagement. If, however, the reaction is violent and successfully contests the defender, the advantage goes to the attacker and remains with him through subsequent engagements.

The pilot unconvinced

With these judgmental values inserted, the equation begins to approach reality and the probabilities become usable by planners. We may safely assume that the analyst is capable of inserting values which portray the ability of flying steel to intercept and interfere with the flight of manned metal.

We may even assume that the computer will properly present the results of arithmetical computations. The analyst is content – his equation is a work of art. The pilot remains unconvinced, and he is, as usual, correct.

Major assumptions

There are two major assumptions which must be truths before the equation has usable meaning:

(1) *No task will be undertaken unless the probabilities favor its successful completion.* No pilot is mentally geared to the acceptance of an impossible task. The commander, responsible for more than a single helicopter and its crew, may well ignore the odds and order a flight. If he should do so, our second assumption assumes great importance.

(2) *No task will be undertaken which does not have a probable gain, the results of which are known by and acceptable to the pilot.* The worth of a probable gain is a judgment reserved by the commander, and is not an issue to be decided by the pilot. However, all leaders know that one sure way to ground a bunch of aircraft or to suffer an amazingly high rate of air aborts enroute to a mission, is to allow the pilot to become convinced that the whole works is a balled-up event in which the risks far outweigh the possible gain.

No "average aviator"

In a report before the AAAA Convention in 1967 MG G. P. Seneff, Jr. indicated that the average helicopter in RVN took 13 hits before it was downed, and that, if flown on 4 sorties each day, the machine would fly for seven combat years before taking that number of hits. A later *Army Times* modified those figures but slightly. Even the most optimistic $P + Q = 1$ formula given unclassified distribution cuts the allowable hits in half and reduces the combat life of the machine to the equivalent of two aviator tours. Obviously, the formula is in error.

Granted that probabilities are not intended to be read as absolutes; that there is no such thing as the average aviator or the average helicopter; and that bad things happen only to other people – there isn't an aviator alive who hasn't improved on his success probabilities at one time or another. This implies that he knew the existing odds and didn't care for them.

He is practicing an art – the analyst would like to make it a science.

ABOUT THE AUTHOR

Morris G. Rawlings is a retired Army Aviator (LTC, AUS) and a frequent contributor to "Army Aviation." He is the Manager, HLH Market Planning, HLHS Branch, Boeing Vertol Division.

CAMP CASEY, Korea — A "Rejuvenation Meeting" of the Korean Chapter of the AAAA was held at the newly-remodeled 7th Avn Bn Club. Some of the attendees included front row (L to R): MAJ Crants (Sec); LTC Licha; LTC Peppard (Pres); LTC Baugh; LTC Vovilla (Trea); LTS Pittman & Houck; MAJs Shaw (VPI) & Reid; WO1s McDonald & Snead. Back: LT Wathen; WO1s Cunningham & Johnson; CPT Buckley; LTC Johnson; WO1s Myers, French, Erdman, & Lane; CW3 Blanchard; LT Grundborg. The Chapter has made plans for later AAAA meetings in Seoul and in Pyongtaek.

BAD GODESBERG, GERMANY — Shown following the presentation of U.S. Army Aviator Badges at the U.S. Embassy to German Army Aviators by the Acting Chief, MAAG, are the U.S. and German Army parties concerned. From L to R are LTC LW Keister, Avn Advisor; Sgt Klafki and Sgt Kollman, recipients of Army Senior Aviator Badges; COL Meier, Acting Chief, MAAG; M/Sgt Diele, recipient of the Army Master Army Aviator Badge; LTC Gerlach, SAA Badge; and LTC Tietjen, the DOI at the German Army Aviation School.

EARN $60 TO $100!

"Army Aviation Magazine" reimburses its authors on the basis of three to five cents per word for the first 2,000 words published. Articles should be first-run exclusives and so marked when submitted. See page 3 masthead for mailing address.

PERSONNEL SEMINAR

Designed to stimulate open discussion on the problems facing junior officers and warrant officers in Army aviation today, to include the areas of career development, assignments, and flight pay, a Personnel Seminar will be held at the AAAA Annual Meeting in Washington, D.C., on Thursday, Oct. 16.

A field survey questionnaire has been forwarded to the 40-odd AAAA Chapter activities with September compilation and analysis to assist in the question and answer seminar being planned by COL John W. Marr of OPX-AA, OPD.

STAFF VISIT

In a companion effort to obtain junior officer and warrant officer guidance on future AAAA programs and policies, and to generate '69 Annual Meeting attendance by younger members, GEN Hamilton H. Howze, AAAA national president; Arthur H. Kesten, executive vice president; and a small group of key national officers will visit Forts Wolters and Rucker and Hunter/Stewart in mid-Sept. and will meet with member and non-member groups at each installation. The program was proposed by National Board members CPT Jerome R. Daly and CW4 Donald R. Joyce, and Washington, D.C. Chapter treasurer, CW3 Robert L. Hamilton.

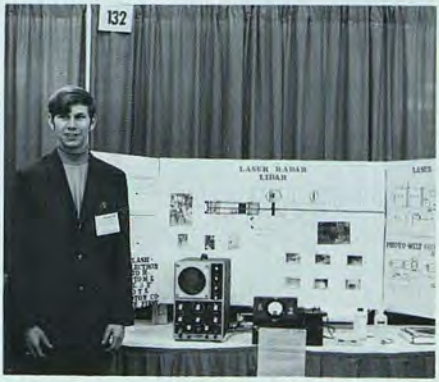
NEW CHAPTER

PHILADELPHIA (Delayed) — Delaware Valley Chapter AAAA officers are shown just after the activation of their Area Chapter. L-r, sitting: Jack Pierce, Trea.; Carl A. Colozzi, VP Res Aff; Harry S. Pack, Pres.; Jack Aschoff, VP Ind Aff. Back: Ralph Johansen, Arrangements; Ris Rawlings, Secr; Ed Nielsen, VP Army Aff; and Bill Usher, VP ARNG Aff. Missing: Max Clark, Membership; and George Strasbaugh, VP Public Aff.

ALL AAAA

FORT WOLTERS — A large part of the WOC members of the 7th Warrant Officer Company form a "7" to accompany their note saying, "We're with AAAA!" Some 205 members of the company have joined the Army Aviation Association with five of the company's flights at 100 percent membership. Class orientation and participation have been handled by CW2s David L. Eagleston and Gilford D. Palmer of the 2d Battalion, Troop Brigade, at the USAPHC/S.

