

23

TAC ATTACK

NOVEMBER 1975



THE PASSING OF
A FRIEND... Pg 23

NOV

FOR EFFICIENT TACTICAL AIR POWER



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Angle of ATTACK



Safety=Change

COL J.D. MOORE
Chief of Safety

In case you have not noticed, the safety business is achieving a new look. At some point in the past, safety seems to have acquired a reputation for being a less than desirable job. This is unfortunate -- almost tragic. It is difficult to nail down a reason for this. At least a part of the cause may be purely psychological in that safety types always seem to be reminding people of the obvious, pestering them about unsafe things and bearing bad news. It will not serve our purpose to explain all that in this brief space, but you can be assured that it is necessary.

The result, as learned from a recent survey, is that 77% of you TAC folks think that there is some stigma attached to being in the safety business. Forty-five percent of you would not

volunteer for a safety job under any circumstances. That is lamentable. You are missing one of the very finest career-broadening opportunities available. Safety spans the full spectrum of TAC's operations. Whether it is at squadron, wing, NAF, or TAC HQ level, safety deals with every conceivable aspect from plans to knuckle-busting. Nothing you can do fails to involve safety and safety encompasses everything. It cuts laterally across all organizations and it moves vertically in the chain of command with more ease than any other function. Spend some time with your safety people or come up and join us for a day and see for yourself. It is no piece of cake to be in a position of carrying bad news to the boss. It is no easier to keep pounding closed ears with safety guidance, statistics or slogans. Some cower under the load and reduce to cruise power. And when you are used to running at full mil or better, who wants to joint the plodders?

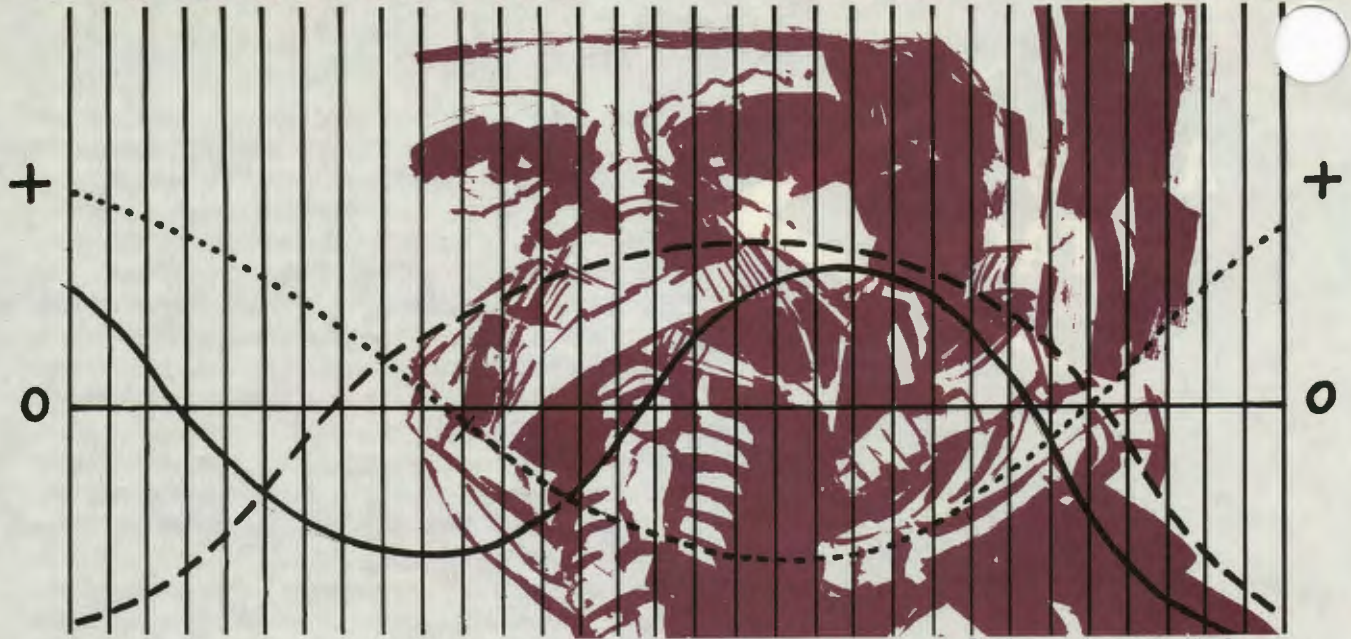
That, gang, is changing! If you do not have a superior record of performance, exceptional growth potential and demonstrated skill as a manager and a leader, you cannot be in safety. It is in TACR 36-1. Even more, it is being closely monitored by us, the NAF safety people and commanders. If you do not measure up, you cannot get in.

Should you be good enough to shoulder the load, you will not get lost in safety or be labelled with an "X prefix" forever. AFR 36-20 prohibits anyone from being in safety for more than three (collective) years unless one volunteers for more. More important, safety jobs are now stair steps to other highly coveted positions. The career-broadening, maturing and educational nature of safety make it an ideal source for operations officers, squadron commanders and similar jobs of high responsibility. Look around, you will see it happening.

What I am describing is a carefully designed and calculated program. It has the full, active support of the TAC Commander, NAF Commanders and Wing Commanders. If you are interested in challenge, progression, career-broadening, preparation for real responsibility and being on the first team, try the safety team. It has changed.

Have a good one!

BIORHYTHMS---ARE THEY A



by Major John H. Wolcott, USAF, BSC, Aerospace Pathology Division, Armed Forces Institute of Pathology, Washington, DC

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The biorhythm theory is in the news a lot lately. TAC ATTACK published an article on the subject back in March 1972 entitled "Bio-what" and the response to that article has been steadily increasing since that date. It's fun to figure your personal biorhythm chart and if doing so makes you more safety conscious only during "critical periods," some benefit has been achieved. Unfortunately, this unproved theory may be gaining some attention that transcends its qualification -- accident reports, for instance. The following statistically heavy, but important study may help in putting biorhythms in proper perspective. The opinions or assertions that follow are the private views of the authors and are not to be construed as official or as reflecting the views of the DOD, Air Force, Army, National Transportation Safety Board, of the Federal Aviation Agency—ED.

What is the "biorhythm theory," and how does it apply to aviation safety? Recent military magazines as well as other popular literature have proposed a role for biorhythms in reducing accident rates. The biorhythm theory proposes that there are three biological cycles which affect a person's feelings and performance. The

23-day physical cycle and the 28-day emotional cycle were discovered by Swoboda and Fliess, working independently, over 70 years ago. Later, Teltscher discovered the third cycle, a 33-day intellectual cycle. The cycles, represented by sine wave curves, start simultaneously on the first positive half-cycle at the moment of

birth. The positive phase of each cycle represents a period when maximum performance should be expected, the negative phase represents periods of poorer performance, and the crossover points of the cycles (sine nodes) are termed "critical periods." Critical periods are characterized by maximum fluctuations

WASTE OF TIME ?

pects of behavior and present times when accidents are most likely to occur (See Fig 1). Detailed description of the biorhythm theory can be found in Thommen's book (1973). Major Tim Brady, then Editor of TAC ATTACK, in a March 1972 article, also summarized the essential points of the theory.

The biorhythm theory is frequently used to predict individual capabilities -- physical, emotional, and intellectual -- during past, present, and future time periods. If a person's date of birth is known, it is easy to test the theory to see if past accidents correspond with points on the biorhythm curves. To do this, however, it is essential to understand the mathematics of the theory and the effect of different lengths of time used for the critical period.

Most people who have calculated biorhythms have defined each critical period to be of 24 hours duration. Since a sine curve is composed of both a positive and a negative phase, the line crosses the "zero line" twice for each cycle. Each of these nodal points represents a critical period. Therefore, 2 of 23 days are in the physical, 2 of 28 days are in the emotional, and 2 of 33 days are in the intellectual "high risk" periods. Adding these figures would yield a total of 21.9% which is reduced to 20.4% because of the occurrence of multiple critical days. Double and triple critical days refer to days when two or three rhythm curves crossing the "zero line" at the same time. The exact percentages of all days that are critical if a 24-hour critical period is used are presented in Table 1.

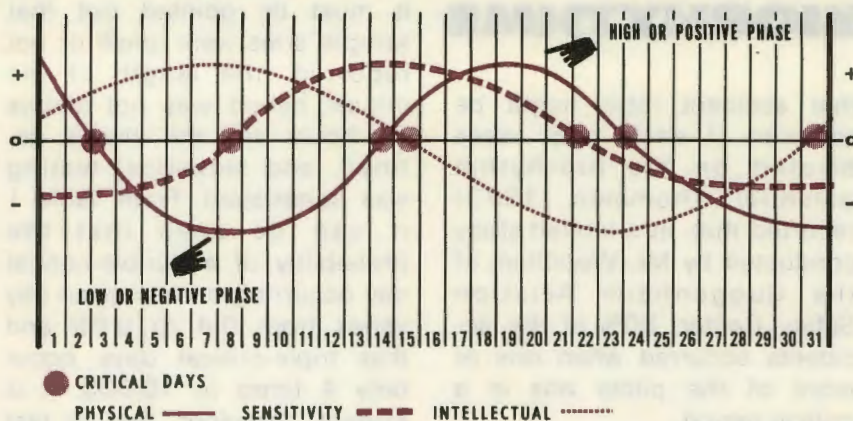


FIGURE 1 - THE THREE BIORHYTHM CYCLES ARE PLOTTED AGAINST DAYS OF THE MONTH.

