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# Interceptor

**JANUARY 1979** 



TWENTIETH ANNIVERSARY ISSUE



# Interceptor

FOR THE MEN AND WOMEN RESPONSIBLE FOR AEROSPACE DEFENSE

VOL 21 NO 1

Aerospace Defense Command Gen James E. Hill Commander in Chief

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### **SPOTLIGHT**

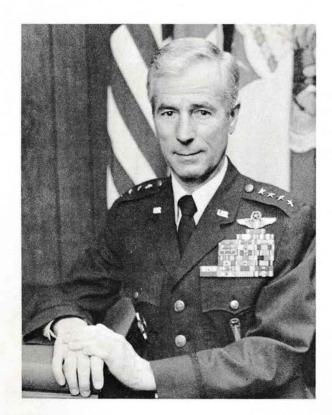
Experience is a hard teacher because she gives the test first, the lesson afterwards.

Vernon Law

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# **THANKS**

INTERCEPTOR extends a special thanks to TSgt Marty J. Isham, HQ ADCOM Graphics Section, for his contribution of unit histories, patches, and photographs used in this anniversary issue. We likewise extend our appreciation to the following individuals who also contributed photographs and data: Mr. Michael Druzolowski, HQ ADCOM Office of History; MSgt Mike Brown and TSgt Doug Barnard, 142FIG (Oregon ANG); MSgt Stan Drew, 177FIG (New Jersey ANG); SSgt George Gottsammer, 49FIS; SSgt Tom Randall, ADWC; Mr. John Severa, 46AERODW; Mr. Ron Montgomery, Whiting, NJ; Mr. Frank MacSorley, Glen Burnie, MD; and Mr. Ted Woodo, NAFEC.



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INTERCEPTOR'S 20th Anniversary

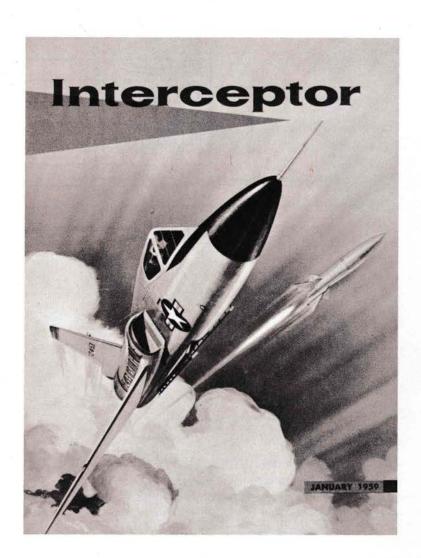
In January 1959, 20 years ago, the first copy of INTERCEPTOR magazine was published. The front cover sported a brand new F-106. The magazine was the culmination of many months of effort and received laudatory comments.

The Air Defense Command was under the able leadership of Lieutenant General J. H. Atkinson. The Command was divided into three major subgroups: the Eastern Air Defense Force, the Central Air Defense Force, and the Western Air Defense Force. Aircrews were flying F-86s, F-89s, F-101s, F-102s, F-104s, and F-106s . . . and, yes, T-33s. Additionally, they were supported by C-123s, C-121s, and C-131s. There were about 100 active flying squadrons. The Command mishap rate sat at 10.7 and had been above 25.0.

The purpose of the INTERCEPTOR was to provide Command safety guidance and to provide a centralized publication for all units. By the end of 1960 the mishap rate was below 10.0 for the first time ever. Since 1965 it has more or less stabilized around 5.0, better than ever before, but still too high. One has to wonder what drove that ugly statistic down suddenly from 25 to 5. Was it to some extent the magazine? Even if it "saved" one airplane or safely influenced some crewman, it has been worth all the cost and effort.

After 20 years, INTERCEPTOR is still fresh and informative. It is read by 60,000 professional people each month. Its influence cannot be measured, but it is there. This Command is happy to sponsor — and be associated with — INTERCEPTOR magazine.

JAMES E. HILL, General, USAF Commander in Chief



# 20 years of INTERCEPTOR

wenty years ago the first copy of INTERCEPTOR rolled off the presses. It was the culmination of many months of planning and preparation. The endeavor was instigated by (then Captain) Roger Crewse to provide a medium to exchange information within the Command and to promote safer mission accomplishment.

The first INTERCEPTOR staff included Captain Roger Crewse, Editor; Captain Harry Tyndale, Associate Editor; Captain John Lane, Research Editor; and Craig Schafer, Art Director. Craig Schafer is still with the magazine as Art Director.

Roger Crewse has provided immeasurable support to the magazine as Editor, during his tour in Safety Analysis, and as ADCOM's heroic "Coolstone." Captains Tyndale and Lane spent several years on the staff providing their expertise to build INTERCEPTOR into a leader in safety magazines.

In this 20th anniversary issue, we put the original staff back to work. On page 50 you will find one of the first articles written by Captains Tyndale and Lane, "The Pasteboard Simulator." In the title picture, that's John Lane wearing a sport coat and Harry Tyndale in uniform.

We understand that an exorbitant amount of work went into the article, including a tough three-day TDY to Nellis for the photographs. Things have changed!

On page 46 we've brought back some of Craig Schafer's artwork for your enjoyment, and we were successful in cajoling Roger Crewse into taking some time from his job as Chief of the Reports and Analysis Division at HQ AFISC to bring Coolstone back for one more memorable flight on page 12. We hope you enjoy them as much as we have enjoyed bringing them to you.



Air Defense of the Continental United States had its beginning when Major General Hap Arnold recommended an Air Defense Command Unit composed of Air Corps, Coast Guard Artillery, and Signal Corps be formed. On 26 February 1950 the unit was officially activated at Mitchell Field under the command of Brig Gen. James E. Chaney, an Air Corps officer. Although the command was deactivated fourteen months later, it provided the ground work for the future Air Defense Command.

On March 1946, Air Defense Command was organized as a major command, and on 1 December 1946 was placed under Continental Air Command. On 1 July 1950 ADC was discontinued; however, it was reactivated as a major command again on 1 January 1951. Air Defense Command was redesignated Aerospace Defense

Command on 15 January 1968, and on 31 July 1975 it became a specified command under NORAD and JCS control.

During the 30-plus years of its existence the command has undergone many changes. One thing has not changed though; the men and women of the Command have provided the country with a continual shield against air attack. Starting with detection and warning and ending with the interceptors and aircrews standing alert to launch at a moment's notice.

In this issue of the magazine we have included an historic, and possibly nostalgic, sketch of the command by including brief histories of all (93 to be exact) the fighter interceptor squadrons assigned to the command as its alert force. These are just the active Air Force Squadrons that have been in the command. Time and space did not allow

us to include the 76 Air National Guard Squadrons, several Naval Squadrons, radar squadrons, training squadrons and numerous support units that have played important roles in our nation's defense.

For brevity we have omitted some actions that affected all the squadrons in the command at that time. They are: 11 June 1948 when the P designation of all fighter aircraft was changed to F; 20 January 1948 when Fighter Squadrons became Fighter Interceptor Squadrons; and 18 August 1955 when a number of changes in unit designations took place under "Project Arrow." This restored many squadrons to the wings and groups to which they had belonged during World War II.

We hope the histories on the following pages will bring back some memories to the Old Heads and show the young troops what life in ADCOM was like a few years back.



2d FIS

In June 1947 the 2d FIS was transferred from USAFE to ADC. The unit was based at Mitchell Field and flew P-61s. In June 1948 it traded in its P-61s for F-82 Twin Mustangs. In the fall of 1949 the 2d FIS moved to McGuire AFB and transitioned into jets — F-86s. A year later in 1950 the unit traded in its 86s for F-94s which it flew for two vears. In the fall of 1952 the unit transitioned into F-84Gs followed by another change into F-86Ds during the summer of 1953. In August of 1955 the 2d FIS designation was moved to Suffolk County AFB where in January 1957 it transitioned into F-102As. In August 1959 the unit transitioned into F-101Bs which it kept until inactivation in December of 1969. The 2d FIS was reactivated in July 1971 at Wurtsmith AFB, flying the 94th FIS F-106As when that unit designation was transferred to TAC. The 2d FIS was deactivated on 31 March 1973. The Combat Crew Training Squadron at Tyndall AFB picked up the unit insignia changing it slightly to the 2d FITS in 1974.