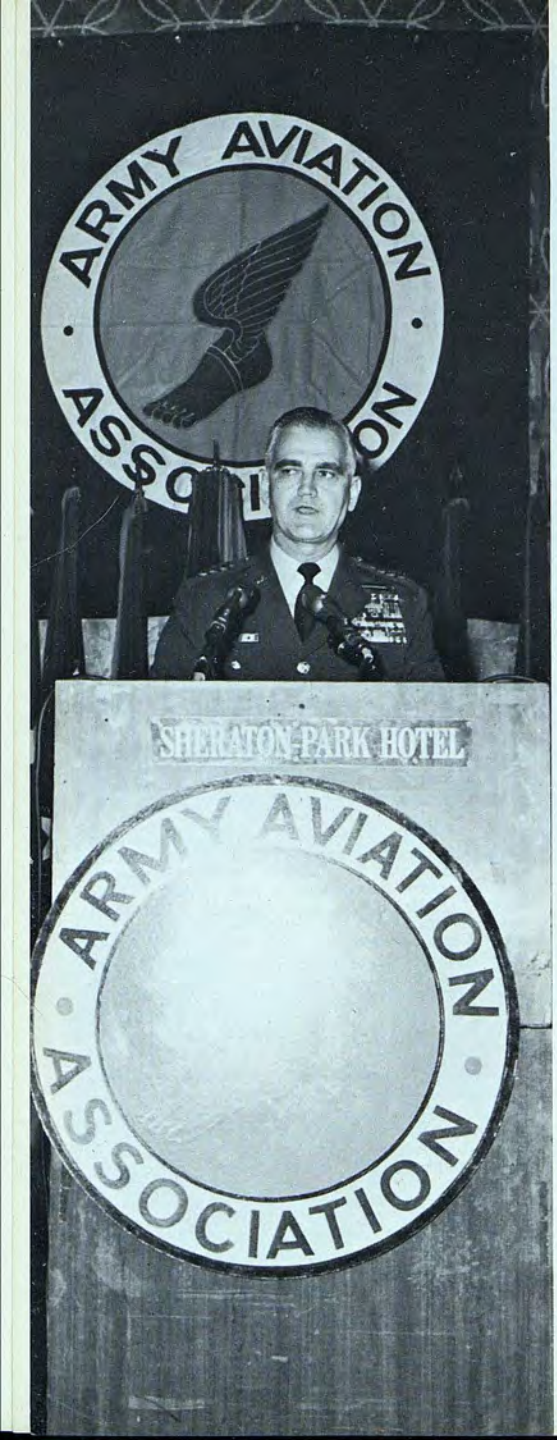
FORT BELVOIR — A wealth of aviation know-how is represented by the 19 General Officers who conducted a review board of the Army Aircraft Systems Study, 1970-1985 (FAAS-1985) at Carlisle Barracks, Pa., July 22-23. FAAS-85 will help to determine the family of Army aircraft needed for the 1970-1985 time frame. In the front row (l. to r.), MG G. P. Seneff, MG James W. Sutherland, MG Robert R. Williams, MG George S. Eckhardt, LTG Austin W. Betts, LTG Harry W. O. Kinnard, LTG John J. Tolson, MG George I. Forsythe, and MG John L. Klingenhagen. (Back row) BG Hal B. Jennings, Jr., BG George W. Casey, Mr. David C. Hardison, BG Raymond P. Murphy, MG Charles P. Brown, MG Charles J. Denholm, BG George S. Blanchard, BG George S. Beatty, Jr., MG John Norton, MG Delk M. Oden, and MG John H. Hay.



FORT WORTH — One of four AAAA national award winners, Stephen P. Parfitt, 18, of Airport H.S., West Cola, S.C., stands beside his award-winning International Science Fair exhibit, "Laser Radar." Each of the four received $100 cash awards from MG C. C. Haug, Southwestern U.S. Army Engineer Division commander after being selected by a five-member team of AAAA judges headed by D. P. "Gerry" Gerard. Assisting Gerard were John M. Duhon and Curtis B. Jones of Bell Helicopter, and COL John Bergner (Bell Plant Activity CO) and LTC William F. Leach (Dept of Academics, USAPHS).

PHILADELPHIA (Delayed) — General Hamilton H. Howze, USA (Ret.) (left), AAAA national president, is shown chatting with Delaware Valley Chapter president Harry S. Pack, Assistant to the Vice President and General Manager of the Boeing Company's Vertol Division prior to the Chapter activation meeting at which he was the honored guest and guest speaker.

Nominees for AAAA National Executive Board office for the 1969-1972 term are solicited from the general membership. A petition bearing the name of the nominee; a statement of his willingness to serve, if elected; and the signatures of at least 25 members as endorsees should be submitted to the AAAA National Office on or before Sept. 15, 1969. The names of such nominees will appear on the ballot to be voted upon at the general membership business meeting held at the AAAA Annual Convention in Washington, D.C., during Oct. 15-17.



11TH AAAA ANNUAL MEETING

SHERATON-PARK HOTEL
WASHINGTON, D.C.

WEDNESDAY, OCTOBER 15
Early Bird Reception

THURSDAY, OCTOBER 16
General Membership Meeting
President's Annual Report
Elections of National Officers
A.M. Panel Presentation
Chapter Delegates' Luncheon
(Open to General Membership)
P.M. Panel Presentation
Cub Club Reunion
President's Reception
Unit Reunions and Dinners

FRIDAY, OCTOBER 17
A.M. Panel Presentation
Honors Luncheon Reception
1969 AAAA Honors Luncheon
Diehards' Reception

OCTOBER 15 - OCTOBER 17

1969 AAAA ANNUAL MEETING

SHERATON-PARK HOTEL — **WASHINGTON, D.C.**

ADVANCE REGISTRATION

Advance registrations will be accepted Aug. 1-Oct. 6 (see coupon below). All reservations will be confirmed by mail. Registration badges and social function tickets will be available at the AAAA Registration Desk, Sheraton-Park Hotel, beginning 1:00 P.M. Monday, Oct. 13.

SOCIAL FUNCTIONS . . . GUESTS

Tickets may be purchased for guests by registrees for all social functions. Only registrees may attend AAAA and professional presentations.

Full remittance for registration and all tickets must accompany Registration Coupon.

REFUNDS FOR CANCELLATIONS

Phone cancellations of tickets will be accepted until noon, Friday, October 10. Letter cancellations should be postmarked no later than October 6.

ROOM RESERVATIONS

Write Sheraton-Park Hotel, Washington, D.C. 20008, or hotel of choice. Military rates at Sheraton-Park if in uniform or with ID active-duty card. AAAA cannot accept requests for reservations. State that you will attend AAAA meeting.

Civilian Rates at Sheraton-Park:

Single Room	$16.00-$ 25.00
Twin Room	$21.00-$ 30.00
1-Bedroom Suite	$40.00-$115.00
2-Bedroom Suite	$80.00-$105.00

Active Duty Rates at Sheraton-Park:

10% discount from civilian room rates.

On-Post Quarters For Military Personnel:
Write Hq, Military District Washington, Attn: G1, Washington, D.C. 20315 on or before 25 September.

ADVANCE REGISTRATION COUPON

Detach and mail to: ⇨ **ARMY AVIATION ASSOCIATION OF AMERICA**
1 Crestwood Road, Westport, Conn. 06880 ⇦ Make check payable to

Enclosed please find $..... in payment of my registration for the 1969 AAAA Annual Meeting and tickets indicated below:

Function	Quantity Desired	Unit Prices **Military	Civilian	Amount
1. Registration	.....	$ 5.00	$15.00	$.....
2. President's Reception* (Oct. 31)	.....	$ 5.00	$15.00	$.....
3. Honors Luncheon and Reception* (Nov. 1)	.....	$ 7.50	$15.00	$.....
4. Combined Attendance (Includes 1, 2 and 3)				
Member Alone	.....	$15.00	$30.00	$.....
Member and Wife	.....	$25.00	$50.00	$.....

*Separate tickets are required for each social function.
**Includes civilian employees of the Armed Services.

NAME.....
(Print or type) (Rank or title of position)

ADDRESS.....
(Print or type)

THIS APPLICATION WILL BE ACCEPTED ONLY IF ACCOMPANIED BY PAYMENT IN FULL

FLIGHT PAY PROTECTION PLAN - OPEN ENROLLMENT FOR ALL RANKS AND GRADES

I understand that in making application for flight pay insurance that the effective starting date for my coverage will be the first day of the month after the month in which I make application.

