# TAGA Attack Description of the Attack Descri

DECEMBER 1991

Seasons Freelings

Bailey

### ANGLE OF ATTACK

here has the time gone? It seems like just yesterday that we were looking forward to summer and here it is December, another holiday season and the end of another year.

Most of us think of December as a joyous time of the year with Christmas and the upcoming New Year. However, many of our people are separated from their families (TDYs, single, or away from home for the first time) during this season. As a result, this can be a time of sadness or even depression because they feel very much alone. During this time of year, supervisors should be ever alert to what is going on with their troops. Don't let one of your people accidentally spend the holidays alone. Instead, be sure your people are included in the holiday activities sponsored by your unit. I would even encourage you and your people to consider including those who are alone in your family plans and get-togethers. You'll allenjoy it.

This is also the time of year we often have extra and sometimes unexpected house guests and visitors. Having extra people around the home can easily have an impact on our normal routine; it may even be a distraction at times from our normal job. No, it isn't time to put out the "No Vacancy" sign; it's time to acknowledge those distractions and admit to ourselves and others that things aren't just "routine" during the holidays.

At this time of the year, it is also especially



important to let everyone know "We Care." A little creativity and caring by us can make all the difference in the world. Have Santa included in your unit's family activities - the young kids will never forget it. If you're really creative, you can even get the teenagers involved in wrapping gifts, decorating, and helping to ride herd on the little ones. Plan your unit holiday parties to be fun get-togethers and not a strain on your people. If alcohol is involved, be sure to use designated drivers. Nothing destroys the holiday season like a senseless, preventable mishap. If you're planning a winter vacation, plan well in advance considering adverse weather and traveling snags. Above all -- don't overdo it. Ease into the fun times.

Have an enjoyable and safe holiday season. A Merry Christmas and a Happy New Year from the folks at TAC Safety!

BODIE R. BODENHEIM, Colonel, USA.

Chief of Safety





Page 4



Page 20



Page 26

TAC SP 127-1

**VOLUME 31** 

#### **FEATURES**

- **FLIGHT LEADERSHIP** What are the qualities that make a good fighter pilot a good flight lead?
- THE MOST EXPENSIVE SET OF DRINKS YOU'LL EVER BUY Read this & heed. Your career, your family, your financial future are the only things at risk.
- THOSE LITTLE INDICATORS In our business, flat-foot reactions can be fatal.
- 20 THOUGHTS ON SKIING
- 26 WHAT I LEARNED AT THE WAR Nothing could be so different during war, could it?

#### **DEPARTMENTS**

- CHOCK TALK 11
- 18 BEEN THERE, DONE THAT
- **DOWN TO EARTH** 28

#### **AWARDS**

AIRCREW OF DISTINCTION Other Awards see pages 10,23-25,30

ISSUE 12

DECEMBER 1991

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#### Col Al Guarino 49 FW/CV Holloman AFB NM

I'd like to give you some of my views on flight leadership. I know, opinions are like..., and everybody has one. Well, here are some thoughts on one of my favorite subjects.

Flight leadership is the single most important part of our business. A GOOD flight lead not only is an expert in his jet's systems, weapons employment capabilities, limitations and tactics, but he is also a strict and unwavering disciplinarian. He has developed the art of influencing and directing his wingmen so as to obtain their obedience, respect and confidence; thus, enabling them to be effective in combat.

The basis of good flight leadership is adherence to an unwritten, but iron-clad pact between fighter pilots ... always strive to be the best! The leader's part of the "pact" is to take care of his wingmen and make efficient use of their combat capabilities. The wingmen's part is to do exactly as they are told. Neither should

do anything when they fly that surprises the other. The basic principles of the "pact" are simplicity and complete understanding of the mission plan and tactics. The responsibilities of the leader and wingmen are endless; regardless of what happens in a flight, all are responsible for the outcome—not equally, but nevertheless responsible.

What are the qualities that make a good fighter pilot a good flight lead? He must obviously be able to lead and control his flight-smoothly employing it in the tactical arena, while taking care of the more mundane flight leadership chores going to and from their fragged area. A good flight lead will also have the traits of good judgment, selfdiscipline and a desire for his flight to excel. He should have a commitment to perfectionwhat I refer to as striving to be perfect. Nobody is perfect, but a good flight lead strives to be almost perfect.

There are two other traits which seem to set the GOOD flight lead well apart from the AVERAGE flight lead. These traits are attention to detail and anticipation.



Notice the items that impress you when you fly with a good flight lead. The briefing is always well prepared-you know the mission and what is expected of you during the flight. Do you have to ask a good flight lead to brief the short-range plan he forgot, to cover the training rules or to outline a backup mission? No! The attention to detail is there; these items were planned for and were covered thoroughly. When a scenario is written out on the board, do numerous misspellings detract from the content and cause distraction for the wingmen? How many ways have you seen. "ordnance" and "separation" spelled-a good flight lead will get them right! A good flight lead will stress attention to detail from those in his flight also. Crisp radio check-ins, exact taxi spacing, sharp formations, concise engagement terminology, valid shots and exact adherence to the TRs are expected of all flight members. A good flight lead will allow

nothing less. The attention to detail will show in the results.

The second important trait which appears in a good flight lead is anticipation. While it seems that many pilots simply react to the situation they encounter, a good flight lead is always a step ahead. He knows a new guy may take a bit longer during preflight and start-so. the "standard" step time is already moved forward, and the brief time is also moved up a bit. The good flight lead always seems to be ready. He has anticipated delays and takes them in stride—he's prepared!

The tactical portion of the flight is where the good flight lead really shines. He knows what he wants to do, and often seems to know exactly what the opponents will do. This anticipation comes from

planning and discussion of tactics and is so evident in a good flight lead that he seems to "pull along" often less capable flight members, instilling in them the confidence and capability to win.

Attention to detail and anticipation—two traits that help get GOOD flight leads to their goal to be almost perfect, to be THE BEST!



### Aircrew of Distinction Award

n 14 Aug 91, Lt Col Thomas V. Stinson, flight lead, and Capt Michael B. Kane were on an RTU surface attack tactics sortie to Avon Park Range. As Capt Kane was performing a low altitude ingress, a 5-pound turkey vulture struck his aircraft. This impact destroyed the radome. damaged the radar antenna, and restricted forward visibility through the canopy due to splattered bird remains. Capt Kane notified his flight lead, while climbing to a safe altitude, and began to analyze his engine indications. The engine operation seemed normal; but, as aircraft handling was extremely rough, an engine problem was suspected. At this point, Col Stinson rejoined on Capt Kane's aircraft. As they proceeded to Avon Park Airfield for an SFO landing, Col Stinson advised Capt Kane that his radome was hanging to the left side of the fuselage offset more than 120 degrees from its original position. He also informed Capt Kane that airspeed and AOA indications would be inaccurate. Capt Kane noted that the airspeed was zero and the AOA indicator read



Lt Col Thomas V. Stinson



Capt Michael B. Kane 72 FS, 56 FW MacDill AFB FL

"off." The two pilots were not sure of the extent of the engine damage from pieces of the radome or vulture debris, and opted not to delay the landing. As Capt Kane expressed concern about flying an SFO without airspeed indications. Col Stinson took control of the situation and decided to lead Capt Kane through a formation SFO approach to the flare. Prior to the approach, all options were discussed to include ejection if the engine were to fail. Col Stinson and Capt Kane then flew a flawless formation teardrop SFO approach. During the flare for landing, Col Stinson went around as Capt Kane was now able to see the runway environment through the vulture remains on the canopy. Capt Kane landed without incident and stopped the aircraft 10 feet prior to the departure end cable.