5th FIS

In June 1947 the 5th FIS was transferred (along with the 2d FIS) from USAFE to ADC at Mitchell

Field flying P-61s. In June 1948 the unit transitioned into F-82s. In the fall of 1949 the unit moved to McGuire AFB. In August of 1955 the 5th FIS designation was transferred to Suffolk County AFB. In the spring of 1957 the unit transitioned into F-102As. In February 1960 the 5th FIS moved to Minot AFB and transitioned into the F-106A. They are still here today.



11th FIS

The 11th FIS was activated at Duluth IAP with F-51Ds in December 1952, replacing the Minnesota ANG's 179th FIS. In the fall of 1953 the unit transitioned into F-86Ds. In June 1960 the 11th FIS transitioned into F-106As which it flew until September 1968 when it was redesignated the 87th FIS. This resulted in retirement of the 11th FIS insignia.



The 13th FIS was activated in April 1953 at Self-ridge AFB. It was some six months later when it received its first aircraft — the F-86D. The 13th FIS designation was moved to Sioux City Airport in August 1955 and transitioned into F-86Ls in the fall of 1957. In July 1959 the 13th FIS moved to Glasgow AFB, transitioned into F-101B's, and remained there until deactivation on 30 June 1968.



14th FIS

The 14th FIS was activated at Sioux City Airport in November 1953 with F-86Ds. In the fall of 1957 the 14th FIS transitioned into F-86Ls which it flew until its deactivation on 1 April 1960.



# 18th FIS

Activated in December 1952, the 18th FIS replaced the Minnesota ANG's 109th FIS at Minneapolis-St. Paul Airport in F-51Ds. In the spring of 1953 the unit transitioned into F-86As followed by another change to F-86Fs later the same year. The 86s were short-lived in the squadron, however, when in the spring of 1954, it obtained F-89Ds. In the fall of 1954 the unit moved to Alaska under control of AAC. The 18th FIS transferred back to ADC in August 1953 when it moved to Wurtsmith AFB and received F-102As at the same time. In May 1960 the squadron moved to Grand Forks AFB transitioning into F-101Bs. It remained there until its deactivation on 15 April 1971.



# 15th FIS

In April 1953 the 15th FIS was activated at Davis-Monthan AFB with F-86As. A year later the unit transitioned into F-86Ds followed by a transition to F-86Ls in the fall of 1957. In the spring of 1959 the unit received F-89J interceptors which it flew for only a year when it transitioned into F-101Bs. On 24 December 1964 the 15th FIS was deactivated.



# 27th FIS

The 27th FIS was originally transferred to ADC from SAC with F-80s in December 1948. However, the squadron went back under SAC four months later in May 1949. In April 1950 the 27th FIS was again transferred to ADC, still at March AFB, but with new F-86A aircraft. In July 1950 the squadron moved to George AFB for a brief one

month when it again moved in August 1950 across the county to Griffiss AFB. In August 1952 the squadron began transitioning into F-89Cs; however, the change was never completed. It continued flying F-86As until the spring of 1954 when a transition into F-94Cs was completed. In the fall of 1957 the unit transitioned into F-102As. Two years later in the fall of 1959 the squadron moved to Loring AFB and began flying F-106As. On 1 July 1971 the 27th FIS designation was transferred to TAC as the 27th TFS.

The 31st FIS was activated at Larson AFB with F-86Ds in April 1953. Two-and-a-half years later in August 1955, the squadron was deactivated. In June 1956 the squadron was reactivated at Wurtsmith AFB to fly F-102A aircraft. A little over a year later on 20 August 1957, the 31st FIS moved to Alaska and transferred from ADC to AAC.



# 29th FIS

The 29th FIS was activated at Great Falls AFB (later named Malmstrom AFB) in November 1953 with F-94C aircraft. In May 1957 the squadron transitioned into F-89Hs and a year later into F-89Js. In June 1960 the 29th FIS received F-101Bs which were flown until the squadron was deactivated on 27 April 1968.



31st FIS



OLD



**NEW** 

# 37th FIS

The 37th FIS was first activated under ADC at Dow Field with P-47Ds in November 1946. The squadron transitioned into P-84Bs in October 1947 which were flown until deactivation in October 1949. The squadron was reactivated in November 1952 at Burlington Airport with F-51Ds, replacing the 134th FIS Vermont ANG. In February 1953 the unit's home was named Ethan Allen AFB along with a transition into jet F-86D aircraft. In the fall of 1952 the 37th FIS transitioned into F-102As which were flown until deactivation on 1 May 1960.



42d FIS

The 42d FIS was activated in February 1953 at O'Hare Airport with F-86Ds. In August 1955 the unit designation was transferred to Greater Pittsburgh Airport. The squadron transitioned into F-86Ls in the spring of 1957 which were flown until deactivation on 1 July 1958.



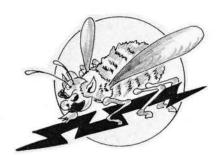
45th FIS

The 45th FIS, activated in November 1952 at Suffolk County AFB, replaced the 118th FIS of the Connecticut ANG. It had a fairly short ADC commitment as the squadron was transferred to USAFE on 25 May 1953 while transitioning from F-47Ns to F-86Fs.



46th FIS

The 46th FIS was activated in November 1952 at Dover AFB with F-94Bs, replacing the Pennsylvania ANG's 148th FIS. Shortly thereafter in April 1953, it received F-94Cs which were flown until deactivation on 1 July 1958.



OLD



NEW

# 47th FIS

Activated in December 1952 at Niagara Falls Airport, the 47th FIS replaced the 136th FIS of the New York ANG flying F-47s. During 1953 the squadron transitioned into F-86Fs and Ds. In the spring of 1957 the unit received F-86Ls which were traded a year later in 1958 for F-102As. The Deuces were flown until deactivation on 1 July 1960.





48th FIS

The 48th FIS was activated at Dow Field in November 1946 with P-47s. In October 1947 a transition into P-84Bs was completed. These were flown until the unit was temporarily deactivated on 2 October 1949. The 48th FIS was reactivated in November 1952 at Grenier AFB with F-47s, replacing the New Hampshire ANG's 133d FIS. A relocation to Langley AFB was completed in early 1953 along with a transition into F-84Gs and then F-94Cs in the fall of 1953. In the summer of 1957 the squadron completed a transition into F-102As followed by another in the fall of 1960 to F-106As. The 48th FIS can still be found at Langley with F-106s.



49th FIS

The 49th FIS was activated at Dow Field in November 1946 with P-47s. In October 1947 a transition into P-84Bs was made which were flown until temporary deactivation on 2 October 1949. The squadron was reactivated in November 1952, still at Dow but with F-80s. It replaced the 132d FIS of the Maine ANG. In the spring of 1953 the unit transitioned into F-86Fs and a year later into

F-86Ds. In November 1955 a move to L.G. Hanscom Field was completed followed by a transition to F-86Ls in October 1956. In July 1959 the squadron moved to Griffiss AFB, picking up the F-89Js of the 465th FIS which was moved to L.G. Hanscom Field. The two units traded places. The move was followed by a transition into F-101Bs in November 1959. These were flown until deactivation on 5 July 1968. However, in September 1968, the 438th FIS at Griffiss, flying F-106As, was redesignated the 49th FIS. The 49th is still at Griffiss flying F-106A interceptors.



54th FIS

The 54th FIS was activated at Rapid City AFB (later named Ellsworth AFB) with F-51Ds, replacing the South Dakota ANG's 175th FIS. The F-51s were traded in for F-84Gs upon activation and in the spring of 1954 a transition into F-86Ds was completed. In the fall of 1957 another transition, this time to F-89Js, was completed. The 54th FIS continued flying the F-89s until deactivation on 25 December 1960.



56th FIS

The 56th FIS was activated at Selfridge AFB in November 1952. In 1953 the unit began flying F-86Fs and later F-86Ds. In August 1955 the unit designation was transferred to Wright-Patterson AFB. In the spring of 1957 the 86Ds were exchanged for F-86Ls. This was followed a year later with a transition to F-104As in May 1958. The 56th FIS was deactivated on 1 March 1960.

in the spring of 1952 followed by a change to F-94Cs a year later. The 94s were replaced by F-89Ds in 1955 and subsequently Hs and Js in 1956 and 1957. In August 1959 the squadron moved to Walker AFB and was deactivated there on 25 December 1960.