Table 1

Critical Day	24-Hour Period	48-Hour Period
Single physical	7.5850	13.0999
Single emotional	6.1265	10.3707
Single intellectual	5.1383	8.5827
Double P/E	0.5835	2.1834
Double P/I	0.4894	1.8069
Double E/I	0.3953	1.4305
Triple P/E/I	0.0376	0.3011
Total critical	20.3557	37.7752
Noncritical	79.6443	62.2248

Expected Percentage Occurrence of Critical Days Physical (P), Emotional (E), and Intellectual (I) Cycles

Using a 48-hour or 72-hour critical period would increase the expected random occurrence of critical days from 20.4% for the 24-hour critical period to 37.8% and 51.5% respectively. These percentages do not exactly double and triple because large increases occur in the number of multiple

critical days. It is essential that these percentages be understood and the length of the critical period be clearly defined when evaluation of past accident data is undertaken by means of the biorhythm theory.

Previous studies that applied the biorhythm theory to aviation-accident data indicated

BIORHYTHMS

that accident rates might be reduced if each pilot were briefed on his biorhythm potential. Thommen (1973) reported that, in a limited study conducted by Mr. Woodham of the Guggenheim Aviation Safety Center, 80% of the accidents occurred when one or more of the pilots was in a critical period.

Major Brady reported that 13 of 59 TAC accidents (12 expected from random calculation) occurred on days when one or more of the pilots involved was in a biorhythmically critical period. He also noted that 67% (55% expected) of the accidents occurred on days when two or more cycles were in their low phase. Weaver (1974) sampled one-fourth of the U.S. Army pilot-error accidents that occurred during a 2-1/2 year period and reported that 49% occurred on critical days of the pilots. Sixty-four percent of these were on double-critical days. Most recently, Williamson (1975) reported that of the 24 MAC accidents for which complete data were available, 58% occurred on a critical day of the pilot. He also evaluated 35 cases from ADC and found only a 34% correlation between the occurrence of accidents and their occurrence on biorhythmically critical days. It must be pointed out that the author used one day on either side of the critical period as the critical day and thus increased the expected occurrence of critical days to 51.5%. By application of his figures, it appears that 26 of 59 cases (only 44%) occurred on critical days of the pilots.

In reviewing the above data,

it must be pointed out that sample sizes were small or not reported, the length of the critical period was not always 24 hours and not always defined, and statistical testing was nonexistent. From Table 1 it can be seen that the probability of a double-critical day occurring on any given day varies from 0.4 to 0.6% and that triple-critical days occur only 4 times in 10,000. It is evident, therefore, that to test the theory adequately on accident statistics, it is essential to use a large sample size. This is particularly true when observed data do not deviate much from random expected results.

Sacher (1974), in his master's thesis, studied over 4,300 U.S. Navy aircraft-accident cases and found no significant deviation from random expected results. Some of his data will be referenced later in conjunction with nearly 4,300 pilot-involved cases reported here.

We used the U.S. Army Aviation Safety Center accident data on file at the Armed Forces Institute of Pathology to calculate more than 600 biorhythms. It was decided that this sample size was limited, and another 4,003 cases were obtained from the National Transportation Safety Board (NTSB) for general aviation accidents occurring in 1972. Finally, another 1,200 cases were obtained from the U.S. Army Aviation Center, Fort Rucker, Alabama. From these two sources, there were 5,840 aircraft-accident cases (1,837 U.S. Army and 4,003 NTSB), of which 4,279 had been classified as pilot-involved. In calculating the biorhythms of pilots, the average birth time of

1200 hours was used since exact time of birth was available in either NTSB or U.S. Army files. This practice has been used by most biorhythm proponents when calculating biorhythms for large sample sizes. The data were also screened by using a 48-hour critical period in order to insure that this assumption of an average time of birth did not unduly influence the testing of the theory.

Data were tested by the chi-square statistical test. This involves finding the difference between the expected and observed events, squaring this difference, and dividing by the expected number. The chi-square test is used to test data when the expected number occurring can be calculated based on a theory. In this case, the random expected numbers of accidents occurring can be calculated using the percentages shown in Table 1. A chi-square is calculated for each type of critical day (single, double, or triple), and a total chi-square is then derived. This total chi-square value is compared to a statistical table at a specific significance level to see whether the results deviated from the expected random model. In this study, a significance of 90% ($p = 0.1$) was used to test the biorhythm theory. If a result is not statistically significant by this test (observed chi-square value less than the tabular value), it refers to a frequency that might reasonably be expected to have occurred by chance alone.

The data presented in Table 2 were derived from the 3,253 pilot-involved accident cases recorded by NTSB for general aviation in 1972. It summarizes the distribution of accidents

with respect to their occurrence on noncritical and on various types of critical days. There were a few more accidents occurring on single-critical days of the intellectual cycle and on double-critical days of the physical-intellectual cycles than expected. Despite these variations, the total chi-square was not statistically significant.

Addition of the data presented in Table 2 to exactly the same type of data derived from evaluation of the 1,026 pilot-involved accident cases of the U.S. Army yielded the results presented in Table 3 for 4,279 accidents. There were still a few more accidents occurring on critical days of the intellectual cycle than expected. There were also a few more than expected occurring on critical days of the emotional cycle. The total chi-square was slightly lower than the previous value and was also not statistically significant.

Again, using the 24-hour critical period and considering all three cycles, the resultant total chi-square value was even less when the data of Sacher (1974) were added to those for U.S. Army and NTSB cases (Table 4), making a total of 8,625 cases. Although there were still a few more accidents occurring on single-critical days of the emotional and intellectual cycles than expected, there were slightly fewer than expected numbers of most multiple days. The data *did not deviate significantly from the random model*.

If the biorhythm theory is correct, in addition to expecting higher accident rates on critical days, it is also reasonable to predict that more accidents would occur on nega-

Table 2

National Transportation Safety Board Cases

Comparison of Observed and Expected Numbers of Critical-Day Accidents by Chi-Square Analysis in 3,253 Pilot-Involved Accident Cases

(Critical Period - 24 Hours)

Critical Days Type and Cycle	Observed Number	Expected Number	Difference (d)	Chi-Square d^2 /Expt No
Noncritical	2557	2590.8	-33.8	0.42
Single physical	240	246.7	-6.7	0.18
Single emotional	208	199.3	+8.7	0.38
Single intellectual	195	167.1	+27.9	4.66
Double P/E	15	19.0	-4.0	0.84
Double P/I	23	15.9	+7.1	3.17
Double E/I	14	12.9	+1.1	0.09
Triple P/E/I	1	1.2	-0.2	0.03
Total chi-square				9.79
Tabular chi-square, $p = 0.1$, $n = 7$				12.02

Table 3

National Transportation Safety Board and U.S. Army Cases Comparison of Observed and Expected Numbers of Critical-Day Accidents by Chi-Square Analysis in 4,279 Pilot-Involved Accident Cases

(Critical Period - 24 Hours)

Critical Days Type and Cycle	Observed Number	Expected Number	Difference (d)	Chi-Square d^2 /Expt No
Noncritical	3364	3408.0	-44.0	0.57
Single physical	325	324.6	+0.4	0.00
Single emotional	288	262.2	+25.8	2.54
Single intellectual	236	219.9	+16.1	1.18
Double P/E	17	25.0	-8.0	2.56
Double P/I	27	20.9	+6.1	1.78
Double E/I	20	16.9	+3.1	0.57
Triple P/E/I	2	1.5	+0.5	0.13
Total chi-square				9.33
Tabular chi-square, $p = 0.1$, $n = 7$				12.02

BIORHYTHMS

tive or poor-performance portions of the cycles, particularly when more than one biorhythm curve is in a negative phase. Table 5 presents data from the 4,279 pilot-involved cases (U.S. Army and NTSB) showing

the number of accidents that occurred when three cycles were positive, two cycles positive and one negative, one positive and two negative, and all three negative. *Accidents did not occur on triple-negative days with greater frequency than expected.* Again, the ob-

served events so closely matched the expected that an extremely low chi-square resulted.

Data from the U.S. Army and the NTSB were also analyzed in several ways not presented here in tabular form. First, since an average birth time of 1200 hours was used, the data were also evaluated using a 48-hour critical period. This would pick up any "close hits" -- that is, pilots whose birthdays were early in the morning or late at night. The appropriate expected percentage, however, must be changed to reflect the 48-hour period. *The deviations which occurred from the predicted/expected values were not statistically significant.*

The data were also analyzed with reference only to the physical and emotional cycles, since many proponents of biorhythm theory believe this to be the two important cycles in determining the occurrence of accidents. These cycles were evaluated for critical periods of both 24 hours and 48 hours. *No statistically significant differences occurred from the expected results.*

The occurrence of accidents in relation to the phase of cycle was also investigated in several different ways. The number of accidents that occurred on the positive or negative phase of each cycle was recorded. The data were also analyzed with reference only to the physical and emotional cycles and the combined state of the cycles recorded (two positive, one positive-one negative, or both negative). Finally, the data were analyzed to see whether more accidents than expected occurred on peak negative days of the cycle (maximum

Table 4

National Transportation Safety Board, U.S. Army, and U.S. Navy Cases. Comparison of Observed and Expected Numbers of Critical-Day Accidents by Chi-Square Analysis in 8,625 Pilot-Involved Accident Cases

(Critical Period - 24 Hours)

Critical Days Type and Cycle	Observed Number	Expected Number	Difference (d)	Chi-Square $d^2 / \text{Expt No}$
Noncritical	6833	6869.3	-36.3	0.19
Single physical	640	654.2	-14.2	0.31
Single emotional	567	528.4	+38.6	2.82
Single intellectual	463	443.2	+19.8	0.88
Double P/E	45	50.3	-5.3	0.56
Double P/I	44	42.2	+1.8	0.08
Double E/I	31	34.1	-3.1	0.28
Triple P/E/I	2	3.2	-1.2	0.45
Total chi-square				5.57
Tabular chi-square, $p = 0.1$, $n = 7$				12.02

Table 5

National Transportation Safety Board and U.S. Army Cases. Chi-Square Analysis of Accidents Occurring on Combined Phases of Cycle in the Pilot-Involved Accident Cases

Cycle and Phase	Observed Number	Expected Number	Difference (d)	Chi-Square $d^2 / \text{Expt No}$
All positive	439	426.0	+13.0	0.40
Two positive	1474	1479.6	-5.6	0.02
One positive	1702	1712.7	-10.7	0.07
All negative	664	660.7	+3.3	0.02
Total chi-square				0.51
Tabular chi-square, $p = 0.1$, $n = 3$				6.25

points). Only very small deviations occurred, and none were significant.