Col Stinson and Capt Kane's expert airmanship and coolness under pressure allowed them to save a valuable TAC resource. For their professionalism, quick thinking, and expert handling of this emergency, Col Stinson and Capt Kane earned the TAC Aircrew of Distinction Award.

# THE MOST EXPENSIVE SET OF DRINKS YOU'LL EVER BUY

Capt Sam Goodrich Delta Air Lines

Reprinted with permission from Air Line Pilot magazine, June 1991

D on't think it could happen to you? Read on, fellow aviator. I recently had the opportunity to sit as a juror on a DWI (driving while under the influence of alcohol/drugs) case in Dallas, Texas.

It was an enlightening and disturbing experience for me. Enlightening because I learned some information that I was not aware of concerning drinking and driving. Disturbing in that I came to realize how ignorant I was regarding DWI laws and how easy it would be to find myself in court trying to defend myself against a DWI charge.

Read this and heed. Your career, your life, your family, and your financial future are the only things at risk.

In fact, I became so disturbed by what I had witnessed in the courtroom and jury room that I even went to my local public library and read a couple of books on the subject.

I'd like to share what I learned with you in the

hope that it may help you someday. I've heard that to be forewarned is to be forearmed. But as an aviator, I've also heard of Murphy's Law, which says give a pilot information and he'll either use it, abuse it, or file it in the circular file for "future reference."

Read this and heed. Your career, your life, your family, and your financial future are the only things at risk. This is what I learned sitting on a DWI jury:

Warning! How you feel or how you think you feel does not determine whether your are DWI/DUI.

The first thing I learned is the legal meaning of DWI/DUI, which is not "drunk driving." You do not have to be drunk to be arrested and convicted of DWI/DUI. That is why the crime is actually called driving under the influence and not drunk driving. The term "drunk driving" is merely a shorthand way of saying driving while under the influence. The state prosecutor is

under no legal burden to prove "drunkenness" before a jury to convict you of DWI—he only has to prove "impairment." This is a very important distinction, as you will see.

The driving public holds the dangerous perception that having one or two drinks and then driving a car does not impair one's ability to drive safely. I call this perception "social denial"; everyone else does it don't feel drunk; therefore, I must not be driving "under the influence." This used to be my exact thought pattern before I sat on a DWI jury. Warning! How you feel or how you think you feel does not determine whether you are DWI/DOI.

Look at the chart on the facing page (information taken from **Traffic Court: How to Win** by James Glass, Attorney at Law, Allenby Press, 1988, Arcadia, Calif.). Then, put yourself into this all-too-common social drinking scenario: You and your spouse or date go out to dinner with friends. In the period of an hour and a half, you eat a T-bone steak with all the trimmings and consume two beers or highballs—three ounces of alcohol in all.

Can you drive home safely? Legally, you can. The amount of alcohol in your blood is only about .05 percent.

But here is what those drinks have done to you, physically and mentally, as stated by Nicholas A. Pace, M.D., and Wilbur Cross in **Guidelines to Safe Drinking,** McGraw Hill, 1984: "Your eye reaction is markedly lower. Visual acuity is reduced by as much as one-third, or comparable to wearing dark glasses while driving at night.

"Peripheral vision is decreased.

"The recovery time for headlight glare is much longer, ranging from 10 to 30 seconds, depending upon the individual.

"Your reaction time is slowed from 15 to 25 percent.

"Judgments about distance and speed are faulty.

"Your attention to detail lags, and you are more likely to talk and relate to what's going on inside the car (a kind of carry-over from the period of convivial drinking at the restaurant, or elsewhere).

"You are more than likely to have a false sense of your competency behind the wheel.

"Precautions are curbed, and you may tend to

be slightly belligerent to other drivers, who do not seem to be giving you proper right of way.

"Overall, your total driving impairment is likely to range from 25 percent to almost 50 percent, in terms of your physical and mental responses, your reaction time, and your ability to detect unexpected hazards. Few people realize it, but drivers have to make about 100 decisions for every mile of driving on the open road and more than twice that many per mile when driving in urban traffic. That leaves a lot of foom for error for the driver [who] is not completely in control of his car and senses. As a report from the National Council on Alcoholism translated this in terms of statistics: "The drinking driver is 25 times more likely to have an accident than a sober driver."

Count the cost before you drink and drive. Six beers are going to cost you \$6 to \$10 at happy hour. A DWI/DUI will cost a lot more:

First will be the embarrassment of being pulled over by the police, who, if they detect alcohol on your breath, will make you perform a "field sobriety test." These are the physical and mental exercises of walking a straight line, balancing on one leg, reciting the alphabet, counting forward and backward, etc. If the police consider you "under the influence," you will be taken to a police substation for further testing. Your car, if you happen to be alone, will be towed off at your expense (\$75). Once you arrive at the substation, you will be taken into a room that has a video camera. In that room you will be asked to perform part of the "field sobriety test" again, and you will be required to take at least one of three common chemical tests to determine the alcohol content of your blood: a breath test, a blood test, or a urine test.

Attorney James Glass in his book says that you are required to "take these tests because 'implied consent' laws exists in all states. 'Implied consent' means that it is a requirement for the issuance of your driver's license that, upon a proper traffic stop with a belief that you may be under the influence of either alcohol or drugs, you must take a chemical test to determine the amount of alcohol or drugs in your [blood]. You will usually not be allowed to consult with a lawyer in order to make up your mind as to which test you wish to take.

"Refusal to take or to complete one of the

#### **Number of Drinks in One Hour**

ADDIOXIIIRRE DIQUE AROBOI CORREIR (DAC	proximate Blood Alcohol Co	ntent (BAC
--	----------------------------	------------

Drinks			Body	Weight	In Pour	ıds		
7700	100	120	140	160	180	200	220	240
1	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02
2	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03
3	0.11	0.09	0.08	0.07	0.06	0.06	0.05	0.05
4	0.15	0.12	0.11	0.09	0.08	0.08	0.07	0.06
5	0.19	0.16	0.13	0.12	0.11	0.09	0.09	0.08
6	0.23	0.19	0.16	0.14	0.13	0.11	0.10	0.09
7	0.30	0.22	0.19	0.16	0,15	0.13	0.12	0.11
8	0.38	0.25	0.21	0.19	0.17	0.15	0.14	0.13
9	0.34	0.28	0.24	0.21	0.19	0.17	0.15	0.14
10	0.38	0.31	0.27	0.23	0.21	0.19	0.17	0.16

1 drink = 1.5 ounces of 86-proof whiskey, gin, etc.; 1 beer (12 ounces); 3 ounces of wine (20 percent); or 5 ounces of wine (12 percent)

0.08 percent BAC is illegal in Utah and other states

0.10 percent BAC is illegal in ALL states

chemical tests can be used at your trial to show a 'consciousness of guilt.' That is, you didn't take the test because you knew that you were too intoxicated. It will also result in your privilege to drive being suspended," says Glass.