# 57FIS

The 57th FIS was activated at Presque Isle AFB in March 1953 with F-89Cs. In November 1954 the squadron moved to Keflavik, Iceland, and was transferred to MATS, but in July 1962 the 57th FIS once again became an ADC unit flying F-102As. In April 1973 the Deuces were traded in for F-4Cs. The 57th FIS completed a conversion to F-4Es in the summer of 1978.



58th FIS

In December 1948 the 58th FIS was transferred from SAC to ADC at Otis AFB with F-84Bs. In the summer of 1950 a conversion to F-86As was completed. A transition to F-94Bs was completed



# 59th FIS

The 59th FIS was transferred from SAC to ADC in December 1948 at Otis AFB with F-84Bs. In the fall of 1950 the unit began a transition to F-86As which were replaced later in the year by F-94As and Bs. The squadron was transferred to the control of the North East Air Command in October 1952 with a move to Goose Bay, Labrador. In April 1957 the 59th was once again placed under ADC control with F-89Ds and Js. A transition to F-102As was completed in the summer of 1960. On 1 January 1967 the unit was transferred on paper to Bergstrom AFB to be deactivated on 2 January. In September 1968 the 322d FIS at Kingsley Field was redesignated as the 59th FIS flying F-101Bs. On 17 December 1969 final deactivation of the 59th FIS occurred.

- Continued on Page 26





# **Coolstone Lights a Stogie**

by ROGER G. CREWSE AFISC/SER

When you were stationed at McChord in the winter, any TDY south was good news. Therefore, when the 89s were grounded - bad wings, bad engines, or both (Coolstone wasn't sure) the squadron at McChord with its 94s picked up the alert commitment at Hamilton. A real sweet deal. The crews were cycled two weeks down, then two weeks back at McChord. The bad news was that with the exception of the flight down and back it was all alert-24 hours on and 24 hours off-not that a few of the crews didn't make it in to the San Francisco area on their 24 off. In fact, considerable cultural exchanges took place during the 24 hours off from alert. More cultural exchanges than sleep, usually.

Coolstone had been down to Hamilton from McChord twice before since the 89s had been grounded. He and his fearless RO (Two) were now on their third tour. During each 24-hour alert tour, at least three or four scrambles were made by all four crews. The reason for this high level activity was that

the ADIZ was narrow and the tolerances even narrower. Unless you were 5 minutes within your ETA and within 20 miles of your track, you were declared unknown. This immediately required a scramble. The contract cargo bird pilots coming in from FEAF just weren't too impressed by the ADIZ requirements. Thus the many scrambles.

In January, as it now was, almost every night the vis went down in fog. That "cat" kept creeping in and paused a lot longer than the man said, usually all night. Once on top though at about 1000 or 2000 feet it was almost always clear. Intercepts at night were a lot more sporting than the daylight ones. The interceptee didn't know he was being had, and the interceptor was blacked out and had to belly up real close to get aircraft type and numbers. Flying formation with a DC-4 tail at 8000 feet or so, indicating about 150, was a fairly demanding chore. In the day, not much to it, just get the type and press on. At night, another story!

About half-way through Cool-

stone's first tour it became clear that they could not support two-ship scrambles. It just flat ran them out of aircraft and crews before the night was over. So the CO decided that they'd use single-ship scrambles and that four scrambles per crew was max during any 24-hour period. After that you had to be replaced. This happened fairly often, even with just one aircraft per scramble. Needless to say, the crew that was called up got all emotional about it, particularly if the weather was rotten.

Hamilton really didn't have a bona fide IFR letdown or recovery. When IFR conditions did exist, other than just fog, it was necessary for the crews to divert. They sometimes landed at Fairfield Susson or at the Navy base. That also meant another crew had to be called out.

What was really frustrating though was that with the exception of the ADC system, apparently nobody really cared about the ADIZ violations. The aircraft type and numbers were carefully logged and passed to the civilian agencies for action, but as far as anyone knew nothing was ever done about it. Hence no decrease in the 10 to 12 scrambles each night on contract aircraft coming back from Korea. Some of these aircraft carried only freight, but others carried passengers-service men and their dependents.

Tempers were slowly rising to a critical level on the part of the ADC crews.

So it was on this January 1952 night on alert at beautiful Hamilton Air Force Base, California. Coolstone One and Two already had three scrambles behind them and it wasn't even midnight yet. Two of the three remaining crews were airborne on their second scrambles and the other crew on the ground

with the Rock also had three behind them. Coolstone's call sign was Red 1 and he was ready to go. The vis had started to drop in the inevitable fog, as reflected by the telautograph and as observed by just flat looking out the window. The weather training at good old McFog came into good use here when it came to eyeballing the weather. The 25th Division pilots were very careful about observing the weather because the division commander had made his policy extremely clear about mandatory scrambles. "When the bell rings," he had said after calling all of the crews together, "that's me scrambling you and I don't care what the weather is. The least I'll accept is running off the runway on takeoff if you can't see. The word is go and remember that. I'll promise you that those who don't go will wish they had. Is my policy clear?" "Abundantly" was the aircrews' silent response. Coolstone and his fearless RO Two figured if they could see one light and were lined up they could make it by getting on the gauges at rotation, with Two watching the radar real carefully, trying to keep the corner markers in sight. While he didn't tell Two, Coolstone figured that if you could just get lined up, light or not, the odds were good that you could make it. Anyhow, somebody thought you could and had obviously sold the boss on the idea, probably a blockhouse ops officer.

One positive thing that Coolstone had noticed about the Hamilton alert tour was that he was in better shape than when he first went down there. They had enough scrambles that the sprint out of the ops building, across the ramp, then on to the first line of aircraft, was starting to redevelop muscles which hadn't been used for a long, long time. There was no way to make a 5-minute scramble without running as hard as

you could from the minute the bell rang until you got to the aircraft. An added incentive was that if you didn't make the 5 minutes the paper work was horrendous. Several people had gotten lost while making the run in the fog — not an acceptable excuse to the boss at all.

The Rock went over to the pilot of the remaining crew on the ground and said, "okay, we're all set up and when I go you probably should call out another crew, we're getting torn up tonight. We've intercepted two contract C-54s and a Navy P-2V so far." "Yeah," said the Rock's fearless RO, "that P-2V was right on the deck. Man, we had to throttle right back, descend with a hard as possible port." Then he added, "but One had to take three cracks at it before he got it." "Never mind," said the Rock, "if you had gotten the lock on before 300 yards I might have been able to do something with it. All I got was a lot of conversation and a blank scope. He never gave me the dot until we were running right up this guy's tail." "What's the matter, didn't you have the gain turned up?" he asked Two. "Lousy set," said Two, "and I think that black paint doesn't return too well anyhow." "Oh, the cross I have to bear," Two thought to himself. "These converted day fighter pilots, they take it as a personal insult that there is somebody else in their airplane, and then if they're not pulling 7.3 Gs every flight, all the time, chasing one another, there seems to be some type of an emotional reaction that somehow ends up primarily on the backseater." As they walked away from the other crew Coolstone One whispered hoarsely to Two, "never mind discussin' what we do when we're flying together." "I won't say a word about you locking on to that cloud and running me in there with the throttle right back and slow as possible, and all that jazz if you

won't mention some of those very, very minor difficulties that I've experienced. Okay?" "Okay," said Two. But they'd had this conversation several times and neither one of them had been able to keep the agreement to the letter. But then, they had worked out pretty well together. Two recalled, that One never did say anything to anybody about the night he had run them in on that flock of ducks, ducks that apparently were banded; in fact, One might not even have known it. Two knew it but hadn't bothered to mention it. They settled down with well worn magazines and a cup of ersatz coffee and waited for the inevitable.

Sure enough, the bell rang, the loudspeaker clicked on and said "Red 1, scramble!" Coolstone One and Two were launched. They raced to the airplane and as usual, Two won. But Coolstone was reducing the spread. He still remembered the time when Two raced to the wrong airplane. Coolstone never bothered to tell him as he saw Two go up the ladder and try to strap in. The Rock, however, went straight to the right airplane and began the engine start. to the startled surprise of Two. Coolstone never looked around as he got the engines started, checked in, and released the brakes—just as Two scrambled aboard. The Rock thought sure that lesson would slow Two down when they were racing on a scramble, but didn't seem to.