Complete the application form in its entirety. Make your check or money order payable to **LADD AGENCY, INC.** in the amount of the appropriate premium (See premium table on the reverse side). Mail your check and this application form to **LADD AGENCY, INC.**, 1 Crestwood Road, Westport, Conn. 06880 in the status of AAAA member or applicant. Allow 2-3 weeks for the delivery of your policy; provide a permanent address to which your policy may be sent **IF** you expect your address to change within 2-3 weeks after making application.

I have enclosed a check or a money order made payable to the **LADD AGENCY, INC.** for my (annual) (semi-annual) (quarterly) premium of $ PREMIUM

Date of Birth
Month Day Year

Rank or Grade Name ASN

Monthly Flight Pay

ADDRESS (Post Office Box Number, Residence or Quarters Address is Desired)

Years of Service for Pay Purposes

City State Zip

I certify that I am currently on flying status with a U.S. Army unit; that I am in good health at the time of making this application; that I am entitled to receive incentive pay; that no condition is known to me at this time that could result in my loss of flying status for physical reasons; and that no action is pending to remove me from flying status for failure to meet required physical standards. I authorize the Company, or Company-designated representatives, to examine all official medical records that may be pertinent to any claim that I may submit.

SIGNATURE _____ **DATE** _____

THIS COVERAGE IS ONLY MADE AVAILABLE TO AAAA MEMBERS.

PREMIUM TABLE APPEARS ON REVERSE SIDE

CATEGORY OF AAAA MEMBERSHIP

☐ Active U.S. Army establishment
☐ U.S. Army Reserve Component
☐ U.S. Army National Guard component
☐ Other. Describe below.

This coverage is **limited** to AAAA Members.

☐ I am an AAAA Member.

ANNUAL DUES $7.00
INITIATION FEE $2.50

The initiation fee applies to the applicant's **first year** membership only, and covers the one-time provision of a membership decal and a personal lapel insignia. The application form and a check for $9.50 made payable to **"AAAA"** should be returned to: **AAAA**, 1 Crestwood Road, Westport, Connecticut 06880. The individual membership shall become effective on the first day of the month after the month of application.

IMPORTANT: Your premium check should be made payable to **LADD AGENCY, INC.**

FLIGHT PAY PROTECTION PLAN

SCHEDULE OF INCENTIVE PAY AND ANNUAL PREMIUMS

If Monthly Flight Pay is:	Annual Incentive (Flight) Pay is:	If Attained Age is under 30:	If Attained Age is 30-39:	If Attained Age is 40-49:	If Attained Age is 50 and Over:
$245	$2940	$51.45	$58.80	$73.50	$88.20
240	2880	50.40	57.60	72.00	86.40
230	2760	48.30	55.20	69.00	82.80
225	2700	47.25	54.00	67.50	81.00
220	2640	46.20	52.80	66.00	79.20
215	2580	45.15	51.60	64.50	77.40
210	2520	44.10	50.40	63.00	75.60
205	2460	43.05	49.20	61.50	73.80
200	2400	42.00	48.00	60.00	72.00
195	2340	40.95	46.80	58.50	70.20
190	2280	39.90	45.60	57.00	68.40
185	2220	38.85	44.40	55.50	66.60
180	2160	37.80	43.20	54.00	64.80
175	2100	36.75	42.00	52.50	63.00
170	2040	35.70	40.80	51.00	61.20
165	1980	34.65	39.60	49.50	59.40
160	1920	33.60	38.40	48.00	57.60
155	1860	32.55	37.20	46.50	55.80
150	1800	31.50	36.00	45.00	54.00
145	1740	30.45	34.80	43.50	52.20
140	1680	29.40	33.60	42.00	50.40
135	1620	28.35	32.40	40.50	48.60
130	1560	27.30	31.20	39.00	46.80
125	1500	26.25	30.00	37.50	45.00
120	1440	25.20	28.80	36.00	43.20
115	1380	24.15	27.60	34.50	41.40
110	1320	23.10	26.40	33.00	39.60
105	1260	22.05	25.20	31.50	37.80
100	1200	21.00	24.00	30.00	36.00
95	1140	19.95	22.80	28.50	34.20
90	1080	18.90	21.60	27.00	32.40
85	1020	17.85	20.40	25.50	30.60
80	960	16.80	19.20	24.00	28.80
75	900	15.75	18.00	22.50	27.00
70	840	14.70	16.80	21.00	25.20
65	780	13.65	15.60	19.50	23.40
60	720	12.60	14.40	18.00	21.60
55	660	11.55	13.20	16.50	19.80
50	600	10.50	12.00	15.00	18.00

QUARTERLY AND SEMI-ANNUAL PREMIUM PAYMENTS

QUARTERLY: If you plan to pay premiums on a quarterly payment basis, divide the annual premium listed above by 4 and add $1.00 for each quarterly premium payment.

SEMI-ANNUAL: If you plan to pay premiums on a semi-annual payment basis, divide the annual premium listed above by 2 and add $1.00 for each semi-annual premium payment.

LOST, LOSTER, LOSTEST!

(Continued from Page 6)

terious odors which drifted by the air conditioner and then spread throughout the room. One can put up with a great deal while sipping martinis in a comfortable chair, caressed by a cool breeze and titillated by tantalizing odors from the kitchen.

I tell you this so that you will understand how hard I worked to help put across your point, Allen. After all, you were once my superior officer and it could be considered my duty to follow your lead. I took up the cudgels again:

"Look, let's get this conversation back where it belongs. General Burdett simply said that although our losses were heavy, they could have been worse and would have been worse had the loss rate not improved. That's all."

"And all I said was that the loss rate couldn't have improved because the exposure rate didn't change and we still lost more helicopters."

"Yes, but you also said something about having the pilots give him a new rate . . ."

"Who else could change the rate?"

"Well, the enemy – the North Vietnamese and the Viet Cong – they have a say in the matter, too, you know."

"Why?"

"Come on now. That's a silly question. Obviously if we could tell them what to do, we wouldn't be fighting them."

"And that's a silly answer. We aren't supposed to be telling them what to do; we're supposed to be telling them certain things they *cannot* do."

"Oh?"

"That's right."

"It may be right, but you're getting off the subject again. The Army doesn't assign its own missions. It's told what to do. You heard General Wright say that his mission was to find the enemy and destroy him, not to take and hold terrain."

"Now who's getting off the subject? What's that got to do with our losing more helicopters than ever before?"

"Just this. If the choppers are used to hunt for the enemy and then used to transport troops to where he is, all to support the mission as expressed by General Wright, then losses will always be high."

"What about those that we lose on the ground? Those that get hit with rockets and grenades and suitcases . . . "

"Suitcases?"

"You know what I mean. And how about those that we lose because something quits working and it falls down? That could happen whether it was in Vietnam or Timbuctoo. You know what I think?"

"I have the glimmerings of an idea, but tell me anyhow."

"I think that the rate of loss of helicopters is less affected by enemy action than by our own. That's what I think."

"Well, sure. If we hadn't gone over there in the first place and hadn't used helicopters . . ."

"That's not what I mean and you know it. You men! You always want things one, two, three. Well, all right:

One, we're losing more helicopters because they are getting older and our pilots and mechanics aren't; not in experience, anyhow.

Two, we're losing more helicopters because we are transporting more South Vietnamese which makes a more inviting target.