If your blood alcohol content indicates .10 percent, you will be fingerprinted and booked; and you will spend several hours in jail until you can post bond (\$25). You will have to pay even more money to hire a good lawyer to represent you in court. You will spend the next six months to a year with the pending trial hanging over your head.

Once in court, you will have to agonize an additional two, three, or four days as a jury of your peers looks at you on videotape and listens to the testimony of the arresting officer concerning your conduct on the date he stopped you.

Regardless of the outcome of your trial, whether you are acquitted or convicted, it will be the most expensive set of drinks you will ever buy.

We are all subject to "periodic" or "random" drug testing. And while alcohol is not on the list of drugs being tested for at present, it should give you an uneasy feeling to know that this

"next step" looms as a future possibility.

More than ever before, we are going to have to take the initiative for keeping ourselves, our fellow pilots, and our profession clean. Each one of us must be willing to take responsibility for our own actions in this area and to be continually alert to the problems that alcohol can cause for others.

Denial is a fact of life for the person who abuses alcohol. Denial is reading information like this and refusing to acknowledge that it applies to you or a fellow pilot. So how do we deal with denial on a practical basis? Simply put, don't let an alcohol- abusing fellow pilot's denial put you into a no-win situation.

Each of us must confront and aggressively seek help for those who have problems in this area. Don't fly with someone you think may have a problem. Be strong enough to confront potential problems before they get into the cockpit, and have the compassion to seek help for those who need it. Better to have someone mad as hell at you for a while and to still have his or her career intact than for that person to end up on the street, in jail, or worse yet, dead because you were afraid to say or do something.

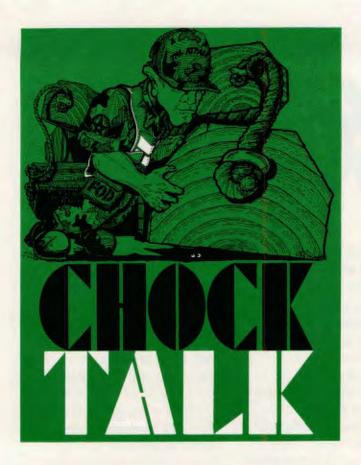
### Outstanding Unit Safety Achievement Award

The 6th Airborne Command and Control Squadron has been recognized with this award for an outstanding ground safety program. Under the direction of Staff Sergeant Mark L. Compau, the unit received an "Outstanding" on their annual safety inspection with no discrepancies—an impressive achievement for a unit of approximately 100 people supporting 24-hour-aday alert and flying operations. Under the unit's spot-inspection program, five areas a month are inspected in detail, thereby enhancing safety and preventing accidents before they happen. The "We Care About You" program tracks high-risk personnel, motorcycle riders, and maintains a very effective designated driver program. Sgt Compau's monthly safety briefings reinforced the safety consciousness of the 6



6 ACCS, 1 FW Langley AFB VA

ACCS toward mishap prevention, as evidenced by only 1 minor work-related injury in FY 91. Sgt Compau's dedication to safety contributed immeasurably to the 6 ACCS remaining mishap free and earned the unit the TAC Outstanding Unit Safety Achievement Award.



#### SAFETY IN NUMBERS

Maj John R. Scott AFIT/LSMA Wright-Patterson AFB OH

A ircraft maintainers produce, collect, and analyze tremendous amounts of statistical data. This information is generally applied toward enhancing daily sortie production. Much of the data collected by maintainers could be used to manage safety programs. How often do maintainers look at abort, repair, and repeat/recur rates to determine if these numbers are telling a story about safety problems in their organizations? I would suggest not often enough.

You might ask, "How can production numbers make me more aware of safety concerns in my organization?" To answer this question, let's take a look at several examples of how routine maintenance statistics can be used in mishap prevention.

The first maintenance statistic to be

scrutinized is abort information. Although abort information generally provides feedback on a unit's ability to meet its scheduled sortie production, a manager could also ascertain the safety posture of an organization's work efforts. For instance, when a unit's abort rate is high, doesn't this imply that maintenance workers are performing more "redball" or "hurry-up" maintenance actions than should be acceptable to maintenance managers? If a unit is performing large numbers of "redballs," then it seems to follow that the unit is significantly increasing its chances for a mishap.

An additional statistical safety analysis tool is the unit's repair rate. This maintenance statistic usually provides feedback on the efficiency of the maintenance organization. However, if efficiency is examined closely, doesn't it also include effective safety practices as one of its objectives? Consequently, repair times could also indicate whether or not workers are doing reliable maintenance in a safe manner.

Another maintenance statistic that can be an indicator of possible safety problems is the data on repeat/recur aircrew-reported discrepancies. During a manager's examination of this data, it is possible to question the quality of the technician's work. If quality is lacking in the maintenance task being performed, then safety might also be missing from the worker's efforts as a result of unsafe maintenance practices that may have been around for years.

These three examples, as to how safety can be evaluated through analysis of routine maintenance statistics, demonstrate how a maintenance manager can use available maintenance data to better manage his or her organizational safety program. This article does not mean to imply that there is always a safety issue involved when a unit's statistics are exceeding the command standard, but its purpose is to provide the maintenance manager with another tool for his or her managerial toolbox. By viewing routine maintenance statistics from a safety perspective, the safety manager can prevent potential mishaps from becoming real mishaps —these are identified under another statistical category!

# those little INDICATORS

Major C. J. Weiss 16 AF APO NY 09283

ave you ever been hurtling through the ether aboard your magnificent wind wagon, about to cross the FEBA, when you find your mind has momentarily checked out of the mission and wandered off for a cup of cafe con leche? Needless to say, when the FEBA's real, the grey matter doesn't float away. But we've all found ourselves at one time or another as a support member on a not especially challenging training mission where we meditated some on that evening's festivities rather than solely on the tactics at hand.

Obviously, we're open for a flatfooted response to unexpected events during these lapses of appropriate attention. In our business, flatfoot reactions can be fatal! So, how can I flog the quivering grey ielly back to full-time effort on the current mission? I've found that I just have to recognize my personal little indicators that show "my stereo's on, but I'm not really home." Let me tell you about some of these "little indicators," and I'll bet you have your own too!