The various methods of studying the data mentioned above resulted in the construction of eight chi-square tables from each data source (U.S. Army, NTSB, and both combined). Of these 24 tables, 3 (Tables 2, 3, and 5) are presented in this article. Only 3 of these 24 tabular total chi-square values were significant at the $p=0.1$ level. All three of these were on the smallest sample size, the U.S. Army. All three resulted from distributions of critical days that did not match the theoretical expected distribution, but nevertheless did little to enhance the biorhythm theory. The first two deviations were discovered while analyzing the distribution of critical days among all three cycles for 24-48-hour critical periods. In some cases, there were individual chi-square values that resulted from fewer than expected numbers of accidents occurring on specific critical days and that composed about half of the total chi-square value. The third significant total chi-square value resulted when evaluating only the physical and emotional cycles while using a 48-hour critical period. Again, there were fewer than

expected numbers of one type (double-critical-day) and more than expected numbers of single-critical-day accidents.

SUMMARY AND CONCLUSIONS

Previous reports have claimed that a person is as much as three to eight times more susceptible to accidents during a critical period. Analysis of 8,625 cases for correlation of aircraft-accident occurrences on critical days and 4,279 cases for correlation with negative phases of cycle failed to demonstrate that aircraft accidents occur in accordance with the biorhythm theory. *From the percentages derived from Table 4, it is found that the total percentage of accidents that occurred on all types of critical days was 20.78%, compared to the expected ratio of 20.36%. This deviation which occurred from the expected results was not significant.* Additionally, an extremely low chi-square value was obtained when comparing the occurrence of accidents on various multiple phases of cycles. Although average birth times were used and aircraft accidents are difficult to assess absolutely with respect to

cause, the use of a large sample size, without significant deviations from expected results, rules out biorhythms as a causal factor in aircraft accidents.

Careful scrutiny of other biorhythm data is needed. The fact that industrial-accident rates were reduced by briefing workers on biorhythms may simply have resulted from people exercising more care as a result of individual attention from management. Practicing care on critical days and on one day on each side of the critical day results in exercising care over 50% of the time. One would expect accident rates to decline when increased care is taken to follow safety precautions or when hazardous situations are avoided, as is the goal of any accident-prevention program.

It obviously makes sense to be careful when flying, particularly if it is on a seemingly "bad day," which everyone has from time to time. Predicting the occurrence of these bad days by use of the biorhythm theory is, at best, questionable. USING BIORHYTHMS AS AN EXCUSE FOR POOR PERFORMANCE MAKES NO SENSE. The emphasis should simply be on commonsense flight safety - not on calculation of individual biorhythms. ➤

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Editor's File: PASS THE WORD

by Maj Joe Tillman

I guess if one phrase could describe the primary responsibility of safety types from HQ Air Force down to squadron level, that phrase would be "pass the word." Recently, TAC Safety, in an effort to insure this flow of information is not a one-way street, requested some information from you in the field. The medium was a short, informal aircrew survey. Four of the questions dealt with your opinion of the flight safety officer's (FSO) job: the desirability of such a job; how you would rank it with other jobs; how you felt an FSO position would affect your career; and your thoughts on whether one assignment in safety would tie you irrevocably to the Safety AFSC. Some interesting answers (and puzzling misconceptions) resulted. For example, one survey question asked: *Following a first assignment as a wing flight safety officer, what do you think your chances are of a second safety assignment?*

We asked that those surveyed select one of these answers:

- a. I would get a second safety assignment only if I volunteered.
- b. I must take action to get other than a safety assignment.
- c. Practically impossible to get other than safety assignment.
- d. I will never get out of safety.

Responses to the questions were as follows: (a) 23%, (b) 49%, (c) 15%, (d) 13%. A full 77 percent selected one of the last three answers --

all wrong! The truth is, AFR 36-20, Officer's Assignments, (Change 5, dated 20 Jan 75) now limits the flying safety tour to a maximum of three (collective) years: "The 3-year limitation includes situations where an officer's initial assignment is to flying safety officer duty and is subsequently reassigned to other full-time safety duties (such as Chief of Safety) prior to the expiration of the 3-year period." Quote, unquote. If you haven't already, read this month's Angle of Attack on page 3.

The survey question that hit home to those of us in the safety education business concerned dissemination of information. The question on safety cross-tell brought some surprising results. We requested: *Rank the following sources according to which has had the most impact on you (number one being the source having the most impact).*

---ALSAFECOMs

---Safety magazines

---Wing safety bulletins

---Wing flight safety meetings

---Squadron flight safety meetings

---Accident reports in the FCIF

Before we give the results of this question, take a stab at it yourself.

If you are typical of our testees (sorry),

Squadron flight safety meeting is your most effective source of safety information. Safety magazines ran a close second, wing safety meetings third, wing bulletins fourth, accident information in the FCIF was fifth, and ALSAFE-COMs were last. Considering the personnel resources we drew from, maybe this is not so unusual. The majority of you are lieutenants and captains, and it's logical to assume that you are more influenced by squadron meetings. This is supported by the breakdown of responses by rank -- Lt colonels, for instance, felt wing safety meetings have more impact. Lt Colonels are normally more involved with the goings-on at wing level than lieutenants and captains.

Accurate interpretation of survey results is a tricky business, so please accept our wags as just that. With this in mind, let me offer this opinionated statement ... the squadron safety officer is an important dude. He is probably the one person that can make or break a unit's accident prevention program. He is the man behind the gun ... and we need good gunners. Wing-level safety people shouldn't worry too much about the survey results, even though they only came in with a "show." Safety information is being spread at the squadron level where it belongs, and wing weenies are obviously giving the squadron safety type the encouragement (and authority) to do his thing. This is good.

As editor of TAC ATTACK, I can't feel complacent about the second-place finish that safety publications scored in spreading the word. At first blush, second place doesn't seem bad, but after all, this isn't a popularity contest and if safety mags were the primary source of accident prevention info, we would be seriously remiss. TAC active and TAC-gained reserve forces are blessed with more than 20 aircraft types based at more than 60 locations, with great variances in terrain and weather. As much as we would like to think safety mags could completely fill everyone's needs, we know it just ain't so.

Finally, I would be remiss in my job as TAC ATTACK editor if I didn't take this opportunity to enlist your aid in curing our headquarters myopia. We need feedback. Let us know what you like, what you don't like, and why. If you are aware of a safety deficiency that hasn't received publicity or been corrected, let us know. Articles are always welcome, criticism is grudgingly accepted, but apathy is abhorred. Give us a call, write a letter, send us a Fleaglegram ... pull our leg. Take a safety officer to lunch. ➤



TAC TIPS

Experience is the name everyone gives
to their mistakes. ✦ Oscar Wilde

MISIDENTIFIED TARGET

After making four passes on a controlled range, the two Aardvarks proceeded to a nearby TAC range. Lead visually cleared the target runway complex with a dry pass and then went high to score number two.

The wingman acknowledged the target complex and was cleared in by the leader. However, after the pulloff, number two became doubtful that his first pass was on the prebriefed target.

Approximately five minutes later, the range contacted the flight and told them that a practice bomb had hit approximately 50 feet from one of its emitter sites.

This wasn't the first time a bomb was dropped on the wrong target. TAC pilots have unintentionally dropped bombs on everything from fishing boats to wildlife refuge compounds. Luckily, no one was injured this time.

Let's use a little "pipper discipline" ... if you're not positive you're on the right target, don't drop. If you even think your wingman is rolling in on the wrong target, direct him to abort the pass. Don't take any chances. It may save someone's life.

ACE OF ACES

In aviation, an ace is a pilot who shoots down five enemy aircraft. In golf, an ace is a hole-in-one. But what do you call a golfer who shoots down an airplane with one shot? According to the Fresno GADO, which investigated the incident, this actually happened at the nearby Fort

...interest items,
mishaps with morals,
for the
TAC aircrewman

Washington Golf Course. A single-engine airplane doing low-level mosquito spraying was struck by a hard hit golf ball that passed through the whirling propeller, smashed through the windshield, bounced off the pilot's helmet and shattered a side window. Although stunned by the impact and injured by flying glass, the pilot kept control of his aircraft and made an emergency landing at a nearby airstrip. In answer to our question, the pilot had his own name for the golfer who shot him down, but we can't print it here.

From FAA WORLD, February 1975

HELP WANTED

A new TAC Chief of Explosives Safety

Qualification: Grade of senior Captain

or Major, with recent tactical munitions

experience. Must be remote tour

ineligible. Reporting Date: Early

January 1976. Interested individuals

may contact Lt Col McManus or Capt

Richardson, Langley AFB VA (Autovon

432-3102) for additional information.

Excellent career broadening.

RENT SLUF

After takeoff, the A-7 pilot initiated flap retraction at 205 KIAS and started a turn to acquire his wingman and facilitate the rejoin. He then noticed a flashing "wheels flap" light indicating the flaps had not been fully retracted.