Three, we could establish any desired loss rate from near-zero to a hundred a month and make it stick by our choice of helicopter use.

Four, if the losses get too high – that is, when we can no longer find acceptable reasons – we'll give machines to the South Vietnamese and let them establish their own rate. Those that we keep, we'll restrict in use so that they last as long as my dancing pumps which haven't been on a dance floor since last Fall in spite of all your promises . . ."

I told you it was embarrassing to have presented the theme so poorly. My excuses are obviously inadequate and my reasons are bound to be unacceptable. Perhaps it will make you feel better to know that I won a small part of the battle anyhow.

We *still* haven't gone dancing!

month's takeoffs

PCS - GENERALS

BURDETT, A.M., Jr., BG

MUELLER, E.L., BG

SCHILTZ, Howard F.,MG

ZAIS, Melvin, LTG

COLONELS

BUCHAN, Earl K.

BURKE, James L.

BUSH, Harry L.

BUTLER, Olva B.

CLARKE, Arthur M.

CODY, Robert L.

DONNELLY, Henry J.

HANDLEY, George E., Jr.

HEMINGWAY, Jack W.

JERSEY, Donald H.

LYONS, Thomas L.

MADRANO, Joseph P.

NIX, James H.

PAULSON, Norman W.

SOLER, Eduardo M.

PCS - COLONELS

STAPLETON, Cyril D.

THOMSON, Arington C.,Jr.

TOWNSEND, Delbert L.

UGALDE, Jesse G.

LT COLONELS

ADDISS, Daniel A.

ALDRIDGE, George W.,Jr.

ALLEN, William M.

ANDERSON, Jack W., Jr.

AVEY, James F.

BAGLEY, Robert T.

BAILEY, Paul O.

BANG, Arne J.

BASTIAN, Richard K.

BAUGH, Russell E.

BAUGHMAN, Larry J.

BAXTER, George M.

BEEKMAN, Gerald R.

BELK, George M., Jr.

BENNETT, Ralph O.

PCS - LTCS

BENZ, Milton

BINDRUP, Lavere W.

BLAKE, Kenneth N., Jr.

BLOOMQUIST, Paul A.

BRIDGES, James T.

BROWN, John P.

BRYAN, Clyde M., Jr.

BURNETT, Clark A.

CARDWELL, Kenneth E.

CARLSON, Billy H.

CARRILLO, Arnold R.

CHAMBERLAIN, Donald F.

CHAMBERLAIN, Wm. C.

CHEDESTER, Robert R.

COOK, Harold E.

COOK, Morris G.

CORLEY, William L.

COX, Newton C.

CROW, Eldward E.

DALE, Ronald E.

PCS - LTCS

DEGENEFFE, Delano E.

DENEND, William L.

DERRICK, George E.

DOYLE, John P.

DRAKE, Charles E.

DUCKWORTH, Richard H.

DUGAN, John E.

DUNN, Thomas M., Jr.

ECKERT, Edward N.

ENGLAND, Marion F., Jr.

FARISH, Stephen

FLADMARK, Lorentz W.

FOLTA, Russell J.

FROELICH, James W.

GALLIHER, Kay D.

GARTEN, Lynn W.

GOBER, Floyd C.

GREGORY, Kelly G.

GUION, James L.

PCS - LTCS

HALL, Thomas W.

HARK, William H.

HARRISON, Ben L.

HATFIELD, Jimmy L.

HOBBS, Harry V.

HOELTZEL, Norman E.

HORTON, George C.

HOUSER, John W.

HOWARD, Lonnie T.

HUGHES, Norman J.

HUNTLEY, David L.

HUTH, Walter H.

INGRAM, Thomas A.

JARRETT, Richard S.

JOHNSON, Dave M.

JOINER, Jack D.

JONES, Charles R.

KALLESTAD, Richard D.

KEAN, John J.

KELLY, James J.

KVERNES, Roger W.

LASEAU, Joseph N.

LAUTZENHEISER, R.D.

PCS - LTCS

LEACH, William F.

LEHMAN, Ralph L.

LICHA, Charles A.

LIGGETT, Dale M.

LILIKER, Thomas W.

LILLEY, Aaron L., Jr.

LOHMANN, Harlan W.

MADDOX, Chesley B., Jr.

MALONE, Howard E., Jr.

MARTIN, Francis B.

McCOOLE, Delos A.

McDANIEL, Harry T.

McLAUGHLIN, Leonard F.

McNAIR, Jeptha I., Jr.

McNEESE, Luna V., Jr.

McWHORTER, James H. Jr

MERRITT, Ronald H.

MIKULA, Joseph G.

MILLER, Billy G.

MITCHELL, Theodore L.

MOLKENBUHR, Seamon J.

MOORE, Francis D.

MOORE, Peter W.

MOORE, Raymond E.

PCS - LTCS

PAQUETTE, Dean R.

PARKER, Walter E.

PHILLIPS, James W.,Jr.

PLISSEY, Robert D.

PLOTT, Thomas J.

PONDER, William R.

QUINLAN, James A.

RATHBONE, William A.

REID, Charles W.

RIVIERE, George L.

ROCHAT, Louis J., Jr.

ROGERS, Avery M.

ROGERS, Richard W.

ROUSSE, William C.

SALCH, Joseph F.

SARGENT, Wayne B.

SCHWARZ, Henry E.

SEATON, Peter P.

SELISKAR, Jack

SENAY, David C.

SHEIDER, Augustus L.,Jr.

SHRADER, James E.

SIEGERT, Robert W., Jr.

SMITH, Athol M.

PCS - LTCS

SMITH, Osbin E.

SNYDER, Paul B.

SOUCEK, Leo E.

STARKER, Joseph B.

SWANSON, Robert L.

SWILLEY, George R.

TATE, Wallace L.

TONER, Francis J.

UNDERWOOD, Joe D.

UTZMAN, Charles D.

VAN LANDUYT, Dixon D.

VEDITZ, Raymond P.

WEBBER, Herbert M.

WESTRICH, Ralph L.

WILDER, Stuart F.

WILLEY, Donald E.

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YUNKER, John L.

ZELLMER, Harry J.

ZUGSCHWERT, John F.

MAJORS

AICKEN, Larry B.

ANGLIN, Richard C.

ARRINGTON, Alvin D.

AVERY, Wesley B.

100 Percent AAAA

FORT RUCKER — Three warrant officer candidates receive AAAA "Membership Incentive" refund checks from Colonel A. T. Pumphrey (left), president of the Army Aviation Center Chapter of AAAA. The cash returns are for aviation primary class' 100 percent membership participation in AAAA, and for the most part, are used by classes to defray graduation party expenses. From left are Warrant Officer Candidates Robert B. Watkins, Jerry L. Roberts, and Nelson G. Peregory. WOC Roberts' Class 69-25 received a $292 cash refund; WOC Peregory's Class 69-13 and WOC Watkins' Class 69-17 each received $45 cash returns.

PCS - MAJORS

BAGOZZI, Donald F.
BAILEY, Gary G.
BALINT, Barry T.
BASS, Walter E.
BAUER, Arthur S.
BEAULIEU, Gary P.
BELL, Lawrence A.
BERTA, Thomas L.
BITTINGER, Robert C.
BOWLING, Ernest R.
BRADDOCK, Robert L.,Jr.
BREM, Homer L., Jr.
BROKAW, Robert P., Jr.
BRONSON, Russell A.
BROWN, John L.
BURDEN, John R.
BURKE, James A.
CAMPBELL, Billy J.