It can start in the brief when my flight lead breaks through that dazed look on my face. He asks an easy question and gets my simple response—"Waa ... huhhh ... yes ... what was the question?" Later, I find myself in the PE room zipping up my Gsuit when the ops airman comes in to shepherd me back to the desk where I forgot to sign out. "Thanks, sorry." Next, we're stepping out and chatting about future assignments when, "No, I didn't really walk out the door without my harness on." Now in the crew van, "Wait, I've got to go get my VTR tape." Finally together. I'm about to climb out of the van at my jet-"Hey lead, did you say we start on time or check in first?"

Later, taxiing is going OK—
"Well, where's that SID booklet?
Guess we'll use the VFR
corridor if I get the lead. Maybe
I should have checked the pubs
before I climbed in. My EOR
checks seem to be OK—why is
he pointing his two fingers at his
eyes?—lights?—I thought I
already had my strobe light on,
must have bumped it off; yeah,
that's it.

"Well, takeoff checks look good—guess the crew chief didn't hook up my G-suit. At least now my body's all limbered up after contorting to hook it myself." Onto the runway, "I thought three was supposed to be in the slot. Oh well, good thing I'm number four, I just take what's left. Was it a 15 sec or 20 sec interval?"

So, any of this sound familiar to you? I could go on as there are many more examples; obviously all of them don't happen on the same mission, but I think you get the picture. Of course, there are similar little omissions in every jet. The point is that I wasn't keeping my brain engaged in the right compartment at the right time. I'm just like you; I pride myself in staying well ahead of the wind wagon and having everything in its own little container. Is the cure for this lack of precision difficult?

No. I find that all I've gotta do is listen to the little bird fluttering around in the back of my skull. He says, "You D--- S---, get your mind on the task of flying a high performance fighter, or you'll be history." Since I kinda like hanging around at this phase of my existence, I figure it's wise to listen to my little voice. Recognizing any one of those "little indicators" is usually

enough of a slap for me to successfully refocus my attention on the task at hand. That is—assuming my problem was complacency or sloppy familiarity.

But what about when I'm not familiar, when I'm simply not proficient, or in a rush, or overly fatigued, or plain sick, or suffering from low situational awareness? Well, here I find that my little voice will still talk to me when it sees me exhibiting some of those same "little indicators," and others that

maybe aren't so little.

Now the message is different though. It's still "get your act together," but it's also more. It's "You really ought to slow down before your ego takes you beyond your present ability," or "You're not doing so great today; maybe you'd better simplify and concentrate more on just what the basic aircraft is doing, smooth formation, and looking outside to keep away from the rocks and other airplanes. Sorting that formation at 25 miles on the nose is not so

important right now. Do you think your G tolerance is all there today?" Or maybe even, "This isn't so neat; why don't you just knock it off and head back for the barn."

I find that little bird in the back of my head can be a true friend, so I've trained my mind to listen for him, to look for those "little indicators," and then act appropriately. He's saved me from being caught flatfooted on many occasions.

### WHAT YOU TOLD US

In our August and September issues, we asked you to participate in a survey so we could use your inputs to improve TAC Attack and better serve you. From the 54,000 surveys available, we received 113 responses for a return of 0.2 percent. To all the people who took the time to send us their opinions, THANK YOU. We enjoyed reading your thoughts (yes, we read every survey) and appreciate your honesty. To everyone who didn't send us a survey, we can only assume that we're satisfying your needs; otherwise, you would have told us.

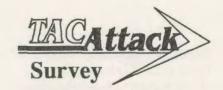
The survey has been reprinted along with your responses. The numerical entries are percentages, i.e.: 28 percent of the responses were from pilots, 88 percent from males, etc. The data for question 7 reflects the percentage of respondents who ALWAYS read the various departments. More surveys trickle in daily, and we will continue to analyze the data and use the results in planning future issues of TAC Attack.

Overall, we interpreted the data to indicate that TAC Attack has been successful in fulfilling its charter. Our goal is to prevent mishaps by providing accurate and useful information concerning flight, ground and weapons safety. The magazine staff is committed to the development of a quality culture in TAC by providing safety information in a professional and interesting format. We realize that we can always improve our product for you--the customer. We intend on doing just that, based on your responses.

Again, thanks to everyone who filled out a survey and now...how about an article? You can help make us better by sharing your experiences and expertise on the pages of TAC Attack.

HAPPY HOLIDAYS, and keep 'em safe!

The Staff of TAC Attack



Off: 49

Civ: 6

1. What is your rank or grade and time in service? Enl: 37

Avg Svc: 15.3 yrs 2. What is your job?

a. pilot 28

b. WSO 5

c. other aircrew member 1

d. aircraft maintenance 22

e, weapons

4 f. flight medicine

g. air traffic control 0

h. life support, survival

i. safety j. other (specify) 34

3. What is your age?

a. under 21 2 b. 21-25 5 c. 26-30 15

d. 31-35 23 e. 36-40 19

f. over 40 36

4. Your sex?

a. male 88 b. female 12

5. How much formal education have you had?

a. didn't finish high school 0

b. high school 4

c. some college, but no degree 16

d. associate's degree 16

e. bachelor's degree

f. master's degree or higher 26

6. How often do you read TAC Attack?

a. every month

b. almost every month (at least six a year) 20

c. occasionally (from three to

five a year)

d. rarely (once or twice a year) 2

7. How often do you read these regular departments? Answer with corresponding letter.

R - rarely

O - occasionally

N - never

F - frequently

A always

78
40
48
42
35
40
35
_34
50
29
28
43
62

8. What kinds of articles should we print more of?

a. Been There, Done That

b. Ground safety mishaps c. There I Was/Pers. exp.

d. Maintenance

9. What kinds of articles should we print less of?

a. Ground safety

b. Flight safety

c. Awards

d. Weapons safety

10. Of the stories we printed last year, what was your favorite?

Been There, Done That

11. What story in the last year did you like the least?

Fictional scenarios

12. Overall, do you think TAC Attack isa. interesting and useful 89

b. interesting, but not useful 6

c. useful, but not interesting 5

d. of no value at all 0

13. Has a TAC Attack article ever saved your life or kept you from doing something dangerous? If so, briefly describe the situation.

> Yes: 9 Maybe: 10

14. How does TAC Attack compare to other safety magazines?

a. better than most 57

b. about the same as most 30

c. worse than most 2

d. don't read any others 11

15. How do you like our layout and design?

a. excellent 48

b. good 47

5 c. fair

0 d. poor e. terrible

16. What magazines or newspapers do you regularly read?

a. Local newspaper

b. Air Force Times

c. Air Force Magazine

17. What changes would you make to TAC Attack if you could?

a. None

b. More aircrew articles

c. More pers, experiences

d. Less boring/Not so dull

18. Other comments:

Keep up the good work



















### Nothing New Under the Sun



Major John Marshall HQ TAC/SEF

Thile I don't fully subscribe to this age-old adage, when you read through a few mishap reports, you often get a feeling of dejavu. Many of the situation setups prior to a mishap seem like an old familiar movie script.