The flap handle had been raised only partially, just short of the detent. When the pilot checked the flap handle to see if it was all the way forward, the handle moved forward slightly, the "wheels flap" light went out and the flaps indicated full up. A visual inspection was performed, but revealed no damage. The mission was continued.

Postflight inspection revealed damage to the inboard flap and a two-inch crack on the leading edge of the harness assembly (see photos).

When the flaps or gear do not come up normally, caution should be used to remain below limiting airspeeds. Should these airspeeds be exceeded, decelerate below the limiting airspeed prior to retracting them. If any doubt exists as to damage, land and have it checked out. Do not take a chance on having to explain a dropped object as well as gear or flap damage from exceeding limiting airspeeds.



PREFLIGHT THAT HELMET!

Ejections are risky ... even when everything goes right. When things go wrong, they can be fatal. Even the smallest oversight can cause unexpected problems ... like having a loose napestrap on your helmet. It's not uncommon to read about a jock's helmet coming off during an ejection. Usually, it was because that one dollar and eighty-three cent napestrap was loose.

The next time you pick up your helmet, check out where the CG is. Right, it's on the front side of the helmet. Now add the oxygen mask ... it really makes the helmet heavy in front. Add to this, the G you get going up the rails when you jettison your sick jet, and it's easy to see why the helmet wants to rotate forward during ejection. That's where the napestrap comes in. That little hummer, when properly adjusted, will prevent the helmet from rotating forward and coming off your head. Should the helmet do this, facial injuries are often the result (this is doubly important for you guys with large proboscises).

Your friendly PE folks will be glad to properly adjust your helmet -- all you have to do is ask. Millions of dollars have been invested in escape systems that work ... but it's up to you to preflight your escape/survival equipment to insure it's in order. Preflight that helmet -- then if you need it, it will work as designed.

DOWN TO EARTH

FLAMING SPITFIRE

by Capt Marty Steere
HQ TAC/SEPP

Most fighter jocks love to tell "There I was" stories about their aerial exploits. I'm no exception and this is one of those stories, with one exception—it's about what happened to me while I was driving my car one Saturday morning a few weeks ago.

I had purchased a 1970 Triumph Spitfire three weeks prior and had checked it out thoroughly—brakes, tires, oil, plugs, etc. Everything looked like it was in pretty good shape. The car ran fine, didn't burn oil and cut down on the amount of gasoline consumed going back and forth to work.

Then it happened—there I was, driving along with my four-year-old son on a beautiful morning when the car suddenly filled with smoke. At first I thought it was steam from a ruptured water hose, but as I slowed down I smelled gasoline, heard a crackling sound and saw the paint on the hood start to bubble. I quickly came to a stop, got my son and myself out of the car, and moved a safe distance away.

Fire trucks arrived less than five minutes after the sequence of events started, but by then the car was completely engulfed in flames. Firemen extinguished the blaze before the gas tank could rupture, but the car was destroyed.

Fortunately for me, the car was insured and most important, no one was injured. It might have been different if I were going faster on an interstate high-

way or if the firemen had not responded as quickly as they did. A burning car often draws a large crowd of spectators oblivious to the dangers involved, should the fuel tank rupture.

Cause of the blaze was a broken fuel line which pumped gasoline onto the hot engine. If you purchase a used or new car, it might be worth the time to carefully check out this component. Another point to remember is if there is a fire under the hood of your car, consider leaving the hood down. If you raise the hood, the added oxygen could cause the fire to significantly worsen and could also injure you. A fire extinguisher? I have considered that and checked out the extinguishers available for use in automobiles, but most do not contain a sufficient quantity of agent to extinguish a fire of the size I had. They may be good for a small, isolated type fire—such as an interior fire resulting from a dropped cigarette. The big fires are best left to the pros.

OK, now you've heard my "there I was" story. Check out your car thoroughly or you may have one to tell—if you're around to tell it.

OUT OF THE FRYING PAN...

This year family housing fires have accounted for approximately 2% of TAC's property damage fires. Further, three military disabling injuries resulted from grease fires and mishaps involving hot cooking oils. Here's a recap of how they happened:

A wife had cooked pork chops in 1/4 inch of cooking oil. She shut the kitchen doors and retired to the living room, thinking she had turned the stove off. An hour and one-half later she smelled smoke, investigated, and found the skillet and cabinets above the stove on fire.

A wife was heating oil in a pan in preparation for the evening meal. She thought she heard a scream from her child who was playing outside, so she went to investigate. She returned two minutes later and found the pan of grease, cabinets and stove hood on fire.

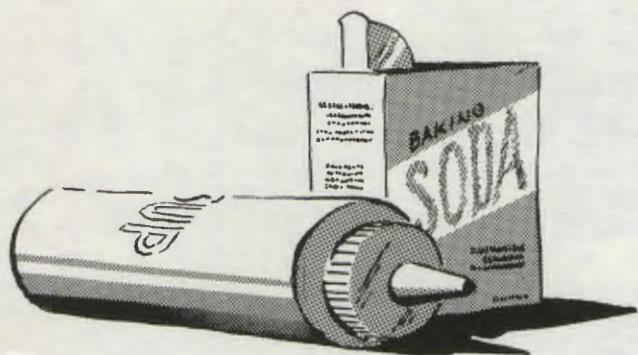
A wife placed a pan of shortening on the stove in preparation for the evening meal and found she needed several more items to complete the meal. She went to a friend's house two blocks away without turning the burner off. Twenty minutes later a neighbor reported smoke.

A sergeant preparing to cook chicken put a pan of grease on the stove to heat. While it was heating, he laid on the couch and fell asleep. The smell of burning grease awoke him. He attempted to remove the pan from the stove v

the bare hands. The pan was hot and he dropped it, spilling grease on his body, resulting in first and second degree burns. He was hospitalized for 45 days.

An airman preparing supper put grease in an electric deep fat fryer. The electrical cord was draped across a nearby chair. He sat down in the chair, pulled the cord, tipped the fryer over and spilled hot grease on both hands and feet.

A sergeant entered his kitchen to check some popcorn that he was popping and found the grease had caught fire. He spilled hot grease on his right hand while carrying the pan to the kitchen sink.



All of these mishaps were preventable and all could have ended in disaster. Don't leave cooking oil unattended for even one minute. If a pan of grease should catch fire and you catch it in time, put a lid on it. A dry chemical fire extinguisher is a good investment for the kitchen, but if you don't have one, baking soda or salt is a good (and cheap) backup. One more hint: Fill a plastic squeeze bottle (used for catsup, mustard, etc) with baking soda, and keep it handy for use only as an emergency extinguisher. The nozzle on the bottle allows you to direct the soda to the base of the fire and control the flow of the powder.

GUN SAFETY

The hunting season is here and many TAC folks will be taking to the woods hoping to fill their freezers. The people at TAC Safety wish you good luck on your trip and to help make it a safer one, offer you the National Rifle Association's 10 Commandments of Gun Safety:

COMMANDMENTS

I. Treat every gun with the respect due a loaded gun. This is the first rule of gun safety.

II. Guns carried into camp or home, or when otherwise not in use, must always be unloaded, and taken down or have actions open; guns should always be carried in cases to the shooting area.

III. Always be sure barrel and action are clear of obstructions, and that you have only ammunition of the proper size for the gun you are carrying. Remove oil and grease from chamber before firing.

IV. Always carry your gun so that you can control the direction of the muzzle, even if you stumble.

V. Be sure of your target before you pull the trigger; know the identifying features of the game you intend to hunt.

VI. Never point a gun at anything you do not want to shoot; avoid all horseplay while handling a gun.

VII. Unattended guns should be unloaded; guns and ammunition should be stored separately beyond reach of children and careless adults.

VIII. Never climb a tree or fence or jump a ditch with a loaded gun; never pull a gun toward you by the muzzle.

IX. Never shoot a bullet at a flat, hard surface or the surface of water; when at target practice, be sure your backstop is adequate.

X. Avoid alcoholic drinks before or during shooting.

CONTROL-LINE ELECTROCUTION

by Col Lewis
HQ TAC/SGS

A 14-year-old boy was flying a model airplane with wire control leads. The model passed about three feet from a high tension line and electricity arced across and down the leads causing 75 percent second and third degree body burns. Two weeks after arriving at the Burn Center at Brooke Army Medical Center, the child died with a cardiac arrest. The Burn Center reports four or five of these cases each year. Model airplanes should be controlled with non-conducting cord rather than wire. **Better yet, stay away from all power lines!**



FUNNY PHOTOS





FLEAGLEGRAM

RESPONSES FROM THE FRONT

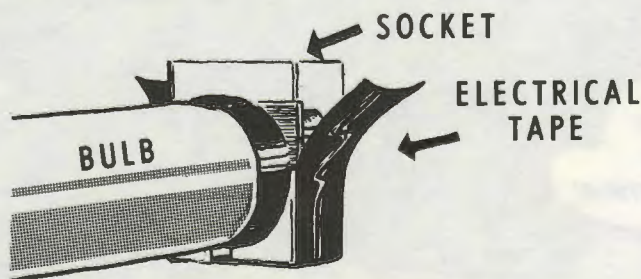
Fleaglegram responses from the front

Dear Fleag

Just finished reading Capt John W. Kester's (121 TFW/ANG) Fleaglegram on the "Falling Fluorescent Light Bulb" in the September issue of TAC ATTACK. I'm certain many of your friendly readers have experienced such a close call

I found an inexpensive cure for this problem, particularly when shields or clamps are not available. Cut a piece of 3/4 inch electrical tape (black plastic) two inches long and again down the center, so as to have two 3/8" x 2" strips. Cover over the entrance of each tube socket with the tape, thus covering the escape route of the falling fluorescent tubes. TRY IT!