They cranked up, checked in, and were given initial vectors. They taxied to the north end of the runway, very carefully since the vis was really down, lined up, were cleared, engaged burner and felt their way through the fog until becoming airborne.

Coolstone One cleaned up the aircraft and checked in with Sundance. "Sundance from Coolstone One, squawking normal, climbing

through four angels." "Roger, Coolstone, this is Sundance - understand. Continue climb to 15 angels, turn port 240, your bogie is at 10 angels, approximately 75 miles heading 085, speed 200 knots." And he added "apparently into the San Francisco area." "Roger," mumbled Coolstone and then he mumbled to Two, "looks like another contract carrier missing his ETA. I think those guys just fly east until they hit the coast and narrow it down after that. The crime is they never even know that they've been intercepted." "How's the set look?" He asked Two. "We're picking up a boat or two on the water. I think we've got a good one here," Two answered. "I hope so," said One, "I want to get this guy, and I want to turn him in and I sure want him to know that he's been intercepted." Sundance kept them advised of the bogie's progress. They were placed several miles to the right of the target's track and finally at about 6 miles. Two picked up the target and began the conversion to a stern attack. As they steadied out on the reciprocal heading, parallelling the bogie's track, Two was able to lock on and gave One the dot. They stabilized their speed, then worked in very carefully, indicating about 160 with flaps and boards out, descending gently as they closed. One had the bogie's lights in sight, checked again to be sure that his were off, and moved on in. Coolstone One could always tell when the range was getting critical because Two's commentary picked up pace considerably. Two was from Magnolia, Arkansas and he normally had a drawl that dripped cornbread, but when they were within 2000 feet of anything at night or in the weather, his commentary picked up a staccato characteristic worthy of a New Yorker.

Coolstone One was able, as they

moved to within a couple hundred feet to make out the horizontal stabilizer and he positioned the aircraft just slightly ahead on the transport's right side. They identified it as a C-54/DC-4 type with large red letters painted on the fuselage. This indicated it was a contract airline of doubtful pedigree and even more doubtful ancestry. As they were stabilized they could see people through the windows. It was a passenger flight. Coolstone told Sundance the type aircraft and the name of the airline. Sundance told them to break it off and gave them vectors for Hamilton.

Coolstone started a gentle starboard turn, added throttle, increased his airspeed, descending slightly, and then he said to Two "what a shame, this guy doesn't even know we were here. I think I'll come back around and fly by them, just so they'll know they've been intercepted." Coolstone did a loose 360, climbing as he did, until he was 5000 to 7000 feet above the bogie. He still had him in sight and he started a descent in full mil from about 5 miles in the stern. By the time he got to the transport he was slightly underneath it, slightly to the right, and pushing the mach. At this point he plugged in the burner, pulled up sharply, and climbed steeply. He was sure that transport crew had seen him. He finally disengaged the burner at about 20,000 feet and headed for home.

"At least this time," Two told him, they'll know they've been intercepted." Sundance vectored Coolstone One and Two back to Hamilton where GCA picked them up. Even though weather was calling it 100 obscured, with a quarter of a mile visibility in fog, the Rock gave it a try. He knew the fog was only a few hundred feet thick and he also knew full well that if he didn't land at Hamilton, the rest of his night was

going to be spent someplace other than where he wanted it to be spent and probably most of his day off too. They made the GCA to the north and as they came on down the approach, Coolstone could see through the fog vertically, which gave him confidence. At least he could stay lined up with the runway until the last 300 or 400 feet.

He was on speed, on glide path, and on centerline when he finally entered the fog at about 200 feet. Just a short time later he picked up the fuzzy green threshold lights and landed. As they were rolling out, Coolstone chuckled slightly and said "by golly, that's one of them that knows he's been intercepted and he'll think again before he misses his ETA that far." "That's right," said Two, "we all ought to do that every time so that they know they're being had out there. Maybe the word will get around and they'll think a little more about getting to the ADIZ on time." When they got back to the Ops ready room, Two filled out the intercept information card and asked One if he wanted to include the fact that they'd made a pass on the bogie. One said no, he didn't think so. They probably should leave that part out.

The pilot of another alert crew, overhearing the discussion, said "what did you do, make a pass on him?" Coolstone One said "sure, I made a pass on him. I wanted him to know he'd been intercepted. I'm sick of these guys coming in here in the middle of the night not paying attention to anything and then we scramble our fannies off. I got up behind him, picked up a good head of steam, came down underneath, engaged the burner, pulled up in front, and held the climb until I was about 20,000 and came on home. There is no doubt in his mind that he was intercepted. He'll think about that a little bit the next time he's coming

back to San Francisco." "That's a darn good idea," said the other pilot. "When we get scrambled we'll do the same thing."

"Did you call out a relief crew?" asked the Rock. "No, I didn't," said the other pilot, "I decided since the scrambles drop off quite a bit after 1 or 2 o'clock, we'll probably get by okay. Why don't you and Two sack on out?" Both One and Two agreed with that assessment and spent the rest of the night trying to sleep in the lounge chairs that were placed strategically in the ready room.

The next morning after they were relieved, all of the outgoing alert crews decided to go up to the club and have breakfast before they hit the pad seriously. The club was on the top of the hill as was the "Q", so they had to make the climb anyhow. As they were going into the club, one of the crews spotted the headlines in a San Francisco paper that was showing through the grill of a vending machine.

He said, "look at that." The group moved over to the vending machine and read the large headlines "Cigar-Shaped Objects Terrorize

# Transport Crews and Passengers."

Coolstone's hair began to rise on the back of his neck. He had a sneaking, horrible suspicion that he knew exactly what one of those cigar-shaped objects was. He looked at the other pilot. "Did you get a scramble after we sacked out?" "Roq," said the pilot.

Coolstone One bought the paper and then read the front page story, which said in essence. "Two transports returning from overseas were harassed by cigar-shaped objects, belching green fire. The pilot of one of the airliners stated that the object passed his aircraft going at least 2000 miles per hour, then climbed vertically until it went completely out of sight. The airline pilot stated he had never observed an airborne object moving that fast, climbing that fast, or climbing that high in his life. The pilots of both of the air carriers agreed in their description of the object. They also stated that there was a tremendous disturbance in the air which caused them to almost lose control of their large transports. Several passengers in each aircraft confirmed that the unidentified object passed the airliner on the right side at a tremendous speed. Some of them reported seeing portholes with grotesque faces lit by a strange red glow, and one of the passengers insisted that the beasts inside had domed heads — no hair at all — which could not have belonged to any being on this earth.

Coolstone One, and Two, and Three, and Four no longer cared for breakfast. The other two crews did not understand what the problem was, and the four of them went on in to eat. The remaining four stood silently, staring at the newspaper.

Two, Coolstone's fearless RO, finally said to the quiet group, "I guess they didn't know they were intercepted after all." Then added "I dont believe any of us had ever better say a word about this as long as we live." A lot of head nodding met this sage advice.

Thereafter, whenever Coolstone read about an unidentified flying object — cigar-shaped — spewing green fire, he had a sneaking hunch that another bogie pilot didn't realize he had been interercepted. ★

# **ABOUT THE AUTHOR**

Roger Crews has devoted much of his life to preventing aircraft accidents. During his some 20 years in ADCOM's Safety Office, Roger made innumerable contributions to the Command and Air Force Safety programs. Roger's indepth investigations and analyses of many problems have provided us safer aircraft and a safer environment in which to fly. Perhaps most notable was his F-106 spin investigation which led to greatly improved recovery procedures. Typical of Roger, his work did not end there. He followed up by personally visiting and briefing every 106 squadron on the new procedures. For his many achievements, Roger was awarded the Air Force Chief of Staff Individual Safety Award for 1969.

Even with this record, Roger is perhaps best known because of his popular Coolstone articles. The first, "Coolstone Concedes," ran in the January 1959 Interceptor. Many more followed during Roger's tour as first editor of the magazine and as Chief of Safety Analysis. Since this 20th anniversary issue of the magazine would not be complete without one of Coolstone's misadventures, we prevailed on Roger to take some time from his job as Chief of Reports and Analysis' Division at the Air Force Inspection and Safety Center and bring Coolstone back, which we're sure you'll agree he did in fine style.