One area that would seem most preventable is intra-flight midairs. While some happen during ACM, ACT or Baron maneuvering, an alarming percentage occur during what would be considered administrative element

maneuvering. Forty-three per cent of all TAF midairs since 1981 were intra-flight. These typically involve categories in the human factors field and are most usually factors at the conscious level (mis-prioritization, complacency), not the subconscious level. These issues should be easier to identify and address through better training, supervision. and leadership. The following are some examples of these issues:

18 December 1991

## DONE THAT

A two-ship was circling the wagons to RTB at night after the wingman had suffered a suspected bird strike. "Lead", in trail a couple miles aft, called up an air-to-air mode on their radar and accelerated to join up. Seeing the nav lights of "Two," they called "visual" as they closed. Hearing this, Two switched his air-to-air TACAN to a navigation mode for the RTB. Two was slowing well below a "normal" join-up airspeed, as he was preparing for a rejoin by Lead and a controllability check, but didn't radio his new speed. Lead's WSO/EWO was a very new guy with his head in the scope of a radar not optimized for air intercept; and with the pilot losing his two clues to closure and going head-down, by the time they looked out the window they had a windscreen full of Two and his nav lights. Result: a midair.

Or how bout this one. Two highly experienced air-to-air drivers were joining up to RTB after DACT. They seemed to have the rejoin hacked, so Two went head-in to do a chore maybe better left for later as Lead altered his bank angle (you guessed it) into Two. His "chore" took longer than he figured; and by the time he came head-out, he, too, got a face full of Lead. An evasive maneuver was initiated, but a bit late. Result: a midair.

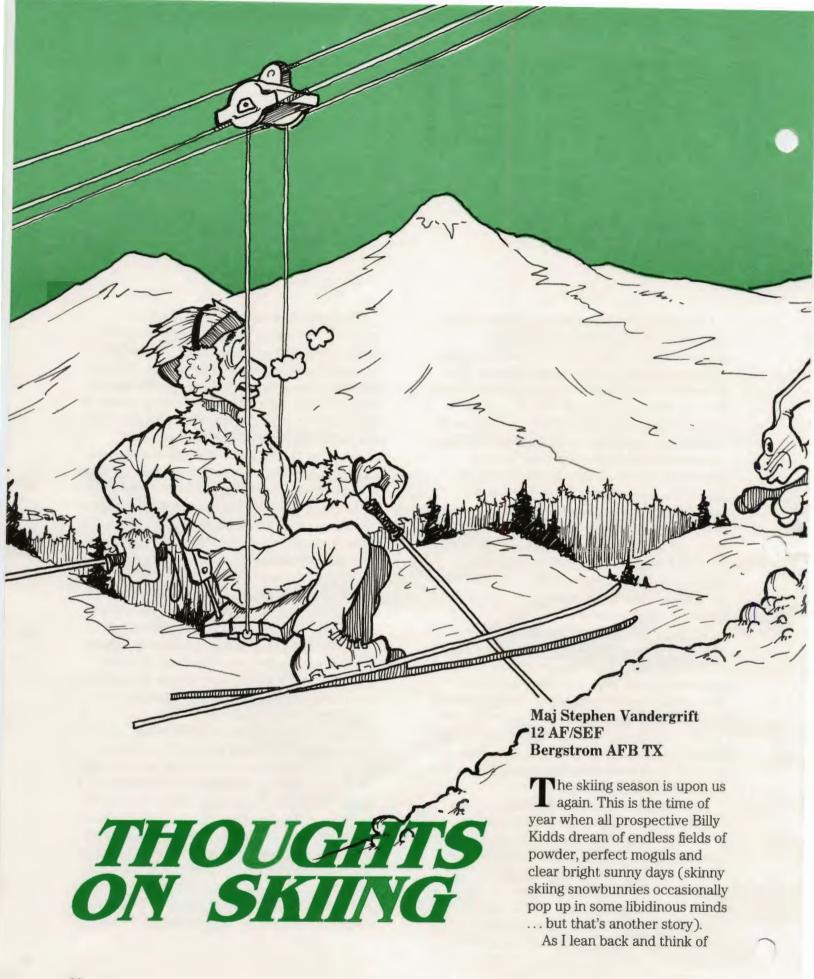
Just one more. A couple of fighters were coming off the tanker at night and were probably just finishing up their post-refueling checklist items. Lead started a subtle turn into Two, as he asked for an Alpha check to a nav point. We have to surmise the rest 'cause Two didn't live through this one . . . Two went head-down to check his INS in dimmed lighting as he drifted right into Lead. Result: fatal midair.

These incidents and more have a few common threads to them. Element members were taking what seemed to them as "routine" administrative tasks for granted. Two was not devoting adequate attention and visual time to Lead. He/they violated one of the basic tenets of flying that most of our training rules are built around: **DON'T HIT LEAD.** Lead wasn't monitoring Two as he insidiously changed his flight attitude and increased Two's task loading in a potential closure situation. He violated one of the golden rules of flight leadership: wingman consideration. While not implying the "blame" is equal, it usually does take two to midair tango.

In the aftermath of Desert Storm, and with LANTIRN's full-scale debut, we're almost certain to see a big increase in night training sorties. Those tasks which seemed so easy and routine in daytime are often far different at night. We don't have the proficiency, and many of our aspect and closure clues are severely degraded or misled by other inputs. We need to be more vigilant to catch those mistakes or oversights that *anyone* can make.

In air combat, a smart mindset when attacking bandits might be to never assume you're unobserved—assume they see you and attack accordingly. However, in a formation, if a collision potential develops, never assume he DOES see you—assume you're invisible and react accordingly. When in a formation, don't assume nothing will change in terms of aspect or closure when you go head-down—assume something will change, and only go head-down IF you can afford to, and no longer than you're willing to bet your life on. Fly Smart!

TAC ATTACK





the past 20 or so seasons of pounding various mountains on several continents with my little pink body, some lessons learned come to mind. These are mainly in three areas: equipment, physical conditioning, and pacing.

Equipment has greatly improved since the days of leather boots, spring bindings and wooden skis. Modern boots have virtually eliminated ankle injuries, but they moved the body's weak points to the knee (yours truly) and the hip. An elastic knee brace purchased at a BX or any sporting goods store adds stability to the knee, and skiing in control will eliminate most hip injuries. So, what should a new skier know about boots? My best advice is to check with a professional

boot mechanic. They will know which boot will meet your needs and can fit the boot to YOUR foot. A good fit is essential. Imagine running a marathon in dress shoes that are too big or too small for your feet; you get the idea, PAIN.