SMSgt Joseph F. Delia
131st TFW (ANG)
St Louis, MO



Dear Sgt Delia

This is a good idea -- it's no wonder NCOs have been classed as the most innovative individuals in the Air Force (not including yours truly, of course). Our Ground Safety people here feel this jerry rig is OK if you've failed in all attempts to get the proper guards. If you can't prevent accidents by following directives, you have to prevent accidents by using your head. Thanks for the suggestion. Readers should note that it says ELECTRICAL tape.

Fleag

Dear Fleag

Have had this on my mind since 1970 -- haven't known who to write it to, and so hope you may know the proper action to take:

The IP and his student (me) were returning from an instrument training mission in a T-38 with the student in the back seat under the bag. Intercepting the ILS localizer, the IP simulated failure of engine, and the student advanced power on the good engine to maintain airspeed/altitude. Bold-face procedures were recited/simulated and reference was made to the checklist for clean-up items. The T-38 intercepted the glideslope and started down. Fortunately (for us), the RSU was awake and sent us around, because the wheels weren't down!

As usual, it took a combination of factors to bite us (almost). First, there was the break in time-worn habit patterns and the distraction of the simulated emergency. Second -- and more subtle -- was the gear-warning system in the T-38. The horn would only sound with both throttles below some critical percent RPM. The power required under a simulated single-engine condition was in excess of the RPM for the horn. The first time we knew the gear was up was when we reached for the handle on the go-around. In the confusion ("I've got it!" by the IP), we both thought the other had raised the wheels.

If you print this, I suggest you caution pilots:

- Beware of breaks in habit patterns (again).
- Know the quirks in the aircraft's systems. Obviously, fail-safe devices don't relieve the pilot of the responsibility for his machine.

Also, you may know the proper people to contact to amend the T-38/F-5 Dash One with something

the following:

WARNING: Power required under single-engine conditions may be in excess of that required to trigger the gear-warning system.

Would be interested to know whether this anecdote ever gets any action.

Thank you.

Capt Wallace G. Murfit
129th ARRS (CA ANG)
Hayward Calif

Dear Wally

Thanks for the letter. Your idea was a good one, so I submitted an AF Form 847 to add a NOTE concerning the gear warning system into the T-38 Dash One. I checked with the Training Command birds and they thought it was a good idea also. Inci-



dentally, the F-5 system is a little different -- only one throttle (either one) has to be retarded to set off the gear warning system.

If any of you guys have a good idea for a change to the Dash One, submit an 847 right away; don't wait five years. Remember, the early worm gets the bird!

Fleag

Dear Fleag

Currently, we are required to perform maintenance on aircraft that are on jacks. We feel that this is a hazard and should not be done. What do you feel? Is this a safe way to perform maintenance? Is it a hazard?

SSgt Roger K. Smith and Sgt David G. Cope

Dear Sarges

Your Fleaglegram sent Rob and Griff scurrying around Headquarters nest trying to find an answer. AFR 127-101 sets up guidelines for working around or on an aircraft on jacks, and prohibits certain types unless authorized in an applicable Tech Order. I went to IG nest and talked with my good buddies there and they tell me it's OK to work on an aircraft that's on jacks if it is authorized and controlled by a maintenance supervisor. Under controlled, properly supervised conditions, it is not a hazard to perform maintenance on an aircraft on jacks.

Fleag

Hey! pass it along... nine others are waiting.



Winter Weather Checklist



Don't let this "somewhere in Iceland-1943" become "somewhere in the CONUS-1975 or 1976 or..."

Old Man Winter is opening up his infamous bag of tricks in his annual attempt to put the screws to aircrews and maintainers. He is plating our taxiways and runways with freezy skid-stuff, dropping visibility lower than a penguin's instep, and coating your air machine with both rime and clear ice. He's making flight line operations more difficult -- fingers don't work as well, driving on icy ramps around aircraft requires the finesse of a trucker with a load of nitro, and climbing on and around aircraft demands care lest you should be pulled toward the center of the earth a la Newton's apple.

The following checklist is by no means complete, but it's better than a kick in the winter-weights with a frozen mukluk. Dig into the "All Weather Operating Procedures" section of your Dash One and get one up on the winter weather nuisance. Be a winter winner.

AIRCREW

Preparation

1. Keep physically fit.
2. Wear proper clothing.
3. See the flight surgeon when you have a cold. Don't self-medicate.

Planning

1. Check the freezing level, cloud types, degree of icing, and the dew point for the possibility of fog formation.
2. Be sure weather is within your limitations.
3. Check the status of taxiways, runways, navigation, and landing aids at departure, destination.

tion, and diversion airfields.

Supervisors, be sure the crew's capability is equal to the weather.

5. Know the all-weather information contained in the flight manual.

Preflight

1. Although it's cold, don't make the walk-around a race-around. Pay special attention to pitot heads, static ports, control surfaces, intake ducts, and gear wells.

2. Insure the aircraft is completely de-iced.

3. Carefully inspect for fuel and hydraulic leaks caused by the contraction of fittings or shrinkage of packings.

4. Closely inspect drain lines and vents for ice or snow. Be sure pneumatic bottles have been adequately serviced.

5. Check that windshields and canopies are frost-free and clean inside and out.

Start & Taxi

1. If possible have the aircraft moved off ice before starting.

Avoid blowing snow, ice, or slush onto ground crew personnel or equipment.

3. Check the pitot heat, anti-icing, de-icing, etc.

4. Taxi slowly. The slower the better. Allow more room for turning and stopping.

5. Increase space between aircraft to avoid slush or ice being blown onto your air machine and to insure adequate stopping distance.

6. Be sure all instruments are warmed up; check for sluggish instruments during taxi.

7. Painted areas on runways, taxiways, and ramps are slicker than unpainted areas, especially when wet.

Takeoff

1. Double-check the crosswind component before you take the active.

2. Plan on single-ship takeoffs.

3. Line up on a dry spot -- if one is available. Beware of slip on runup. Brakes may not be adequate to complete the full runup so run up engines one-at-a-time (for double blower types), or be ready to finish the checks during the first part of the takeoff roll.

4. Insure that the pitot heat is on and that you have selected the correct setting for cockpit and

canopy heating.

5. High speed aborts on runways covered with snow or slush may cause a flameout from precipitation ingestion.

6. After takeoff from a snow or slush-covered runway, recycle the landing gear several times (if the procedure is recommended by the flight manual).

Inflight

1. Avoid areas of icing or strong turbulence whenever possible.

2. If you have to fly in icing conditions use the anti-icing system early to prevent ice buildup.

3. Operate windshield and canopy heating systems at the highest temperature possible -- consistent with pilot comfort. Prevent frost or fog formation during descent.

4. Keep ahead of the weather. Maintain a constant weather watch of conditions at your destination and divert airfields.

5. Know the capabilities and limitations of the radar facility you are working with.

6. Pass on PIREPS.

Landing

1. Plan descent to expedite flight through icing levels.

2. Carefully evaluate landing conditions -- RCR, crosswind, landing surface, and approach visibility.

3. Fly an on-speed approach -- that little extra speed adds up to extra runway behind you.

4. Touch down firmly near the center of the runway and without drift -- remember the stripes on a runway can be very slippery.

5. Beware of patchy surface conditions that can cause uneven braking and directional problems.

6. On exceptionally slick surfaces use all forms of braking necessary -- aerodynamic, anti-skid, drag chute.

7. Don't be hesitant about diverting or going around.

8. Taxi-back after landing is often trickier than going out for takeoff. With the same thrust, your aircraft with a lower gross weight will taxi faster and you may have to ride the brakes more or shut down an engine (if you have more than one).

9. Don't relax until you are safely in the chocks and engine is shut down.

10. Tell the weatherman what kind of conditions you encountered.
11. Don't blow it all by losing control of your feet on a slippery surface!

MAINTENANCE

Clothing

1. Keep clothing dry and free of fuel, oil, and grease.
2. Have an extra pair of dry gloves handy.
3. Avoid getting overheated. When indoors, remove the outer layer of clothing. This will also give the outer garment time to dry out and warm up.
4. Several layers of clothing are better than one thick bulky garment -- layers give the best balance between heat retention and weight of material.

Flight Line Operations

1. Use extra caution when running up aircraft engines. Use whatever it takes to avoid slipping -- brakes, chocks and tie down devices (if available).
2. Even though it is cold, take time to make a thorough preflight of the aircraft.
3. When possible, warm up electronic bays and cockpits with external heaters. Be sure to observe all electrical and fire safety precautions.
4. Wet drag chutes can freeze at altitude. Be sure to install only dry drag chutes.
5. Keep fuel tanks filled to reduce condensation. Excess water in the fuel can cause fuel control problems and engine flameout.
6. Keep accumulators charged to the correct pressures according to temperature.
7. If towing is a must -- do it slowly. Use both towbar and cables on main wheel struts when towing on snow, ice, or mud.
8. Use extra caution when climbing ladders and walking on wings. Slippery surfaces can cause a nasty fall.
9. Use a broom or brush to remove snow from the aircraft -- but do not use them on the canopy.
10. Lift canopy covers off. Don't slide them off; they will scratch the surface.
11. Use canopy, engine intake and exhaust

covers to provide maximum protection from snow, sleet, and rain.

12. Be sure that the canopy is clean and dry before putting the cover on. The cover will freeze to a wet canopy.

13. Do not spray de-icer fluid on canopies or windshields.

14. Don't de-ice too early. Be sure to drain the de-icer fluid from ailerons, flaps, and elevators. The de-icing fluid, when diluted with snow or ice, can refreeze.