Thank you Roger.



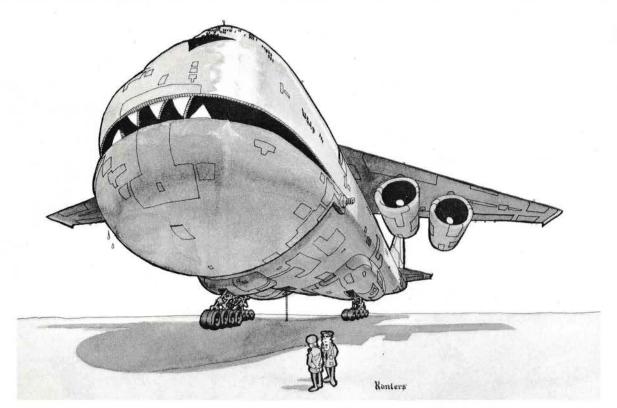
# Cartoonists



"I wish they'd get off this moon kick . . . we're running out of bamboo!"

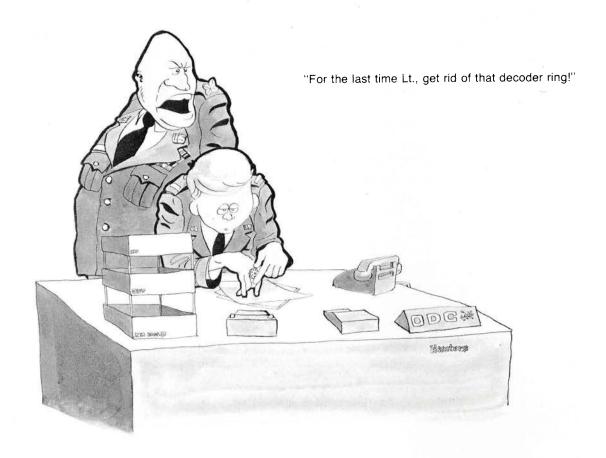


"Why of course you can't fly an AIM this big to the target sir . . . it flies you!"

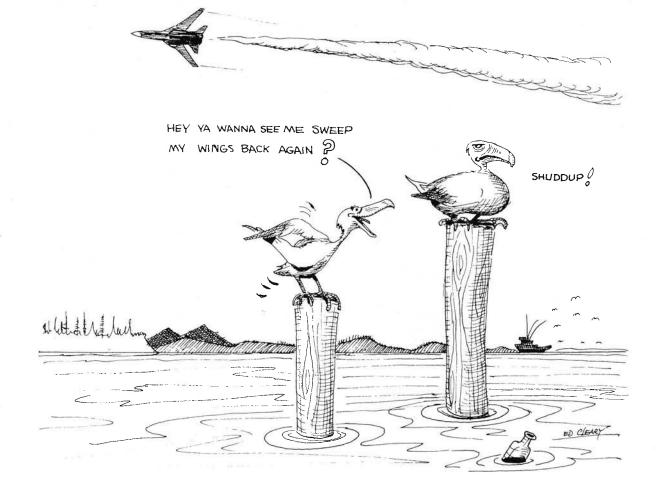


"Well, it's based on the theory that it's cheaper to eat the enemy up, than shoot him down."







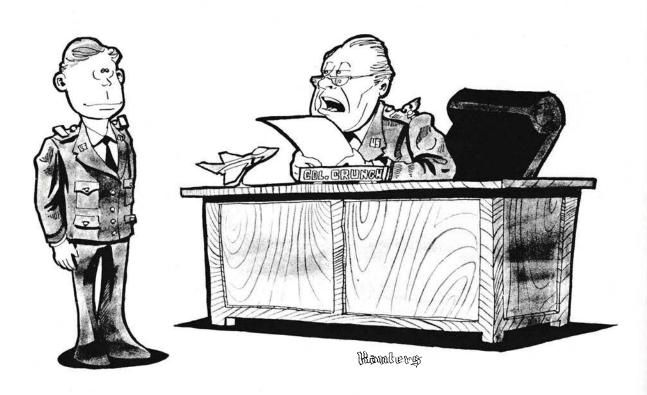




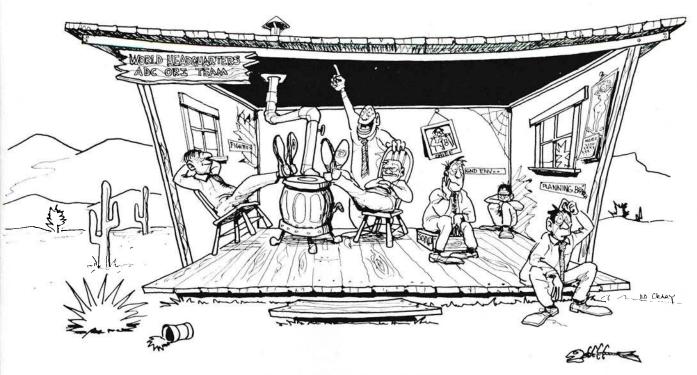
"Sarge, I found this guy wanderin' around our ramp. Says he's a captain of some ORI, somethim' or other, but he's dressed up like a bird colonel . . . must be some kind of nut!"



"Gee sir, I don't know what it is. Sarge just said drive it around the flight line and don't run into no airplanes."



Lt, while I did ask you to keep our Disaster Preparedness Plan simple, we're going to have to come up with something more than "Run for your lives!"



"Hey! I've got an idea - next week let's ORI the world!"



"The Fighter Pilot"

# The Way It Was

PERATIONAL Hazard Reports are the smoke signals of future fires. As pointed out in "Reverse English," on page 9, if the OHR's are submitted by you, and properly handled by us, we *know* our accident rate would be reduced considerably. We regret that all OHR's received can not be published as there just isn't enough space for them all.

# F-104 Compressor Stall

WHILE PASSING through 35,000 feet in a full afterburner climb at .88 mach on a local test flight, the pilot of this F-104A experienced what sounded like several minor explosions accompanied by a mild yaw and flameout. The throttle was placed in idle; RPM reading 40%. Normal airstart procedures produced acceleration to 70% followed by severe stalling. Second attempt: airstart switch activated; throttle opened beyond idle to 100%. Again, severe stall at 70%. Altitude at this time was 25,000-30,000 feet. Each start attempt and stall gave definite thrust towards field. New inlet guide vane switch procedures used for next start and full power was available. 97% restriction with IGV used made speed control difficult during approach. Since the pilot could figure no logical reason for these flameouts, he would not commit himself to gear and full flaps until field was absolutely made, and carried power down final. He chopped the throttle to idle approximately one-fourth mile out, and extended gear in flareout.

Touchdown was at 220 knots at approximately 2,000 feet on a 10,000 foot runway. Nose lowered and brakes applied hard at high speed to obtain dragchute speed. Chute deployed at 195 knots heavy braking until assured for stop, then

brakes released for roll-out to clear off runway.

Note: Éngine idles at 79% after inlet guide vane switch activated.

Cause of this incident: Ram Air Turbine found extended. Latch was on center, rather than over center; and spring was slightly distended and weaker than normal.

Action taken: A message has been sent to EADF, WADF, and the 73d Air Division, pointing out this OHR, and requiring that special emphasis be placed on inspections for security and proper rigging of the RAT.

### Fire in the Hole

AFTER SHUTDOWN, the two pilots of a T-33 noticed heavy blue smoke coming from the tailpipe. At the suggestion of an "alert crewman", the pilot in the front seat "hit the starter switch", (the ignition switch was still in the "ON" position). At this time, a rumbling explosion occurred, and a fire was noticed in the aircraft's belly below the hot section. After evacuating the aircraft, the pilot noticed that the engine was running and immediately boarded the aircraft and stopcocked the throttle. The fire department then arrived, and put out the fire.

Damage to the aircraft consisted of a badly wrinkled tailpipe, and approximately 36 square inches of buckled skin just left of the lower

tail section. In addition to this, the engine had suffered from over temperature.