PCS - MAJORS

CHANCELLOR, Robert L.
CHRISTENSEN, George F.
CHUNN, Don C., Jr.
CLARK, Shannon D.
CLELAN, Joseph R.
COLSON, John T.
COOKE, Charles B.
CULLINS, Robert B., III
DEMPSEY, Bruce R.
DENNISON, Gary V.
DONALDSON, Orlow B.,III
DOTEN, Frederick S.
DOWNER, George R.
DUBOV, Bruce J.
DUFF, John A.
EVANS, Eulus E.
EVANS, Robert D.
EVANS, Wallace M.

PCS - MAJORS

FERGUSON, Norman N.
FLACK, Charles G.
FLEMING, Jerry L.
FULLER, Christopher L.
GALLAGHER, Joseph P.
GARDNER, William H.
GLENN, John F.
GLOVER, Leo M.
GOEBEL, Ernest W.
GRAYSON, Charles H.
HAHN, James S.
HAMILTON, Thomas R.
HARRIS, Robert E.
HATCHER, John W.
HAY, James R.
HEALY, Radcliffe
HEFFORD, Robert A.
HEIKKINEN, Kenneth L.

PCS - MAJORS

HEILMAN, John P., Jr.
HENDERSON, John C.
HENSLEY, William R.
HOLCOMB, Cornelius C.
HOLROYD, Donald E.
HURD, David E.
INGRAM, Duane C.
JAMES, Lindberg A.
JASPER, Theodore C.
JOHNSON, Darel S.
JOHNSON, David S.
JOHNSON, James C.
JOHNSTON, Norbert B.
JONES, Robert J.
JONES, William S.
JOYCE, Warren C.
KARPINIA, Walter

PCS - PAGE 39

PCS - MAJORS

KAST, Wilfried H.
KELLIM, Ronald R.
KIMAK, Philip B.
KITTERMAN, James H.
KLEIBER, Donald G.
KREULEN, Ray H.
LAWSON, Edward K., III
LEGGETT, Roy H.
LYNN, Ellie E.
MACK, Oscar C.
MARK, James C.
MARSH, Elgin R., Jr.
MARVIN, Harold A.
MAYER, John H.
MITCHELL, James R.
MIXTER, Wilbur R.
MOORE, Charles L.
MOORE, Walter B.
MORITZ, Thomas W.
MOXLEY, Robert J.
NAUMANN, Ralph E.
NELIUS, Jack C.
NOACK, Richard R.

PCS - MAJORS

ORR, Gerald W.
PARKER, Purvis L.
PEPE, Michael J.
PHIFER, Thomas K.
PIERCE, Fred W., Jr.
PIERCE, Lawrence D.
PRIEST, William W.
RACKLEY, Robert L.
RAMEY, Harold M.
RIGRISH, Ernest E.
RITTERSPACH, Fred P.
ROBINSON, Edwin K.
ROCHE, Gregory F., Jr.
ROEDER, Helmut A.
ROGERS, James E.
St. LOUIS, Robert P.
SANTULLI, John F.
SAWVELL, Vernon L.
SCAVO, Sam A.
SCOTT, Augustus D.
SCOTT, Engle W.
SCOTT, Norman E.
SHAW, William H.
SHORT, Robert E.

PCS - MAJORS

SILVA, Warren R.
SMITH, Horace M.
SOTHCOTT, Myron F.
STEVENS, Darryl M.
STEVENSON, Carl B.
SULLIVAN, Dale B.
SULZER, Roger J.
SUTTON, William F.
SWAN, Vally A.
SWIFT, William D.
THIRING, Florian A.
THURSTON, Joe B., Jr.
TODD, John J.
TOUCHET, James C.
TREAT, Robert B., Jr.
TREDWAY, Robert N.
VARNON, Jerry R.
WADDELL, Roger W.
WADE, Robert B., Jr.
WAGNER, Ronald E.
WALTON, John T.
WATKE, Frederic W.
WEBER, Ralph P.
WHITWORTH, David C.

PCS - MAJORS

WILLARD, Jack T., Jr.
WILLIAMS, Billy G.
WILLIAMS, Frank K.
WILLIAMSON, Donald R.
WILSON, Donald E.
WINKEL, Paul P., Jr.
WINTERS, Donald L.
WOOLLEY, Alan N.
WOUTERS, Frank D.
WRIGHT, L. Marshall
WYNN, Thad K., Jr.
YOPP, Dewey C.
ZIERDT, William H.

CAPTAINS

ASH, Clifford R.
ATKINSON, Thomas J.
BAKER, Delmar G.
BEASLEY, Lonnie S., Jr.
BRADLEY, David B.
BRANNING, Thomas E.
BURCHAM, Jerry L.
CAVANAUGH, Edw. W.,Jr.
CHAPLIN, Robert D., III
CHIARAMONTE, Wm. V.

Back-to-Back

FORT SILL — In back-to-back award ceremonies Colonel Frederick C. Goodwin, commander of Fort Sill's Field Artillery Aviation Command, is shown presenting Master Army Aviator Wings to two veteran aviators. In left photo, Major Donald H. Yenglin, airfield operations officer, is shown being congratulated following a July 8 ceremony. On the subsequent day Major Ralph R. Jackson, chief of flight standardization at the Artillery Aviation Command (right photo), is shown receiving the Master Army Aviator wings from Colonel Goodwin. Major Yenglin has logged more than 6,000 flying hours in his 15 years as an Army Aviator.

Masters!

PCS - CAPTAINS

COLEMAN, James P.

COLLAR, William D., Jr.

CORDON, Marco A., Jr.

CRISSMAN, Robert S.

DUCKWORTH, W.L., Jr.

EDINGTON, Thomas J.

EVERSON, Randolph L.

FLETCHER, William F.

FOLEY, Raymond K., Jr.

FORMBY, Ronnie R.

FORSYTH, Harry L.

FUKS, Joseph A.

FULLER, George D.

GIBBS, James M.

GORDON, Henry

GRINER, Wayne L.

HARMON, Fern W.

HAYES, Herbert W.

PCS - CAPTAINS

HOGGARD, Claude R., III

HONAMAN, J. Craig

INMAN, Terry W.

JACKSON, Claude K.

JOHNS, Thomas C.

JONES, Lewis M.

KAY, Robert S.

KNIGHT, Gary L.

KNOPS, Norman

KONE, Wilson V.

La ROUE, Francis W.

LAUDER, Ralph H.

LEWIS, Garrett O.

LEWIS, John D.

LOWERY, Roy J.

LUCKIE, John E.

MALANEY, Dempsey L.

MALOWNEY, John R.

PCS - CAPTAINS

MARTIN, William O.

MAYFIELD, Ralph L.

McGEE, George P.

McKENZIE, Billy J.

MILLER, Henry C., Jr.

MILLER, William J.

MITTEER, Jack A.

NADEAU, Clement P.

NIAMTU, John E.

O'QUINN, Milton D.

PAGE, Larry R.

PARRATT, Stephen W.

PETRUZEL, William F.

PORTMAN, Robert L.

PRIDDY, Richard T.

QUEEN, John F.

RAAB, Carl F., IV

RAMAGE, Gary F.

PCS - CAPTAINS

RIDDLE, Ralph E., Jr.

RIVERA, Roberto

SCHAUMBERG, Thomas J.

SHAFER, Paul E.

SHIELDS, John E.

SLYE, William T., Jr.

SMITH, David R.