15. Do not spray de-icer fluid directly into flap wells, elevators, or inaccessible areas, or near engines or starter exhausts.

16. Be sure the battery is kept fully charged. A weak battery will lose its charge rapidly in cold weather. Check that all cells are in good electrical condition and the case is not cracked.

17. Quickly investigate leakage spots which show up on ice or snow.

18. Remember that taxiing aircraft need more room for turning and stopping on snow or ice.

19. Greater attention must be given to maintenance and inspection of such items as static ports, vent lines, fuel drains, and filters.

20. Inspect the tires carefully after landing. Patchy surfaces and rough ice can easily abrade the tread.

21. Allow more time when scheduling work orders for out-of-doors.

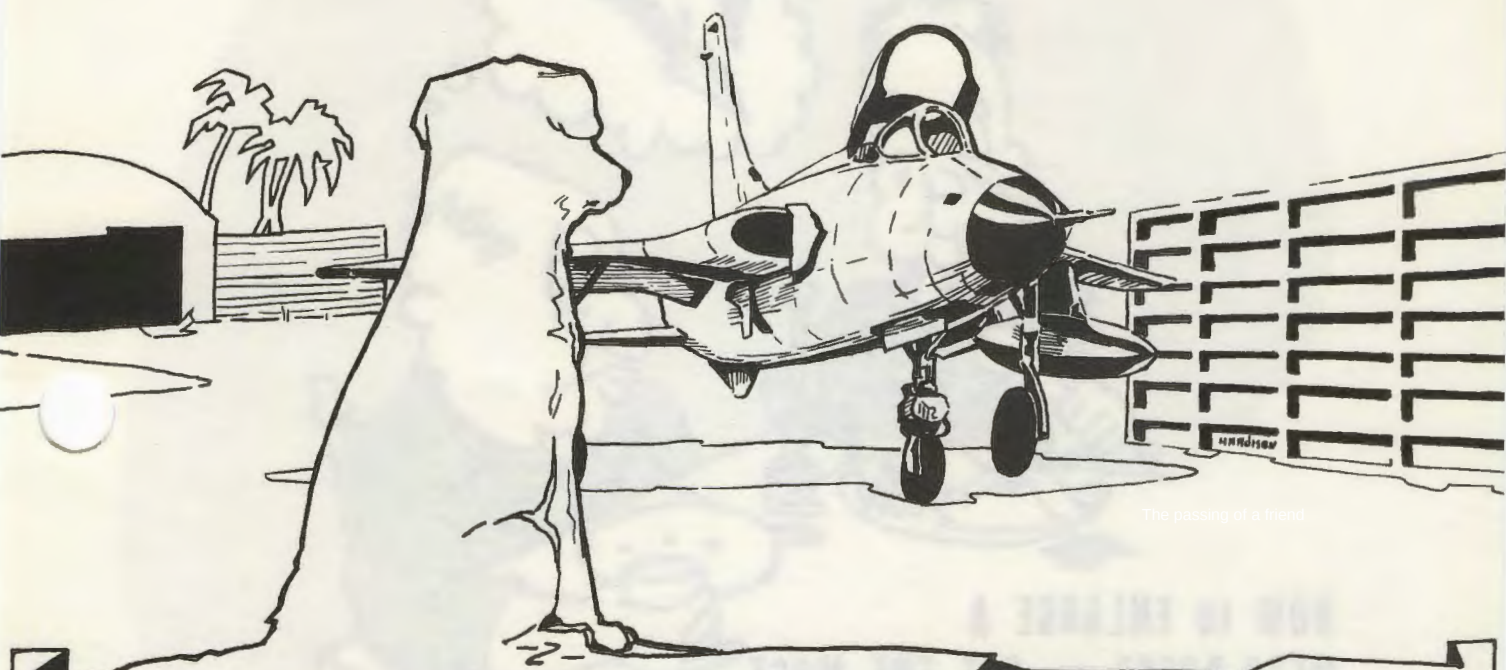
22. Carefully inspect for fuel and hydraulic leaks caused by the contracting of fittings or shrinkage of packings.

Flight Line/Ramp Driving

1. Clean all windows before driving. Frost and ice-covered windows reduce visibility -- and don't forget those rear-view mirrors.
2. Expect reduced visibility due to blowing snow -- slow down
3. Winter brings on more hours of darkness. Insure that reflective tape is attached to clothing, tool boxes, workstands and AGE equipment.
4. Beware of the increased stopping distances required on ice or snow -- slow down when it rains or snows.
5. Be alert for the pedestrian wearing bulky head coverings. The hood of a parka restricts side vision and interferes with hearing.
6. Don't aim your vehicle at an aircraft and then count on the brakes to stop it.
7. Keep those seat belts fastened. ➤

The Passing of a Friend

By Capt Marty Steere
HQ TAC/SEPP



The passing of a friend

Fighter pilots everywhere lost a friend recently. Roscoe, the only official mascot of the 388th TFW, Korat RTAFB, passed away 13 September 1975.

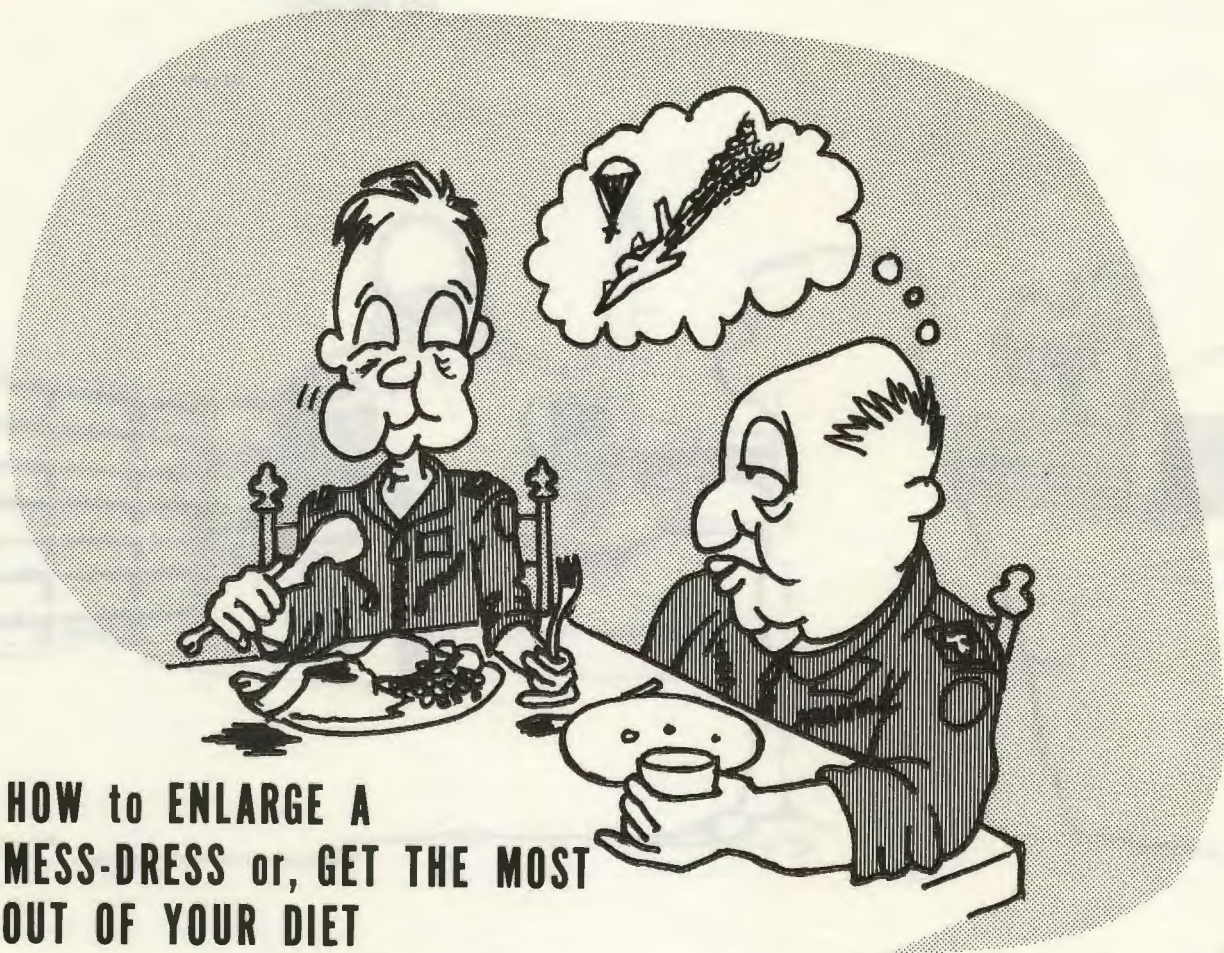
Roscoe was named after Captain Roscoe Anderson, an F-86 MIG killer in Korea, who was killed in an F-105 landing accident at Yakota. Roscoe was brought to Korat in June 1966 by Major Ray Lewis when the Thuds arrived to form the 34th TFS.

When Major Lewis didn't return from a mission up North, Roscoe was adopted by the "Men in Black" of the 34th and became the squadron mascot. Years later, Roscoe became the wing mascot with the honorary rank of colonel.

Many of the pilots who flew their "counters" out of Korat thought Roscoe was psychic. He would sit in at all the briefings and if he was alert and restless, the pilots knew it was going to be a rough mission. If he fell asleep in the Wing Commander's chair, it would be an easy one.

Soon, all of the aircraft and fighter pilots will leave Korat. The men of the 388th will leave behind them a legend and a friend. Maybe Roscoe knew the days of the wing were numbered and that the men he loved would soon be leaving. Korat was a fighter pilot's base and Roscoe was a fighter pilot's dog . . . we'll miss him.