Investigators concluded that during the last periodic inspection, the scupper drain line had been pulled out of its wedged fitting where the fuselage attaches to the tail section. This disconnected scupper drain-line hose allowed excess fuel from the hot section to drain into the lower fuselage. This fuel was heated by the hot burner cans, causing the smoke. When the starter was actuated, fuel remaining within the engine ignited and the resultant explosion popped the throttle open, and the high temperature of the burner cans ignited the smouldering fuel in the belly of the aircraft.

# **B-57 Trim Problem**

THE PILOT of this B-57 made a normal take-off and climb. After a series of single engine procedures at 23,000 feet, a diving turn to the left was started at 150 knots and 100% RPM. At 350 knots, power was reduced to 80%, and a left climbing turn started. A slight vibration was felt in the airframe, straight and level flight was assumed immediately, and power reduced to idle. As airspeed decreased, vibration became violent with rudder pedals moving in and out approximately six inches. Airspeed was decreased, and as it passed through 190 knots, vibration decreased, stopping at 180 knots. The B-57 was visually checked by another aircraft; no damage was apparent. Airspeed was maintained at 180 knots with immediate entry to traffic and a landing accomplished. Vibration was again experienced on landing.

Inspection of the aircraft revealed that the manual rudder trim linkage rod from the actuator to the trim tab had failed. The linkage rod had broken off both from the actuator and rudder hookup. This allowed the trim tab to be free in the slip stream. The vibration from high frequency movement of rudder had been so severe, that the reinforcement metal attaching vertical stabilizer to fuse-lage was cracked on both sides. Had the vibration continued for a longer time, it is probable that the vertical stabilizer would have separated from

the fuselage.

If vibration of this type is experienced, airspeed should immediately be decreased, and a landing be made as soon as possible.

A priority message was sent to WRAMA requesting an immediate investigation of the above condition, and an interim inspection to a fix was recommended. All ADC B-57 using activities were information addressees.

# **MA-2 Preserver**

"WE HAVE just received the MA-2 Underarm Life Preserver", states this pilot. "Wearing it with the B-5 parachute presents no acceptable solution as to how to shed the parachute and canopy once the preserver is inflated under the arms. The B-5 is donned over the MA-2 preserver; then, the stowed uninflated bladders are pulled through the B-5 armholes so the B-5 fits snugly to the body. When the MA-2 is inflated, the bladders cannot be pulled back through the armholes of the B-5 chute due to their size and length. The B-5 canopy cannot be totally released from the harness; therefore, we know of no way to shed the canopy or chute once the MA-2 is inflated. The only solution we have to this is to shed the chute after hitting the water, and prior to MA-2 inflation. However, we fear that the wet chute and canpoy may drag the crew member under the water due to the extra weight when wet. Further, if a pilot is injured he may not be able to shed his chute in water and inflate his MA-2 before drowning; especially if he cannot swim. It is also our opinion (yet unproven) that one cannot get into a one-man dinghy with the MA-2 inflated."

Action taken: An airmail message was forwarded to WADC with information copy to WRAMA (Prime Depot). Investigation of the reported deficiency was requested. Reply received from WADC is as follows: "The MA-2 life preserver and B-5 parachute were intentionally designed to prevent the downed airman from separting with any part of his equipment.

These two items have been tested and evaluated, and it is the conclusion of WADC that the airman is more likely to be rescued with the equipment attached than without it.

This headquarters assures you that the advantages of the design of this equipment outweigh the disadvantages that have been mentioned."

# T-33 Chaos

A FLIGHT of four T-33's departed a Western Air Defense base to support an ORI being conducted in the central part of the United States. After arriving at their staging base, only minor discrepancies were written up by the crews.

The next morning prior to departing on their scheduled mission, post-flight on the first of the T-Birds uncovered a loose vane in the tail cone. This aircraft was pulled until repairs could be made.

Post-flight on the second T-33 revealed a chipped bucket. Further investigation revealed a hole comparable to a fifty caliber bullet in the nozzle diaphragm, and, also, several buckets cracked and dented due to foreign object damage. Loose bolts and nuts were found in the plenum chamber, and the obvious inference is that one or more of these objects had gone through the engine. This aircraft was pulled from flight status, and the engine removed and replaced.



The third aircraft of the flight did not go un-noticed. On the post-flight of this bird, the tailpipe was found to be cracked and had to be changed. Released for flight, the aircraft was dispatched for a short mission. At the conclusion of this flight, the pilot wrote up high tail-pipe temperature. The plane was pulled for further checks. After again removing the aft section, a cracked turbine bucket was found. On further investigation, all of the nozzle diaphragm vanes were found to be cracked beyond permissible limits. The engine

was changed. After engine change, the fuselage tank fuel booster pump was found to be inoperative and was changed.

By this time, maintenance personnel began to realize that they did not have the usual type of transient aircraft on their hands. A close inspection was ordered.

The fourth T-33 (the grandaddy of them all) was inspected beginning with the pilots write-up of a leaking nose strut. Upon removing the nose wheel to repair the strut, the nose wheel bearings and race were found to be damaged beyond repair. The wrong type of grease had also been used. The axle had a groove approximately 1/32 of an inch worn at the point where the inbound bearings rotate. Since this plane could not be readied for a scheduled take-off, the inspection was continued. More trouble was found. One broken bucket was observed and five sets of buckets needed replacement. The shroud ring was worn and grooved. The plenum chamber was wet with JP-4 and the engine had to be removed for repair.

Investigation of the airframe revealed several hydraulic leaks, and upon pulling the aileron boost filter, it was found full of metal shavings. This necessitated replacement of the hydraulic pump and cleaning out the hydraulic system for a one time flight to home base. The pitot tube was bent, and buckshot (No. 2 or No. 3) was found in the tube. The right main wheel had the wrong type of axle nut installed which caused metal filings to enter the bearing.

These items were the high points of the maintenance troubles found on these aircraft. Needless to say, any one of them could have, and eventually would have led to a lost bird, and possibly a pilot or two.

These discrepancies were obviously not the result of one or two flights, but had been accumulated over a period of time. It goes without saying, these four aircraft did not complete the mission they were sent to do.

Action taken: The results of these findings are being processed through channels. Inquiries are being made as to how this deplorable situation was allowed to exist and what action is being taken to prevent its recurrence.



Nose gear, ground safety locks have caused nine 86 accidents in ADC. (See below.)

F-86L—NOSE GEAR GROUND SAFETY LOCKS. ADCR 66-2, 29 Dec. 1958, limits the use of the nose gear ground lock on the F-86L. It's to be used only in emergencies, when aircraft are towed over ice, mud, snow, or rough ground, or when aircraft are undergoing hangar maintenance. The reason for this is that ADC has experienced nine accidents caused by the lock not having been removed before flight, and no accident on the ground which would have been prevented if the lock had been installed.

FALSE CONE INDICATIONS. We thought this problem had gone the way of low frequency ranges, but according to the Flight Safety Foundation's Safety Bulletin 58-210, it hasn't. During recent CAA flight test of VOR stations, some VOR receivers were found susceptible to partial false cone indications at distances up to eight miles from the station. This was evidenced by needle oscillation, and by some minor flag warning activity. The TO-FROM pointer, however, did not fluctuate. CAA recommends the use of the TO-FROM pointer as the primary indication of station passage. If you experience a false cone indication on VOR, fill out an OHR with altitude and distance information included.

OPERATING ON EMERGENCY AC POWER IN THE TF-102. A WADF accident prevention message points out that it is possible when operating on emergency AC power, to lose flight instruments if the Nesa Glass switch is on. This is because hydraulic requirements can reduce the output of the emergency alternator below that required by the flight instruments. They recommend that when operating on emergency AC with a requirement for gyro flight instruments, the Nesa Glass switch should be turned off.

control problems F-102. Three fixes are in the mill which should, in part at least, reduce the frequency of control problem incidents. One affects the hydraulic accumulator, and will change the shape of the Teflon Guide Ring from a spiral type to the scarf type. The material both in the Teflon Guide, and the "O" ring seal, has been tested satisfactorily at temperatures as low as -40 degrees Fahrenheit. Publications concerning this change are now in the preparation stage and should be disseminated at an early date. The second fix concerns the hydraulic pump itself and provides a beefed-up thrust bearing. The third is a cockpit provision so that a malfunctioning hydraulic system may be by-passed. Pilot indication for by-passing will probably

be a light in the cockpit, activated by the temperature of the hydraulic fluid. During a recent test it was determined that the hep valve would always bind when the hydraulic temperature reached 240 degrees Fahrenheit. It is the considered opinion of those close to the F-102 control problem, that air enters the hydraulic system when maintenance is performed or through accumulator leakage. This air, in turn, then causes a failure of one of the hydraulic system components; this causes the temperature of the hydraulic system to rise.