Don't skimp on boots. Buy or rent the best you can afford. A good pair of properly fitted boots should last for years. Speaking of renting, it's a crap shoot. Chances of getting a good fit are probably less than 50-50, particularly if you rent at the slope and on the day you intend to ski. You stand a better chance of getting a decent fit and a better price by renting from a shop away from the slope on the day before you intend to ski. Also, it's not a bad idea to take a knowledgeable friend along the first time you rent or buy equipment; they can usually see through the advertising hype and help you make a good deal. OK, back to boots; no matter if you rent or buy, walk around in the boots,

running shoes (remember the marathon).

What about skis and bindings? Most, if not all, name brand bindings will work as advertised; namely, release just before your knee blows out or a bone breaks. A lot depends on how the bindings are adjusted. A word of caution, when the outfitter asks you your height, weight and experience level. DON'T LIE. They will set the release sensitivity from your answers. Trust me, ego should not be a player when it comes to setting your bindings; one look at a green stick fracture will convince anyone. Again, most any decent pair of skis will work. That first pair will probably be trashed after a year of learning (falling, standing etc.), so resist the temptation to plunk down \$500 on a set of K2's with custom graphics; it's a waste of money. Length is very important so ask the outfitter for the correct one for you. My advice is to go with a shorter ski at first. They are lighter and easier to turn; they also make

### THOUGHTS ON SKIING

getting up easier (VERY IMPORTANT when you're learning) and they build confidence more quickly.

Poles? There's one expression that says it all when it comes to poles; POLES IS POLES. I've skied with expensive ones and cheap ones; there is virtually no difference. My only requirements are that they be the correct length (again, check with an outfitter), have a comfortable handle and be reasonably light. When it comes to clothes, there are as many options as there are experts. What they all agree on is that staying warm and dry is the name of the game. Several light layers are better than one heavy one (you can always peel a layer if you get hot). Water resistance can't be overstated; the only thing worse than being cold is being wet and cold! Scotch Guard or any other high quality water repellent spray works great, even on jeans.

Getting in shape is probably the single most important thing prospective skiers can do to increase their chances of surviving and enjoying the sport. Despite wishing otherwise, there is no easy way to condition ourselves for a season on the slopes. Effective skiing uses almost all the muscles in the body; it takes an

exercise program that works most of these muscles. That is never easy. My regimen is as follows: aerobic exercise four to five times a week (stairmaster or jog at my target heart rate  $[220 - age \times 80\% = tgt heart]$ ratel for 20-30 minutes), then upper body weight training three to four times a week. I like the stairmaster because it gives you an aerobic workout and does a real number on your thighs. If your aerobic exercise is jogging, you might think about incorporating some extra thigh/leg exercises into your workouts. If you don't, your legs will wear out before your wind and that's discouraging and dangerous. You might be tempted to overextend yourself and sustain an injury.

OK, you've been exercising for at least three or four months; your clothes are warm and waterproofed and your equipment is comfortable, the correct size and properly adjusted. You're ready, right? Not so fast Moose Breath; there's one thing left; TAKE SOME LESSONS!!!!! Lessons are worth their weight in gold, silver or snowbunnies. Besides learning the rudiments of on the hill survival, lessons build confidence, teach the rules of the road (slope) and show students they are not alone;

there are at least five or six other people on the slope who have trouble getting into their skis and standing up (misery loves company). Almost every ski slope/resort offers cheap group beginner lessons. This is money well spent.

Learning to ski is the hardest physical labor you'll ever "pay" to do. Add in the altitude factor. and you will see that you're going to be a very tired camper long before the lifts stop running. Warning, Warning, Warning: as the day wears on slow down, take breaks and rest. You should also drink plenty of water (save the beer for later) and use sunscreen liberally. You will not learn to ski in one day, most likely not even in two days. Relax and don't wear your body out. Make the last one or two runs of the day your easiest. I call them ego runs because that's the time I work on technique and "looking good."

Skiing is tremendous fun and can be enjoyed for many years if you are prepared. You've got to be properly conditioned, correctly clothed, and comfortably equipped. If you are not, you will be wet, cold, sore and maybe injured as well. The choice is yours; choose wisely and enjoy.

### Crew Chief Safety Award

On 9 Aug 91, an OV-10 was in phase dock for a number one phase inspection. Staff Sergeant Kevin S. Timm, Sergeant Mark D. Darnell, and Sergeant William J. Hoalt, 4507th Consolidated Aircraft Maintenance Squadron, 507th Air Control Wing, Shaw AFB SC, were tasked to remove and replace the main landing gear tire wheel bearings. While reinstalling the right main landing gear tire, Sgt Darnell observed that the tire would not

seat properly IAW technical data. At that time, they decided to measure the right and left main landing gear axles and found the right axle to be a quarter of an inch too long. They began to troubleshoot the problem and found the axle attachment bolt was missing—this is the only bolt that attaches the axle to the main landing gear strut. If this problem had gone undetected, it could have caused

serious damage to the aircraft and possible injury to the aircrew. The method this maintenance crew used to inspect, troubleshoot, detect, and correct the cause of the malfunction illustrates dedication, mature judgment, and professionalism. The outstanding efforts and dedication to duty demonstrated by Staff Sergeant Timm and Sergeants Darnell and Hoalt earned them the TAC Crew Chief Safety Award.



SSgt Kevin S. Timm



Sgt Mark D. Darnell 4507 CAMS, 507 ACW Shaw AFB SC



Sgt William J. Hoalt

# Weapons Safety Award of the Quarter

s the 507th Air Control A Wing's Chief of Weapons and Explosives Safety, MSgt Larry E. Booker has ensured that all explosive operations are accomplished in compliance with Air Force and Tactical Air Command explosive safety standards. His many accomplishments are significant and outstanding. He expanded the scope and depth of wing weapons safety inspections by developing and implementing several new inspection checklists. He then distributed the checklists to all of the wing's 23 geographically dispersed units and provided hands-on training to each unit's weapons safety



MSgt Larry E. Booker 507 ACW Shaw AFB SC

personnel. Ratings during wing and HQ TAC inspections have significantly increased as a result of his efforts. He next marshalled the investigations of two separate aircraft weapons release malfunctions, expertly guiding each inquiry to the root cause. In both instances, his recommendations were adopted for command-wide

implementation. When two combat communication groups were added to the 507th Wing, neither unit had a weapons safety program. Sgt Booker readily accepted the challenge. He worked closely with both units-training personnel and developing an effective, ongoing program in each group. Sgt Booker took the lead in the wing's conversion to the A-10 aircraft. Working with host base and TAC, he sited the aircraft parking area and explosive storage holding areas, ensuring a smooth transition to the A- 10. Sgt Booker's initiative and accomplishments earned him the TAC Weapons Safety Award of the Quarter.