SMITH, Richard L.

SPENCER, David G.

STACY, John M.

STEPHENSON, Francis J.

STINE, Glen J.

TOLER, Dale

TOMLIN, James E.

TOMPKINS, Richard J.

TURPEN, William E.

VAN WINKLE, James C.

PCS - CAPTAINS

VOLLMAN, Dennis E.

WALSH, Robert J.

WILLETTE, Larry J.

WITT, Robert J., Jr.

LIEUTENANTS

ALEXANDER, Jimmy D.

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AMOS, Franklin T., Jr.

ANDERSON, Jerry F.

BANASICK, Peter A.

BARBEE, Elmer R.

BARES, Gregory C.

BOLYARD, Virgil D., Jr.

BROWN, Charles P., III

CLOUGH, Larry J.

COCHRAN, John C., Jr.

CONKRIGHT, Donald D.

FOSSUM, Earl G., II

FRAZER, Richard L.

GROW, John W., Sr.

HAINEY, James F.

HAUGH, John F.

HELM, Steven A.

HOLLEMAN, Samuel D.

PCS - LIEUTENANTS

HRANEK, James R.

HULSE, Richard D.

KOHLER, Gary R.

LANGLEY, Donald H.

LOMAX, John B.

LYNES, James C., Jr.

McGRORY, James C., Jr.

MILLONZI, Lance M.

MUSGROVE, Calvin H.

NEFF, Jerry L.

O'CONNELL, Lloyd M.,III

OMER, John M.

PERRINE, James L.

PULLANO, Joseph F.

ROBINSON, Orland, Jr.

SALMON, Ronald

SKIDMORE, George A.

SMITH, Cecil

SPRAGA, John J.

STAMAT, David M.

STAPANON, Edward J.,Jr.

TILLMAN, William L.

ULMET, Oliver D.

VAGNINI, John A.

PCS - LIEUTENANTS

WALSH, William D.

WILLIAMS, George P., Jr.

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CW2 - CW4

ALLEN, James M.

BAILEY, James A.

BANASZAK, Richard Z.

BARNETT, Don E.

BAUMANN, Barry N.

BECKER, Miles S.

BERNHARDT, Henry J.,III

BORGSTEDE, Charles A.

BRAZIL, John E.

BURK, Friedrich

COLE, Leland R.

COMBS, George J.

DANEKER, John G.

DANIEL, Michael W.

DELANEY, James

DICKINSON, Lance D.

EAKINS, James R.

EDDY, Gary D.

ENGELKEN, Charles T.

EVANS, Buddy C.

FALLQUIST, Carl A.

PCS - CWOS

FARNHAM, Robert E.

GARNER, Roland E.

GAY, Albert G.

GERRETSON, James L.

GRAYBILL, Raymond N.

GREENE, David C.

HAMPTON, Billy J.

HANSEN, Henry L.

HENNESSY, Thomas N.

HERMON, Donald E.

HILL, Dickie C.

HILL, James H.

HODGE, Raymond M.,Jr.

HOLCOMBE, Albert M.

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HOLMAN, Peter T.,III

HOOKS, Charles D.

HUSTON, Paul B.

JOHN, Richard L.

JOHNSON, Jimmie E.

JONES, Walter E.

JURNEY, James K.

KIDD, Denver G.

KILKER, Gary L.

KOEHNEN, Richard C.

Master AA's

FT. LEAVENWORTH — Four U.S. Army officers attending the U.S. Army Command and General Staff College are shown just after receiving their Master Army Aviator Badges in a June ceremony. From the left are: Lieutenant Colonels George M. Belk, Jr., and James A. Payne, Jr.; Major General John H. Hay, Jr., Commandant of the USACGSC; and Lieutenant Colonels Lee B. Cannon and Jerry C. Orr. The four officers had flown a total of 16,190 hours since receiving their Army Aviator wings. Master wings are awarded on completion of 15 years service as an Army Aviator, 3000 hours flying time, and a current I-ticket.

PCS - CWOS

LAMB, William T.
LANIER, Harold S.
LAREAU, Kenneth L.
LAWRENCE, Clell H.
LEVERING, John W.
MARSH, Robert R.
MARTIN, Nelson M., Jr.
MARTZ, Richard F.
McGAFFICK, Edward F.
McRAE, Charles C., Jr.
MICHAEL, Charles D.
MOORE, John E.
NEWMAN, Stephen T.
NICHOLSON, Bruce C.
PARIS, Robert N.
PETERSEN, Dwayne L.
PETERSON, Robert M.
PHILLIPS, Eugene B.

PCS - CWOS

PIETY, Richard L.
PINARD, Joseph L.R.
POWELL, Johnny L.
RICHARDS, Paul S.
ROGERS, Roy Aubrey
RUESTOW, Gregory P.
St.JOHN, Dalles
SANDROCK, Donald L.
SCHOMP, Donald D.
SCOTT, Clyde E.
SEEFELDT, Richard S.
SHOUP, Richard W.
SHUMAN, Kenneth E.
STALLARD, James B.
STEELMAN, Jimmie L.
STRONG, Robert E.
SWIZER, John W.
THOMSON, Oliver C.

PCS - CWOS

TOMLIN, Larry C.
ULM, Arthur J., Jr.
USTER, Paul E.
VANLIER, Theodore W.
VLECK, Burton J.
WACHTER, John J.
WANDEL, Warren
WARD, Clark H.
WARREN, James, Jr.
WENDT, Frank L.
WEST, James R.
WILLS, Earl R.
WOLFE, David C.
WRINKLE, John R.

WOS

ADAIR, Ronnie L.
ALBINO, Robert A.
ALLEN, Robert

PCS - WOS

APPLEBY, William H.
BALL, Jesse E.
BATEMAN, James T.
BECKER, Richard W.
BEISHLINE, David C.
BERGEMANN, Curtis A.
BERRYMAN, Rue S.
BIELECKI, Paul M.
BOLLAR, Bert A.
BROWN, Herby
BUCKELEW, Thomas A.
CARROLL, Michael E.
CHAPPELL, Russell W.
CHRISTENSEN, Paul M.
CLATER, Jefferson N.
CLOUD, Thomas M.
COLEMAN, David A.

PCS - PAGE 43

COLLEMER, Steven E.

CONNELLY, Richard J.

COOPER, Ronald E.

CORWIN, Harold B., III

CRABB, Wilbur L.

CRAFT, David R.

CRYER, Robbie L.

CUSHMAN, Thomas J.

DAIGLE, Michael A.

DAVIS, Roger G.L.

DEARING, John L.

DELMORE, Nicholas A.

DEL SOBRAL, Daniel M.

DEMARAIS, Robert M.

DERINGER, Larry P.

DIAS, Harold J., Jr.

DIXON, James M.

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DUNNACK, Mark A.

DUROCHER, Lawrence E.

ELLIS, Dennis P.

ELLIS, Robert D.

FAAST, Eldon F.

FEASEL, Larry S.

FOSTER, George M., Jr.

FOX, Dennis O.

FYKSEN, Dennis R.

GARCIA, James J.

HANF, Lawrence M.

HAVLICEK, Karl R.

HEADY, James A.

HEADY, Kurt C.

HECKLER, Robert L., Jr.

HINTON, William D.

HOWARD, Sidney L.

HUTSELL, Harold J.

INGLE, Larry M.

IRWIN, James L.

JACKSON, William L.

JOHNSON, James M.

KELLY, Charles E., Jr.