GET RID OF THE EJECTION SEAT. It is possible to hold the ejection seat to you during bailout, even if all of the automatic equipment works perfectly. One pilot did it by rigidly holding on to the hand hooks on the armrest during an upward ejection. It is suspected that during a recent fatal downward ejection at low altitude, the pilot held the seat to him by gripping the Actuator Ring tightly. Because of this, the automatic chute opening equipment could not function. It is recommended during either upward or downward ejection, that pilots kick the seat away as quickly as possible, and consciously release either the trigger or the Actuator Ring, depending on the type seat used, immediately after ejection. Pilots should always actuate the D-ring even though they may have automatic opening devices on their parachutes if altitude is right.

F-89 NOSE LANDING GEAR WHEEL ASSEMBLIES. P/N 210-200M (reference 1F-89-4), have been failing at a high rate due to the bushing assembly coming loose and protruding past the edge of the wheel. This condition may cause the nose wheel to vibrate during take-off and landing roll to the point where the aircraft becomes difficult to control.

Maintenance personnel should inspect all General Tire and Rubber Company wheel assemblies for this condition prior to installing on the aircraft. There has been one reported incident where the wheel assembly was installed with the bushing missing from the wheel.

Ogden Air Material Area indicates they have a project established and a fix is forthcoming. However, until a fix is incorporated to prevent the bushing from working loose, maintenance personnel must be alert for this condition prior to installation, and keep a close watch for bushing protrusion.





New modifications to the T-33 electrical system (see below) will soon be a fact. T-bird pilots will welcome these changes—they've been needed for a long time.

ARC-34 UHF CONTROL HEAD. Anyone riding in the rear seat of a T-33 who has tried to select or set a channel on this equipment, and gets vertigo for his effort, will appreciate a simple fix soon to be sent to the field. The set will be rotated 90 degrees, putting the tuning mechanism in a much more accessible position. We are prototyping one at Peterson Field and will publish instructions soon. The same goes for relocation of the ARC-27 control panel. The only trouble is that this isn't so simple, and SMAMA has it under "expedited engineering development."

VIGSLA—VISUAL GLIDE SLOPE LANDING AID. Western has installed for evaluation, a new landing system at McChord AFB, called VIGSLA. The system consists of two reflective panels mounted perpendicular to the runway. They can be seen from an estimated 10,000 feet from touchdown. If you have the panels lined up, your glide slope should be approximately 3 degrees. Western requests that you try the system if you are in the McChord area.

**RECORDS** — **BOTH DIRECTIONS**. Seventeen major and minor accidents occurred throughout ADC during the month of October 1958. This was the worst month since February 1957. Only three accidents occurred during November for a new all-time low.

PROPOSED REVISION FOR F-102A FLIGHT HANDBOOK —USE OF RAM-AIR TURBINE. A failure in the secondary hydraulic system does *not* warrant extension of the RAT.

The *only* function of the Ram-air Turbine is that of augmenting the primary system. Extension for any reason other than primary system malfunction will result in over-heating the fluid, and probable loss of Ram-air Turbine doors or the RAT itself.

**DYE MARKER FOR DOWNED AIRCRAFT.** ADC has recently established a project to test installation of a dye marker system for all ADC aircraft. Project requirements are for the dye to be visible within one hour after immersion and to last for 48 hours. The estimated completion date of the test is 15 April 1959.

**REPORTING OPERATIONAL HAZARDS.** This regulation prescribes air force wide use of AF form 457 in reporting operational hazards. ADC will soon establish its own reporting procedures using this form as required in the new regulation. Until the USAF forms are available, use the ADC form which is depicted on page 11, this issue.

**NEW UNDERARM PRESERVER—TYPE LPU-2.** The LPU-2 pack is considerably thinner than the present MA-2. Immediate requisition action should be taken by all fighter-interceptor squadrons on requirements for the LPU-2. Stock number is 4220-630-871 4. Since fighter aircraft will be given priority, requisitions should indicate type of aircraft. (See OHR Digest, page 22, for report on harness difficulties when wearing underarm preserver.)

**INTERNATIONAL ORANGE COVERALLS.** Headquarters, USAF, has formally recognized the ADC requirements for a vivid colored flying coverall. WADC is scheduled to conduct a service test within a few months.

**PARACHUTE LOW-LEVEL LANYARD.** Because of widely divided opinions as to the suitability of the low-level escape lanyard, the following information should be of interest. Since installation of the lanyard, ten ejections have taken place using the lanyard at altitudes below 1,000 feet. Seven of these were successful.

TYPE SA-17 PARACHUTES (AUTOMATIC SEAT STYLE). Excluding a few outstanding backorders, we should be well on this item. T.O.'s have been prepared for the purpose of correcting discrepancies reported in numerous UR's. They are as follows: harness adjustment for small people; interference of chest strap disconnect with D ring; and replacement of the 30 foot canopy with the 28 foot canopy. Although chutes in use will not be modified, future procurement will include two canopy quick releases.

T.O. 1T-33A-577—IMPROVEMENT OF ELECTRICAL SYSTEM. There's no use explaining why this one is necessary. Almost all people flying or maintaining the T-33 know of the problems here, especially on in-flight generator failure. T.O. 1T-33A-577 will make life a little easier for all. This T.O. calls for installation of a 400 amp generator, 750 VA main inverter, and a 250 VA standby inverter. Kits will be available at the rate of 300 per month beginning in December 1958.

**INSTALLATION OF NICKEL-CADMIUM BATTERIES.** These batteries have been a long time overdue. They will replace the present lead acid batteries. SMAMA will start delivering 300 per month beginning in March 1959.



60th FIS

The 60th FIS was transferred from SAC to ADC in December 1948 at Otis AFB with F-84Bs. In August 1950 the squadron moved to Westover AFB and transitioned to F-86As. Transition to F-86Es occurred in the fall of 1951 with another to F-86Ds in the spring of 1953. In August of 1955 the 60th FIS unit designation was transferred to Otis AFB and F-94Cs were picked up. The 60th FIS was the first operational squadron to begin transition into F-101Bs in January 1959. On 30 April 1971 the unit was deactivated.



62d FIS

The 62d FIS was transferred from SAC to ADC at Selfridge AFB with F-80 aircraft in December 1948. In the fall of 1949 the unit transitioned to F-86A aircraft. This was followed by a move in August 1950 to O'Hare Airport. In the spring of 1953 the squadron received F-86Ds and in the fall of 1956 F-86Ls. In August 1959 the 62d moved to K.I. Sawyer AFB and transitioned into F-101Bs. It remained there with F-101s until deactivation on 30 April 1971.



61st FIS

The 61st FIS was transferred from SAC to ADC in December 1948 at Selfridge AFB with F-80s. The squadron transitioned to F-86As in the fall of 1949 and to F-94Bs in the fall of 1950. In July 1953 control of the unit was transferred to North East Air Command with a move to Ernest Harmon Air Base, Newfoundland. The unit flying F-89Ds was transferred back to ADC in April 1957. In October the squadron moved to Truax Field and transitioned to F-102As. On 25 July 1960 the 61st FIS was deactivated.



63d FIS

The 63d FIS was transferred from SAC to ADC with F-80s at Selfridge AFB in December 1948. In the fall of 1949 the squadron transitioned into F-86As and moved to Oscota AFB (later named Wurtsmith AFB) in January 1951. In the latter part of 1952 the unit received F-86Fs and in May 1954, F-86Ds. The squadron soon made another transition into F89Ds in the spring of 1955. In August of 1955 the 63d FIS designation was transferred to a unit at O'Hare Airport flying F-86Ds. In the spring of 1957 the 63d FIS received F-86L aircraft which were flown until deactivation on 8 January 1958.



# 64th FIS

The 64th FIS was transferred from AAC to ADC with F-102As at McChord AFB in August 1957. In March 1960 the squadron moved to Paine Field where it remained until 2 June 1966 when, with Aerial Refueling, it deployed to Clark Air Base, Philippines, and was reassigned to PACAF.