PHYZ-BIZ



HOW to ENLARGE A MESS-DRESS or, GET THE MOST OUT OF YOUR DIET

**By Lt James P. Dixon, USAF, BSC
Physician Extender
MacDill AFB, FL**

Major Jack Brown is 35 years old. He's always in good shape. His flight physicals have been good, showing no eye problems or blood pressure changes which sometimes begin to appear in aircrews approaching middle-age. However, the other day as he was getting dressed to attend a dining-in, the old mess-dress just didn't fit quite as well as it should. In

fact, his trousers might be called the "high-water" type. He looked at himself in the mirror. Those rows of ribbons didn't lay as flat as they should -- almost as if he had his kid's water-wings on under his blouse. "Man, I didn't think I'd gained that much weight." When he had graduated from the Academy 12 years earlier, he had weighed 178. That's a good weight for somebody 6'1". But now he is 205. What happened?

Most individuals can expect to put on weight as they get older unless they (1) cut their appetite and therefore, eat less, or (2) increa

their physical activity. A "status-quo" will not keep them slim, i.e., their food intake and physical exercise at age 25 will not continue to reward them with the same healthy body at age 45. "But that doesn't make sense. You mean to tell me that if I run 1-1/2 miles everyday and eat the same amount of food at age 45 as I did at 25, I'll still get fat?" Not as fast as your contemporaries, but you'll still put on weight. There are some good reasons for this.

BODY WEIGHT

A person's weight, regardless of what it is, exists because of the amount of food he eats each day. Heredity, fat cell activity (which is established when one is a young child), and appetite (desire to eat certain kinds and amounts of food) play an important part. For the purposes here, if we ignore the abnormal conditions which cause extreme weight conditions, we can basically say that an individual "is what he eats."

FOOD ENERGY

The energy from the food one eats may be (1) converted to heat, (2) utilized to perform work, or (3) stored in the form of adipose tissue. Adipose tissue is fat cells which remain the same in number but change in size relative to the energy that is stored. Obviously, if we want to reduce the amount of adipose tissue, we must decrease food consumption and/or increase the workload. That sounds simple, but it isn't.

ENERGY REQUIREMENTS

Although appetite is usually established in the teen years, energy requirements get progressively smaller as one gets older. Basal Metabolic Rate (BMR), a kind of index for measuring over all body-cell activity, decreases as age increases. BMR is something most people know little about, but is probably the most important factor in gaining weight in an ordinary individual. For Major Brown, it means that he needs to take in 150 calories less at age 35 than at 25. At age 45, 300 calories less. At age 65, 800 calories less! Putting it another way, for 186 pound individuals (Major Brown's

desired weight taken from AFM 160-8) who maintain their physical activity from age 25, their daily caloric intake by age 45 must decrease the equivalent of 2 cans of beer, or 10 strips of bacon, or 2 doughnuts, or 2 glasses of milk, or 30 potato chips.

By age 65, in addition to the above, daily caloric intake must decrease by the equivalent of 5 cans of beer, or 27 strips of bacon, or 1 hamburger sandwich plus 3 doughnuts, or 2 1/3 pieces of apple pie.

And all of this assumes that Major Brown is already maintaining a weight of 186 pounds. It also assumes at age 25, he ate more than 27 strips of bacon daily (these foods are used simply to make a point). If he wants to lose weight from his 205-pound physique, he will have to cut caloric intake by an extra 1000 calories per day in order to lose one pound of fat per week. He can do that, as we said earlier, by limiting food intake and/or exercising.

If he thinks about his food in terms of running time, it might help. For each minute he runs, he will burn up roughly 20 calories. Three beers equal 24 minutes of running. One milk shake equals 25 minutes. One piece of apple pie equals 20 minutes. If you think about food in this way, it might deter you from eating that extra piece of pie if you know you will have to run 20 minutes to get rid of it. It also points out the fact that exercise is almost a necessity in any diet unless a person wants to literally starve himself. (Fad diets can be dangerous. If you have any questions, see your flight surgeon.)

Dieting isn't fun. But it doesn't have to be extremely painful either. If an aircrewman needs to lose weight, he can do it. Don't forget about hypoglycemia. Avoid it by eating regular meals, but not quite so much food at each meal. Exercise and get plenty of vitamins and minerals. And stay off the bathroom scales but once a week. Dieting is slow business, and you may get discouraged if you don't see a daily change. Who knows; once you enlarge your mess-dress, it may fit forever.

MORE... SPECIAL DIET





LOW CALORIE diet

(You are guaranteed to lose weight)

- MON** Breakfast Weak tea
Lunch 1 bouillon cube in 1/4 cup of diluted water
Dinner 1 pigeon thigh
3 oz prune juice (gargle only)
- TUE** Breakfast Scraped crumbs from burned toast
Lunch 1 doughnut hole (without sugar)
1 glass of dehydrated water
Dinner 2 grains of corn meal (broiled)
- WED** Breakfast Boiled out stains of tablecloth
Lunch 1/2 doz poppy seeds
Dinner Bees knees and mosquitos
knuckles sauteed in vinegar
- THUR** Breakfast Shredded eggshell skins
Lunch 1 belly button from a n orange
Dinner 3 eyes from Irish potato (diced)
- FRI** Breakfast 2 lobster antennae
Lunch 1 guppy fin
Dinner Fillet of soft shell crab claw
- SAT** Breakfast 4 chopped banana seeds
Lunch Boiled butterfly liver
Dinner Jelly fish vertebrae ala bookbinder
- SUN** Breakfast Pickled hummingbird tongue
Lunch Prime ribs of tadpole
Dinner Tossed paprika and (1) clover leaf salad

Yes indeedy, you'll lose weight with this diet -- you'll also lose the will to live. This one-week menu is printed just to show how ridiculous fad diets can be. Don't take a chance with your health. Check with a doctor before you decide to go on a diet. Not only will he be glad to help, he'll be able to provide important information about proper nutritional requirements.

AIRCREW MEN of DISTINCTION

Lt York and his crew were flying the number two tanker position, refueling five F-105 receivers. The KC-97L crew refueled their two receivers and cleared them to rejoin their flight on the lead tanker. At this time, the lead tanker experienced an engine problem and was forced to depart the formation, leaving one of his receivers without fuel. The receiver then made contact with Lt York's tanker and took 7,000 pounds of fuel. At this time, Lt Col Rich smelled fuel fumes. Raising the forward floor hatch, he encountered nauseatingly strong fumes. He then checked the lower aft compartment and discovered JP-4 dripping from the walls and ceiling and a 5-inch accumulation of fuel on the compartment floor. He immediately advised the crew of the situation. An emergency breakaway was initiated and an emergency call was made to Salt Lake Center. The smoke and fumes elimination checklist was initiated, and the electrical master switch was turned off, which necessarily resulted in the complete loss of all aircraft electrical systems. While descending to 7,500 feet, the crew donned oxygen masks, depressurized the aircraft, and opened the overwing hatches to dissipate the heavy fuel fumes. Returning VFR to the local area, the crew established radio communication with the tower by use of a radio from the survival equipment aboard, explained their emergency, and requested crash equipment to stand by. After manually extending the landing gear, the crew assumed crash landing positions and accomplished a successful no-flap, no reversing landing. After rolling to a stop, all engines were shut down and the crew abandoned the aircraft.

The aircrew's initiative, prompt action, and outstanding crew coordination displayed in this emergency prevented almost certain loss of life and destruction of an aircraft, and qualifies them for this month's Tactical Air Command Aircrewmen of Distinction Award. ➤

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151st AIR REFUELING GROUP (ANG)

Salt Lake City, Utah

Aircrewmen of Distinction 151st Air Refueling Group (ANG), Salt Lake City, Utah



1ST LT JERRY R. YORK, AIRCRAFT
COMMANDER, 191ST AREFS



1ST LT JAMES V. PETERSON,
CO-PILOT, 191ST AREFS



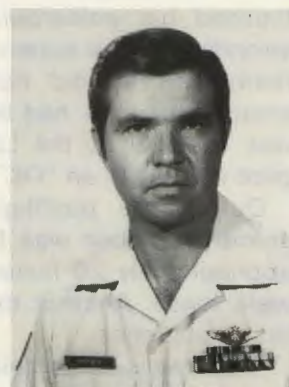
LT COL LYLE M. RICH, INSTRUCTOR
NAVIGATOR, 151ST AREFG



1ST LT GORDON W. REESE,
NAVIGATOR, 191ST AREFS



MSGT DOUGLAS E. CARLSEN, FLIGHT
ENGINEER, 191ST AREFS



TSGT JAMES D. HACKMAN, BOOM
OPERATOR, 191ST AREFS

CHOCK TALK

*...incidents and incidentals
with a maintenance slant.*

A COMEDY OF ERRORS

While making his walkaround inspection at an en route stop, the F-Hun pilot noticed that the right ammo bay door fastener screws were loose with the latches closed and that approximately 20 screws on the right link bay panel had not been tightened. The pilot told the launch crew chief to button the aircraft up and continued his inspection. When he arrived at the aft section, he discovered that the drag chute cable had not been installed correctly. The cable was out of its race and the butterfly doors were improperly secured.

The airman who was securing the panels went to the rear of the aircraft to help the pilot close the butterfly doors. At this point, the transient alert supervisor arrived and our frustrated jock briefed him on the discrepancies he had found. The supervisor directed the airman who had been securing the panels to another area of the ramp to perform maintenance on another aircraft.