KIMBLE, Richard H.

KNIGHTEN, Brelan F.

KUNKEL, Paul L.

LABRUYERE, James R.

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LAUCK, Rodney W.

LONG, Donald J.

MARCHANT, Charles D.

MARSHALL, John L., Jr.

MASCARO, Richard P.

MAYS, Francis E.

McGINNITY, Alan E.

McINNES, Bruce L.

McMANUS, James H.

MERGEN, Thomas S.

METCALF, Marvin G.

MILIZIANO, Salvatore

MILLER, William L.

MILLMAN, Donald J.

MONTGOMERY, N.W.

NEUBERT, Charles L.

NICHOLS, Kenneth L.

NICHOLS, Thomas H.

NISTLER, Gary C.

NIXON, James R.

NIXON, John D., Jr.

PASEWALK, Marc H.

PLESE, Randall J.

POFFENBARGER, Gary L.

PRISOCK, Roy L.

RADEMACHER, James E.

REED, Geoffrey R.

RHODES, John W.

SCHRADER, James M.

SIMKO, Edward W.

SINCLAIR, George L.

SMETANA, Hans R.

SNEED, William D., Jr.

SPARKS, Steven L.

SPOONER, Gary M.

SPRADLIN, Richard E.

STANFORD, Robert F.

STEPHENS, Carl H.

STEPHENSON, Robert D.

STEWART, Norman

STRAUB, Terry L.

SWICKARD, Jeffrey M.

THOMPSON, Paul J.

TONELLI, James D.R.

VARS, John K.

VAUGHAN, Carroll A., Jr.

VAUGHN, William R.

VOGT, Thomas F.

WAGNER, John H.

WATSON, Jackie E.

041
WELCH, Joseph C.

One Millionth Hour

FORT WOLTERS — WOC Richard E. Adams (left), Class 69-35B1, and CWO Larry R. Hansen, Flight B-2, receive congratulations on logging the 1,000,000th hour of flight time recorded in FY69, the highest total ever reached in a single training year at the USAPHS. Pictured at Dempsey Army Heliport are (left to right): COL John F. Roberts, director of training; MAJ Ronald C. Clarke, Flight Safety; Candidate Adams; CWO Hansen; CPT Brent J. Artley, B-2 flight commander; COL Lloyd G. Huggins, Center commander; and LTC C. M. Crain, director of Flight Department B. The new flight mark was established in an OH-13 aircraft.

PCS - WOS

WHARTON, James R.

WINTER, Steven E.

WOOD, Mark W.

ZEITLER, Ernest P.

ZIEGLER, Roy E., II

ZOLLERS, David W.

ENLISTED

DOBBS, Bobby W., SFC

HILL, Joel R., MSG

JONES, Eugene R., 1SG

KENOLIO, D.N.,Jr., SFC

OGLETREE,Clarence, 1SG

WHITE, Alfred J., SSG

WILLIAMS, Robt D.,1SG

RETIRED

BOYD, Marzelle F.,COL

BROWN, Edward C.,LTC

EDSON, Hallett D.,BG

PCS - RETIRED

ERICKSON, F.C., LTC

FABERT, Marvin C., LTC

GRABSKI, Edward J.CWO

HARRIS, Brady R., LTC

KLIM, William, Jr.,LTC

KYLE, David M., COL

McKENZIE, V.C., LTC

MILLER, Oral D., LTC

MORRIS, Robert E., LTC

MURRAY, George W., CW3

NORMAN, Brooks O., COL

OLNEY, Gregory L., COL

VAUGHT, Ralph J., CW4

ASSOCIATES

BATTLE, Richard, Jr.

BONNARENS, F.O., Mrs.

COLLETT, Benson M.,Mrs

23602

DUFFY, John P.

PCS - ASSOCIATES

EDGINGTON, Walter R.

FERRING, Ed

HENRY, Harley, Jr.

HYMOFF, Edward

MAHON, John L.

MIDDLETON, John L., Jr.

MITCHELL, R.J., Jr.

MITCHELL, Ward B.

RASHIS, Bernard

RODES, Anthony L.

PCS - ASSOCIATES

ROSS, James A., Jr.

RYAN, Jack T.

SANDERS, Emil

SHIPLEY, Guy E., Jr.

SMITH, Barbara L.,Miss

STEELE, Richard S.

TEAGUE, Gene A.

UHLER, D.C.

WESLEY, Charles M.

WROBLESKI, Dennis A.

OBITUARIES

AULD — In Vietnam, Warrant Officer Roger M. Auld, Jr., 11th Aviation Battalion, due to an aircraft accident on April 23, 1969; son of Mr. and Mrs. Roger M. Auld, Sr., [redacted]

BAKER — At Fort Rucker, Alabama, Captain Ralph W. Baker, Headquarters and Service Company, due to an aircraft accident on April 18, 1969; son of Mr. and Mrs. Robert L. Baker, Baker, West Virginia.

BOUCHER — In Vietnam, Captain Robert C. Boucher, 7th Squadron, 1st Air Cavalry, due to hostile action on April 20, 1969; husband of Mrs. Lynn M. Boucher, c/o Mr. and Mrs. Walter F. Boucher, [redacted]

BRITTON — In Vietnam, First Lieutenant William D. Britton, 227th Aviation Battalion, due to an aircraft accident on May 4, 1969; husband of Mrs. Deborah J. Britton, c/o Mr. William L. Utsey, [redacted]

BROWN — In Vietnam, Warrant Officer James A. Brown, II, 101 Airborne Division (Airmobile), due to hostile action on April 24, 1969; husband of Mrs. Dorothy L. Brown, [redacted]

CHROBAK — At Fort Rucker, Alabama, Chief Warrant Officer Christopher B. Chrobak, US Army Aviation School Regiment, due to an aircraft accident on April 15, 1969; husband of Mrs. Ingrid E. Chrobak, [redacted]

CRAMBLET — In Vietnam, Warrant Officer Howard E. Cramblet, 9th Infantry Division, due to hostile action on May 12, 1969; son of Mr. and Mrs. Howard M. Cramblet, [redacted]

CREAL — In Vietnam, Chief Warrant Officer Carl M. Creal, 145th Aviation Battalion, due to hostile action on April 20, 1969; son of Mr. and Mrs. Richard W. Creal, [redacted].

DACEY — In Vietnam, Captain Bertrand J. Dacey, 11th Armored Cavalry Regiment, due to hostile action on April 27, 1969; son of Mr. and Mrs. Bertrand J. Dacey, [redacted]

DAVIS — In Vietnam, Chief Warrant Officer Thomas A. Davis, 101st Airborne Division (Airmobile), due to hostile action on April 18, 1969; husband of Mrs. Barbara J. Davis, [redacted].

DONICS — In Vietnam, Warrant Officer William C. Donics, 1st Cavalry Division (Airmobile), due to an aircraft action on May 15, 1969; son of Colonel and Mrs. William Donics, [redacted].

DUNN — In Vietnam, Warrant Officer James H. Dunn, 1st Cavalry Division (Airmobile), due to hostile action on April 23, 1969; husband of Mrs. Joyce E. Dunn, [redacted]

ECKERT — In Vietnam, Chief Warrant Officer Harold L. Eckert, Jr., 101st Airborne Division (Airmobile), due to hostile action on April 18, 1969; son of Mr. and Mrs. Harold L. Eckert, Sr., [redacted]

EYLER — In Vietnam, Warrant Officer Allan D. Eyler, 1st Infantry Division, due to an aircraft accident on April 23, 1969; son of Mr. and Mrs. George H. Eyler, Jr., Rural [redacted].