## Ground Safety Award of the Quarter

C taff Sergeant Gregory B. Pritt was appointed to the 4th Equipment Maintenance Squadron Propulsion Branch (additional duty) Safety Noncommissioned Officer position on 1 Mar 90. He has aggressively promoted job safety awareness through his daily shop safety "spot" inspections and his thorough monthly branch inspections. Sgt Pritt ensures all personnel receive their initial shop safety briefing, as well as coordinating weekly industrial/general safety briefings for approximately 95 personnel. He also volunteered as the Federal Hazard Communication Instructor, obtained the AFOSH 161-21.1W instructional workbooks/videos, and scheduled all shop personnel for this training. Sgt Pritt also emphasized the hazards of the various chemicals used in the workcenter and the safety equipment required for their use.

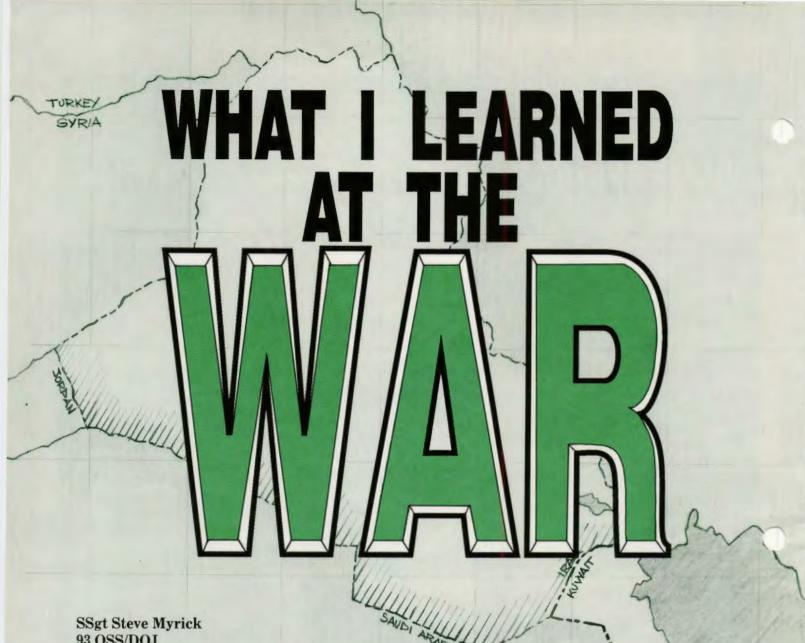


SSgt Gregory B. Pritt 4 EMS, 4 WG Seymour Johnson AFB NC

Sgt Pritt conducts random seat belt checks each month, often on his own time. On 27 Sep 90 and 15 Apr 91, he coordinated with the 4th Wing Security Police to conduct informal "surprise" speed checks which resulted in the EMS Propulsion Branch personnel completely eliminating their speeding incidents.

On 3 Jul, Sgt Pritt discovered a previously undetected safety deficiency. The emergency eyewash stations in the branch were insufficient in size and quantity for the amount of hazardous chemicals used, stored, and handled in the Propulsion Branch. He coordinated the corrective action and trained all shop supervisors on the required monthly maintenance.

Due to the transition to the F-15E weapon system and various mobility commitments. the potential for disabling injuries increased. As a direct result of Sgt Pritt's active support and stressing "Safety Awareness," there have been no ON- or OFF-duty lost workday mishaps during the nomination period. Sgt Pritt's proven leadership and sustained efforts to promote the 4th Wing Mishap Prevention and the "We Care About You" Programs earned him the TAC Ground Safety Award of the Quarter.



93 OSS/DOJ Castle AFB CA

s a KC-135A Standardization/Evaluation boom operator, I have had many years of experience in the boom pod, refueling every plane in the Air Force inventory during peacetime. With all this experience to rely on, I was not overly concerned with my crew's selection for deployment to a forward operating base during DESERT STORM. After all, nothing could be so different during war, could it? Boy, was I wrong!!

Our crew's first combat support mission was a night sortie consisting of F-16C prestrike refueling and then delaying for post-attack refueling, then RTB. Tactical decisions for our crew were made in advance of each sortie. Some conflict arose between reality and the WARNING "Do not sit aft of the aft escape hatch." As the boom operator, I was required to occupy the boom pod during takeoff to watch for flashes that might

indicate a missile launch and advise the pilot of any necessary actions to take. We lumbered down the runway for takeoff with 12 F-16s following us by one minute. Gear in the well, flaps up, when I see flash, flash, flash. "Pilot, boom," I called. The pilot's excited voice, "What Boom?" A pause, as I try to figure out what is going on. Just as I'm preparing to call for maneuvering, I realize it's the F-16s employing self-defense flares. "Never mind pilot." The

pilot eases his grip on the controls, and we continue onward and upward. The fighters join on the wing, the first one coming up to the boom. Not a word is said, EMCON 4 procedures are in effect. (We don't want the Iragis to hear us coming.) In the still of the night, we hear from another refueling group, "Tanker 3, turn up your lights; now down a bit." We continue with all our lights off, except for the very dimly lit pilot director lights (PDL) and nozzle light. (We don't want those Iragis to see us coming either.) We hear another refueling group, "Breakaway, Breakaway, Breakaway." I ask myself, "Weren't the flashing PDL lights enough?" I thought this was an EMCON 4 war.

Our receiver seems to be having a little difficulty getting into position; I wonder if it has something to do with those 2,000 pound bombs tucked under the wings and fuel tanks near capacity. I can't remember, even at Red Flag, refueling heavyweight fighters. Well, I'll try to extend the boom out a little..., contact at 20 feet, 25 degrees elevation, 0 degree azimuth (slightly outside the prescribed envelope). I'm thinking I have a slight problem

here with the tech order CAUTION, "Do not exceed envelope limits, nozzle binding may occur or damage to the boom." The questions run through my mind. Ever? During an emergency? During a war? I can assure you, never ever during a checkride! Anybody have any better ideas right now? I wonder; what if we break the system and the rest of the fighters can't get their gas? What will be the effect on mission success? No more time to think about it as the fighter disconnects and moves to the wing. Only 11 receivers and 23 contacts to go tonight, the first night, and three more months of war. This is easy, just like we trained-right?

Back on the ground, I ponder the training and experience I've had to prepare for this. Years of refueling, instructing, command evaluations, checkrides taken and given, deployments, exercises—the real thing is certainly different from the routine training environment.

The war is over, we won and we're all home now. Back at my desk in Training Flight, I still have questions and concerns. How much do I tell the first term boomer about my DESERT STORM missions?

How realistic is our training if we only have the actual experience every 20 years? How do we make the training more realistic and still be safe? Who thinks about the mission effectiveness if the first fighter breaks our system and his buddies can't get any gas? Especially on a post-strike A/R?

So what's my point? It's this keep us, your lifeline, informed. Let us know your tactics on departure, your requirements and/or limitations en route and realize if the boom breaks, it stays broken. Work with us to expand our training, learn from these experiences, and eliminate the double standards. "Okay" during the war, but followed to the letter for checkrides and ORIs just won't cut it. The standards are established to prevent equipment breakage or unsafe practices, and we all have to operate within prescribed regulations.