Assuming that the supervisor clearly understood the details of all the problems, the jock finished his walkaround and climbed into the aircraft after the supervisor indicated the jet was ready, but he did not recheck each item to ensure all panels had been fastened. The aircraft was checked by the Last Chance crew and the pilot was given an "OK" signal by the NCOs.

During the postflight inspection, the right ammo bay door was found to be missing and approximately 20 fasteners on the link bay door were loose. Another dropped object was added to our statistics.

There were many causes in this incident -- the airman who was interrupted before he had completed buttoning up the aircraft -- inadequate

training on F-100 drag chute installation -- the supervisor who signed off the red X on the 7 without ensuring all the panels were secured -- the Last Chance team who failed to check the aircraft for loose panels and fasteners -- and the pilot, who failed to recheck all the panels for security.

It was a comedy of errors that wasn't very funny. Someone could have been injured or killed because of the dropped object. It could have been prevented too. Not by Safety briefings or IG visits -- it's simpler than that. If the people involved had just done their job, it wouldn't have happened. Do your job right the first time and prevent an accident or incident -- it's easier than you think.

MURPHY RIDES AGAIN

A TAC airman was driving a Case tractor when the lights failed. He parked this tractor and picked up a '67 model International farm tractor to finish delivering AGE. While driving this tractor, the airman inadvertently depressed the gas pedal instead of the brake, and struck another vehicle.

How did Mr. Murphy get into the act? A 1967 model International farm tractor was designed with the brake pedal to the right of the gas pedal, instead of the left.

There are very few '67 model International farm tractors in TAC, so the odds are low that you will get to drive this vehicle ... but there may be some other vehicles around with peculiarities just as bad as this one. When you get into an unfamiliar vehicle, make sure you learn all its quirks before you start it up. If you're not sure you know everything about the vehicle, ask. It will save a lot of time and money in the long run, and may foil old Murphy.

FOR WANT OF A NAIL

During a high-speed dive recovery, the T-38 control stick in the front cockpit became inoperative in roll. Luckily, the mission was dual and the rear cockpit stick operated normally.

Post-flight inspection revealed that the front stick aileron control rod was disconnected.

castellated nut had backed off from the attachment bolt and allowed the bolt to fall clear of connection. The nut and bolt had been installed and inspected 18 days earlier, but no evidence could be found that the cotter pin, which holds the nut in place, had been installed -- or that the supervisor checked for proper installation.

As the old saying goes: "For want of a nail, the shoe was lost; for want of a shoe, the horse was lost; ... etc." In this case, for want of a cotter pin, a valuable aircraft (and more valuable people) could have been lost.

WET WIRES

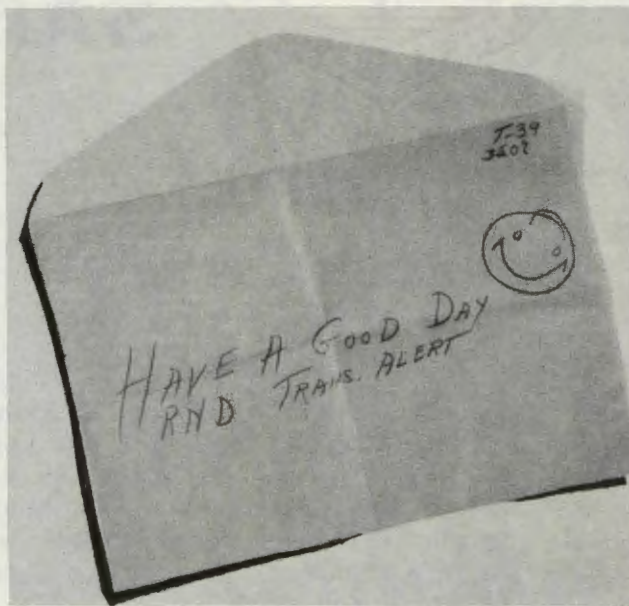
While rejoining on lead after departing the range, the Thud experienced a rapid yaw to the right accompanied by a violent pitch down. Due to the abruptness of the negative-G force, the pilot was unable to disengage the stab aug system using the AFCS emergency disconnect lever. The stab aug system disengaged itself as the aircraft reached approximately a 30-degree nose-down attitude. All violent flight control inputs ceased after the stab aug disengaged. The jock regained aircraft control and recovered via a straight-in.

A complete check of the flight control and stab aug system was accomplished with all components performing as designed. The possibility of spurious inputs to the stab aug system due to stray voltage was then examined and all wiring associated with the stab aug system was inspected for deterioration. While inspecting the wiring in panel FF-25, the wire bundle located under the rack and panel assembly was found saturated with moisture. Standing water was also observed in a compartment in the vicinity of the wiring. The aircraft had not flown for several days during which it rained heavily. This period was also characterized by high humidity and rapid changes in ambient air temperature. Normally, the wiring would be protected from moisture by insulation. Over a period of time, however, temperature extremes deteriorated the wiring insulation, and moisture created a short in the wire bundle.

The unit will now open panel FF-25 after inclement weather to check for accumulated mois-

ture. If moisture is discovered, the area will be dried out and the wiring rechecked prior to releasing the aircraft for flight. Sounds like a good idea. Shorted out stag augs can be hazardous to your health.

GOOD ON YA'



Recently, while flying on an admin mission in my (read: MAC's) trusty T-39, I ops stopped at Randolph AFB for a pax pickup and gas. I was pleasantly surprised by the quick, efficient and friendly service given by RND's transient alert. The Follow-Me was right there, the aircraft was chocked right away, and the fuel truck soon arrived. In no time at all, we were ready to go. Strapping on the Saberliner, I noticed an envelope on the copilot's seat. It contained the fuel receipt (AF Form 1994) and was decorated as shown in photo above. I folded the missive up and stuck it in my pocket, not thinking much more about it 'til now. You know, that simple gesture (coupled with good service) made my flight that day just a little more pleasant. I'm in a position to publicly offer an attaboy to the unknown T/A type (and to good guys everywhere) -- most people aren't. I just want this guy to know he may never hear from any of the other pilots he has helped expedite, but we all appreciate his attitude, seen all too rarely these days. ED



TAC

SAFETY AWARDS

Maintenance Safety Award

Staff Sergeant William F. Martin, 27th Tactical Fighter Wing, Cannon AFB, NM, has been selected to receive the Tactical Air Command Maintenance Safety Award for this month. Sergeant Martin will receive a certificate and letter of appreciation from the Vice Commander, Tactical Air Command.



SSGT MARTIN

Crew Chief Safety Award

Staff Sergeant Manatee Robinson, Jr., 58th Organizational Maintenance Squadron, 58th Tactical Fighter Training Wing, Luke Air Force Base, Arizona, has been selected to receive the Tactical Air Command Crew Chief Award for this month. Sergeant Robinson will receive a certificate and letter of appreciation from the Vice Commander, Tactical Air Command.



SSGT ROBINSON, JR.

TAC TALLY



TOTAL ACFT. ACCIDENTS ▶
MAJOR ACFT. ACCIDENTS ▶
AIRCREW FATALITIES ▶
TOTAL EJECTIONS ▶
SUCCESSFUL EJECTIONS ▶

TAC		
SEP	Thru SEP	
	1975	1974
1	22	18
1	20	14
0	16	9
7	11	13
1	8	11

ANG		
SEP	Thru SEP	
	1975	1974
1	12	14
1	10	14
0	6	7
2	6	6
2	5	4

AFRES		
SEP	Thru SEP	
	1975	1974
0	0	6
0	0	4
0	0	2
0	0	2
0	0	1



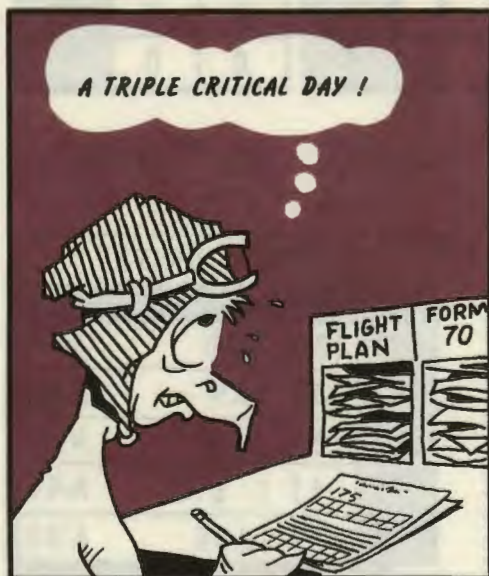
FIGHTER/RECCE WINGS		
ACCIDENT-FREE MONTHS		
76	33 TFW	TAC
57	4 TFW	TAC
42	127 TFW	ANG
39	31 TFW	TAC
27	56 TFW	TAC

OTHER UNITS		
ACCIDENT-FREE MONTHS		
153	130 SOG	ANG
122	136 ARW	ANG
114	143 SOG	ANG
102	DET 1, D.C.	ANG
78	135 TASG	ANG

MAJOR ACCIDENT COMPARISON RATE 74-75
(BASED ON ACCIDENTS PER 100,000 HOURS FLYING TIME)

TAC	74	4.5	5.4	5.6	4.5	4.0	3.6	3.1	3.2	3.0	2.9	2.8	3.2
	75	7.9	5.4	3.6	2.6	3.1	3.5	5.2	6.4	6.0			
ANG	74	7.2	8.6	8.2	5.7	6.0	6.3	7.6	6.6	6.3	6.4	6.9	6.4
	75	5.3	2.8	5.3	3.7	4.7	6.8	5.9	5.1	5.1			
AFRES	74	0	16.4	8.9	8.8	6.7	5.3	5.8	5.0	4.3	3.8	3.5	3.3
	75	0	0	0	0	0	0	0	0	0			
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC													

FLEAGLE



SCREE...UNCH!