FLAGELLA — In Vietnam, First Lieutenant James P. Flagella, 1st Cavalry Division (Airmobile) due to an aircraft accident on May 4, 1969; son of Mr. and Mrs. Potito N. Flagella, [redacted].

FLURRY — In Vietnam, First Lieutenant James D. Flurry, 17th Air Cavalry, due to hostile action on May 2, 1969; husband of Mrs. Carmen M. Flurry, [redacted]

FRONGILLO — In Vietnam, Warrant Officer John R. Frongillo, 1st Cavalry Division (Airmobile), due to hostile action on May 17, 1969; son of Mr. and Mrs. Ralph B. Frongillo, [redacted]

GILBERT — In Vietnam, Warrant Officer James M. Gilbert, 3d Squadron, 17th Air Cavalry, due to hostile action on May 11, 1969; husband of Mrs. Lana M. Gilbert, 204 Vine Street, Waterloo, Iowa.

GROVER — In Germany, Captain Claude R. Grover, 7th Army Training Center, due to an aircraft accident on April 28, 1969; husband of Mrs. Sondra D. Grover, [redacted]

HODSON — In Vietnam, First Lieutenant Victor M. Hodson, 183rd Aviation Company, due to an aircraft accident on April 14, 1969; husband of Mrs. Janet L. Hodson, 7[redacted]

JENKINS — In Vietnam, Warrant Officer Bert M. Jenkins, 1st Infantry Division, due to hostile action on April 28, 1969; husband of Mrs. Janet L. Jenkins, [redacted]

KOON — In Vietnam, First Lieutenant Albert L. Koon, 1st Cavalry Division (Airmobile), due to an aircraft accident on May 15, 1969; son of Mr. and Mrs. James A. Koon, [redacted]

LEDFORD — In Vietnam, Captain Alvie J. Ledford, Jr., 101st Airborne Division (Airmobile), due to hostile action on April 13, 1969; son of Mrs. Nora D. Ledford, [redacted]

LYON — In Vietnam, Captain John P. Lyon, 7th Squadron, 1st Air Cavalry, due to hostile action on April 18, 1969; son of Mr. and Mrs. Clarence J. Lyon, [redacted].

MOHNIKE — In Vietnam, Chief Warrant Officer Phillip S. Mohnike, 11th Armored Cavalry Regiment, due to hostile action on April 27, 1969; son of Mrs. Vivian M. Mohnike, 720 County Center Drive, [redacted]

MURRAY — In Vietnam, Chief Warrant Officer Arthur J. Murray, Jr., 1st Cavalry Division (Airmobile), due to hostile action on May 15, 1969; son of Mr. and Mrs. Arthur J. Murray, Sr. [redacted].

PETERSON — In Vietnam, Chief Warrant Officer Stephen R. Peterson, 1st Infantry Division, due to an aircraft accident on April 23, 1969; son of Mr. and Mrs. Ray W. Peterson, [redacted]

POWERS — In Vietnam, First Lieutenant Edward C. Powers, 11th Armored Cavalry Regiment, due to hostile action on May 2, 1969; husband of Mrs. Olivia D. Powers, [redacted]

REMMLER — In Vietnam, Warrant Officer Milton W. Remmler, Jr., 1st Cavalry Division (Airmobile), due to an aircraft accident on May 4, 1969; son of Mr. and Mrs. Milton W. Remmler, Sr., [redacted]

RUCKER — In Vietnam, Warrant Officer John M. Rucker, 101st Airborne Division (Airmobile), due to an aircraft accident on May 11, 1969; husband of Mrs. Constance S. Rucker, [redacted].

ROSS — In Vietnam, First Lieutenant Kenneth E. Ross, 3d Squadron, 17th Air Cavalry, due to an aircraft accident on May 1, 1969; husband of Mrs. Patricia A. Ross, [redacted].

SANFORD — In Vietnam, Captain Arnold Sanford, 11th Aviation Battalion, due to an aircraft accident on April 23, 1969; husband of Mrs. Linda Sanford, [redacted]

SATTERFIELD — In Vietnam, Warrant Officer Robert W. Satterfield, 3d Squadron, 17th Air Cavalry, due to an aircraft accident on April 16, 1969; husband of Mrs. Kathleen E. Satterfield, [redacted]

SCHAEFER — In Lakeland General Hospital, Lakeland, Fla. — Lieutenant Colonel Richard B. Schaefer, Hqs. U.S. Army Aviation Center, Fort Rucker, Ala., on June 13, 1969, due to injuries received in an automobile accident in Brooksville, Fla., on June 12. He is survived by his widow, Marilyn, and four children, Stephen E., 17; Karen S., 15; Kimberly A., 14; and Kathyrn D., 11, all of [redacted]; his mother, one brother, and one sister. Burial with military honors took place in El Camino Memorial Park, San Diego, Calif. on June 23, 1969.

Major Conley T. Raymond, a 33-year-old highly-decorated career aviator who had completed two tours of duty in Vietnam, was killed in an automobile accident on June 1 while enroute to the University of Utah where he was to complete the requirements for a master's degree. He is survived by his widow, Kathleen, and a son, Jeffrey, of 333 West 1st North, Logan, Utah; his mother, Mrs. Reta Raymond and his grandparents, Mr. and Mrs. Moroni Hansen, all of Logan; a brother, Landall, of Bountiful, Utah; and a sister, Mrs. Karl Koerner, also of Logan.

SEARCY — In Vietnam, Chief Warrant Officer Elton L. Searcy, 101st Airborne Division (Airmobile), due to hostile action on April 25, 1969; husband of Mrs. Tiny C. Searcy, [redacted]

STACY — In Vietnam, Warrant Officer Walter R. Stacy, 10th Aviation Battalion, due to an aircraft accident on May 15, 1969; husband of Mrs. Gloria L. Stacy, [redacted]

STAHLSTROM — In Vietnam, Warrant Officer Allan E. Stahlstrom, 25th Infantry Division, due to hostile action on May 10, 1969; son of Lieutenant Colonel (Ret.) and Mrs. Harry A. Stahlstrom, [redacted]

STOWE — In Vietnam, Warrant Officer Jeffrey C. Stowe, 129th Aviation Company, due to hostile action on May 13, 1969; son of Mrs. Gloria A. Lynde, [redacted], and Mr. Charles C. Stowe, 6 [redacted]

THOMAS — In Vietnam, Warrant Officer Roy S. Thomas, 25th Infantry Division, due to hostile action on May 10, 1969; husband of Mrs. Candyee D. Thomas, c/o Mr. and Mrs. James W. Anders, [redacted]

TURLEY — In Vietnam, Warrant Officer Richard L. Turley, 7th Squadron, 17th Air Cavalry, due to hostile action on April 26, 1969; son of Mr. and Mrs. Richard S. Turley, [redacted].

TURNER — In Vietnam, Warrant Officer John M. Turner, 7th Squadron, 17th Cavalry, due to an aircraft accident on March 26, 1969; son of Lieutenant Colonel and Mrs. John T. Turner, Headquarters 2d Support Brigade (VSOSCOM) (Provisional), APO New York.

WATSON — In Vietnam, Captain David W. Watson, 101st Airborne Division (Airmobile), due to hostile action on April 25, 1969; husband of Mrs. Dovie C. Watson, 8 [redacted]

ARMY AVIATION

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