Improved interaction among SAC, TAC, and MAC aircrews is needed. We need to know each other's capabilities and limitations. Most of all though, we need to truly train the way we fight. See you at the ARCP!

### DOWN TO EARTH



ITEMS THAT CAN AFFECT YOU AND YOUR FAMILY HERE ON THE GROUND

### IT WON'T HAPPEN TO ME SYNDROME

Sgt Sandra K. Menz 4 WG/SE Seymour Johnson AFB NC

good friend of mine returned from somewhere in Central Saudi Arabia. He hadn't had anything to drink for at least three months. When he returned, all he wanted was a beer or anything with alcohol; so we went to the club and had a few. Not realizing that we both had a little too much, we decided to find another club. We never made it ... we had a car accident. Luckily, I'm still here to write this article. My friend, however, may never write again. Don't get me wrong, he's not dead (yet), but close to it. He lost seven pints of blood as a result of the accident and hasn't come around vet. You see he's in a coma. It's been two months since the accident, and I just wanted everyone to know that drinking and driving don't mix.

The day had started out great. Joe was due in around 1600, and I was getting everything ready for his return. His car was in storage, the dorm room had been cleared out, and

We stayed at the club about two hours ordering everything we could think of. After a half hour or so, I lost track of how many drinks we had.

everything put in the dorm's store room. I got his car out of storage, gave it a good bath; put in gas, oil, and all the other fluids that it needed. I went to his room and moved everything back. At 1530, I went to the flight line to welcome him home. The plane was only 10 minutes behind schedule. The welcome committee gave Joe a beer while we waited for his bags to be off loaded. His bags finally got to the hangar around 1700. We went to the dorm, he changed, and off to the club we went. We decided to walk because we both planned on getting blitzed. We stayed at the club about two hours ordering everything we could think of. After a half hour

or so, I lost track of how many drinks we had. We started getting bored, but we weren't ready to quit drinking. So, we decided to go to another club off base. He insisted he could drive, and who was I to say he couldn't? It didn't occur to either of us that we would have an accident.

Well, it was off to the club downtown. We never made it. I really don't remember what happened, but this is what my friends told me. Joe and I had crossed the center line and hit another vehicle head-on. Joe wasn't wearing his

His injuries were numerous. The doctors say there wasn't a bone in his body that wasn't broken.

seat belt and was thrown through the windshield. His injuries were numerous. The doctors say there wasn't a bone in his body that wasn't broken. He will be probably be paralyzed (for life) from his neck down. They can't be sure until he comes out of the coma. I, on the other hand, had been wearing my seat belt and only received a broken leg. There were three people in the other car ... a married couple and their son. They were all wearing seat belts as well and received only minor injuries.

Looking back and hearing what happened, I honestly don't believe it was worth **DYING FOR A DRINK**. Everyday I hope and pray that Joe comes out of this alright. This can happen to you if you take a chance with drinking and driving. But I know you don't think it ever will, **RIGHT?** 

This is a fictional story and any similarity to actual events is only coincidental.
Unfortunately, in my two years in safety, I've investigated too many similar mishaps. Are you foolhardy enough to chance meeting the **GRIM REAPER?** 

### Outstanding Individual Safety Achievement Award

On 12 Jun 91, Staff
Sergeant Mark D. Caval
was performing a routine basic
postflight (BPO) inspection on
an F-16. While performing the
BPO, he noticed a small bend on
the corner of a convergent seal
at the 7 o'clock position. Sgt
Caval was acutely aware of the
important implications this
defect could have, so he
continued to investigate.
Further observation revealed a

SSgt Mark D. Caval 58 AGS, 58 FW Luke AFB AZ

3/4-inch gap where the convergent seal meets the augmentor liner. At this point, he realized a serious problem existed, so he opened the turkey feathers to inspect for damage. His inspection revealed a bracket had cracked and the pin that guides the convergent seal had separated from this bracket. He then notified the expediter of the problem and requested an engine expert from the propulsion branch. Mr. Witt, the shift supervisor of the engine shop and the most qualified engine technician on night shift, thoroughly

inspected the damage and determined that it had most likely happened during the aircraft's previous flight. He was sure that an engine augmentor burnthrough or engine fire could have occurred during the next flight. Sgt Caval's attention to detail and high standards of safety prevented an aircraft mishap and, more importantly, the possible loss of an aircrew. His actions have earned him the TAC Outstanding Individual Safety Achievement Award.





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CLASS A MISHAPS
AIRCREW FATALITIES
* IN THE ENVELOPE EJECTIONS
* OUT OF ENVELOPE EJECTIONS

T	ATC	\L			
CT.	THRU OCT				
OCI	FY92	FY91			
2	2	1			
1	1	2			
1/0	1/0	0/0			
0/0	0/0	0/2			

ГАС	;	
THRU	OCT	П
FY92	FY91	П
2	0	П
1	0	П
1/0	0/0	Ш
0/0	0/0	П
	THRU FY92 2 1 1/0	2 0 1 0 1/0 0/0

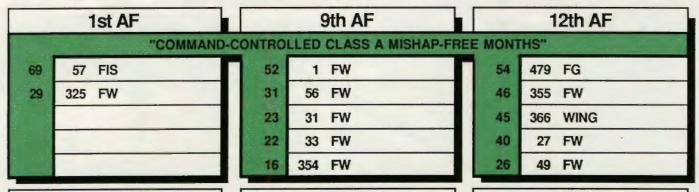
ANC	3		
THRU OCT			
FY92	FY91		
0	1		
0	2		
0/0	0/0		
0/0	0/2		
	THRU FY92 0 0 0/0		

AFF	}			
THRU OCT				
FY92	FY91			
0	0			
0	0			
0/0	0/0			
0/0	0/0			
	THRU FY92 0 0 0/0			

#### CLASS A MISHAP CON

TAC	FY 91	0.0	0.0	0.7	1.8	2.2	2.2	2.2	1.9	1.7	1.8	1.8	2.0
TAC	FY 92	2.2											
ANG	FY 91	3.8	2.0	1.3	3.9	3.2	4.0	5.2	5.0	4.9	4.8	4.3	4.3
ANG	FY 92	0.0											
AFR	FY 91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AFK	FY 92	0.0											
TOTAL	FY 91	1.2	0.6	0.8	2.3	2.4	2.6	2.9	2.7	2.5	2.5	2.4	2.5
TOTAL	FY 92	1.6											
MONT	Н	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

#### TAC'S TOP 5 thru OCTOBER 1991



	ANG		AFRES		DRUs	
	"СОМ	MAND-CONTRO	LLED CLASS A MISH	AP-FREE MONT	THS"	
465	119 FIG	182	301 TFW	181	552 ACW	
441	147 FIG	124	482 TFW	72	28 AD	
251	110 TASG	123	924 TFG	51	USAFAWC	
225	138 TFG	111	906 TFG	0	USAFFWC	
204	112 TFG	86	507 TFG			

<sup>(</sup>SUCCESSFUL/UNSUCCESSFUL)