65th FIS

The 65th FIS was one of ADC's short-lived squadrons. It was transferred from AAC to ADC at Richards-Gebaur AFB in November 1957; however, it was deactivated on 8 January 1958 before it received equipment or personnel.





66th FIS

The 66th FIS was transferred from AAC to ADC at Oxnard AFB in December 1957; however, like the 65th FIS, it was deactivated on 8 January 1958 without ever receiving equipment or personnel.



71st FIS

The 71st FIS was transferred from SAC to ADC with F-80 aircraft at March AFB in December 1948. In May 1949 it went back to SAC for a year until its transfer to ADC again in April 1950 with F-86As. The squadron made three quick moves to George AFB, Griffiss AFB, and, finally, to Greater Pittsburgh Airport in October 1950. In 1953 the unit received F-86D aircraft, and in August 1955 the 71st designation was transferred to Selfridge AFB. In the spring of 1957 the F-86Ds were traded for F-86Ls but, shortly thereafter, in the fall of 1958, the squadron transitioned into F-102As. Two years later in October 1960 a transition into F-106As took place. In January 1967 the unit moved to Richards-Gebaur AFB but soon moved again in June 1968 to Malmstrom AFB. It remained at Malmstrom with F-106s until deactivation on 1 July 1971 at which time the 71st designation was transferred to TAC.



74th FIS

In January 1951 the 74th FIS was activated at Presque Isle AFB with F-86As and Es. In June 1952 a conversion to F-89Cs was begun; however, due to aircraft problems, some F-94Bs were used for alert until the spring of 1953. The squadron moved to Thule Air Base, Greenland, under the North East Air Command in August 1954. In April 1957 control of the squadron now flying F-89Ds was transferred back to ADC, but it was soon deactivated on 25 June 1958.



75th FIS

The 75th FIS was activated in January 1951 with F-86A and E aircraft at Presque Isle AFB. In October 1952 the unit moved to Suffolk County AFB and a year later in the fall of 1953 converted to F-86Ds. In August 1955 the 75th FIS designation was transferred back to Presque Isle AFB and received F-89D aircraft. In the spring of 1957 the F-89Ds were replaced with F-89Hs. The squadron moved to Dow AFB in June 1959 and transitioned into F-101Bs. The unit was deactivated at Dow in June 1968; however, in September, it was reactivated, still with F-101s, at Wurtsmith AFB. Final deactivation of the 75th FIS took place on 30 November 1969.



76th FIS

The 76th FIS was activated in August 1955 at Presque Isle AFB with F-89D aircraft. In November 1957 it moved to Pine Castle AFB and converted to F-89Hs. A conversion to F-89Js took place in June 1959 followed by another move to Westover AFB in February 1961. The squadron transitioned into F-102As in April 1961. The 76th FIS was deactivated on 1 July 1963.



82D FIS

The 82d FIS was transferred from USAFE to ADC at Mitchell Field without personnel or aircraft in June 1947. In November 1948 it was transferred to Hamilton AFB with F-51D aircraft which were replaced in December 1948 with F-84Bs. In the fall of 1950 the F-84Bs were exchanged for F-84Ds. In February 1952 the unit moved to Larson AFB and received F-94Bs. The squadron moved to Keflavik, Iceland, and MATS control in April 1953. In October 1954 the unit was transferred back to ADC at Presque Isle AFB with F-89Ds. In August 1955 the 82d FIS designation was transferred to an F-86D unit at Travis AFB. The squadron transitioned into F-102As in August 1957. It was the first

F-102 unit to become aerial refueling capable and deployed to Naha Air Base, Okinawa, in February 1966. On 25 June 1966 control of the 82d FIS was transferred from ADC to PACAF.



83d FIS

The 83d FIS was transferred from USAFE to ADC in June 1947 at Mitchell Field. Prior to being equipped, it was transferred to Hamilton AFB where it received F-51Ds and F-84Bs. In the fall of 1950 it received F-84Ds and in August 1951 it transitioned into F-89Bs. In July 1952 the squadron moved to Paine Field and received F-86Ds. In August 1955 the 83d FIS designation was transferred to Hamilton AFB to another F-86D squadron. In December 1957 the 83d FIS received F-104As to become the first operational 104 squadron in ADC. In July 1960 the F-104s were replaced by F-101Bs and in July 1960 the squadron was deactivated. It was reactivated at Loring AFB in July 1971 replacing the 27th FIS with F-106As. The 83d FIS was deactivated on 27 June 1972.





84th FIS

The 84th FIS was transferred from USAFE to ADC in June 1947 at Mitchell Field without personnel or equipment. In November 1948 it was transferred to Hamilton AFB and equipped with F-51Ds but began a transition into F-84Bs the following month. In the fall of 1950 it received F-84Ds and in early 1951, F-89As. Transitions into F-89Bs and F-86Fs were accomplished in the summer of 1951 and fall of 1952, respectively. In 1953 the squadron received F-94Bs and Cs but in 1955 these were replaced by F-89Ds. The F-89Ds were replaced by F-89Hs in 1956 and these, in turn, by F-89Js in 1957. In March of 1959 the squadron transitioned into F-101Bs which were flown until deactivation in July 1968. The 84th was reactivated in September 1968 still at Hamilton but with 498th FIS F-106As. In September 1973 the 84th moved to Castle AFB where it's located today with F-106A interceptors.



85th FIS

The 85th FIS was activated at Scott AFB in November 1952 with F-51Ds and Hs. It replaced the 113th FIS of the Indiana ANG. In the fall of 1953 it transitioned into F-86D aircraft and in August 1957 into F-86Ls. The 85th FIS was deactivated on 1 July 1959.



OLD

86th FIS



NEW

The 86th FIS was activated at Youngstown Airport in November 1952 with F-84Cs. It replaced the 166th FIS of the Ohio ANG. In 1953 it received F-86Ds. The squadron transitioned into F-102As in 1957. The deuces were flown until deactivation on 1 March 1960.



OLD

87th FIS



NEW

The 87th FIS was activated in November 1952 at Sioux City Airport. It replaced the Indiana ANG's 163d FIS with F-51D aircraft. In the fall of 1953 it transitioned into F-86Ds. In December 1954 the unit transferred to USAFE. The squadron was transferred back to ADC at Lockbourne AFB in April 1956, again with F-86Ds, and subsequently Ls a year later. The squadron transitioned into F-102As in late 1958. In June 1960 the F-102s were exchanged for F-101Bs. In July 1968 the 87th was deactivated at Lockbourne; however, in September 1968 the 11th FIS at Duluth Airport with F-106As was redesignated the 87th FIS. In May 1971 the 87th FIS moved to K.I. Sawyer AFB where it remains today.



91st FIS

The 91st FIS was activated in ADC at Kirtland AFB in June 1949 with F-80s; however, by the end of the year a transition to F-86As was begun. In May 1950 the unit moved to Larson AFB and on 22 August 1951 it was transferred to USAFE.



92d FIS

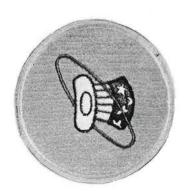
The 92d FIS, activated at Kirtland AFB in June 1949, closely paralleled the 91st FIS. The unit transitioned from F-80s to F-86As in 1949. It moved to Larson AFB in April 1950 and on 22 August 1951 transferred to USAFE.

into F-86Ds. The unit designation was transferred to Selfridge AFB in August 1955. In the fall of 1956 the unit received F-86Ls which were flown until April 1960 when it transitioned into F-106As. In December 1969 a move was made to Wurtsmith AFB where the 94th FIS was deactivated and the unit designation was transferred to TAC.



93d FIS

In June of 1949 the 93d FIS was assigned to ADC at Kirtland AFB with F-80 aircraft. Later that year it transitioned into F-86As. In 1953 it received F-86Fs and Ds. In the summer of 1957 it transitioned into F-86Ls which were flown until deactivation on 8 July 1960.



94th FIS

The 94th FIS was transferred to ADC from SAC in December 1948 at March AFB with F-80 aircraft. In May of 1949 it was transferred back to SAC but in April 1950 it was brought back to ADC control with F-86As. Later in the year it moved to George AFB. In February 1953 the squadron transitioned



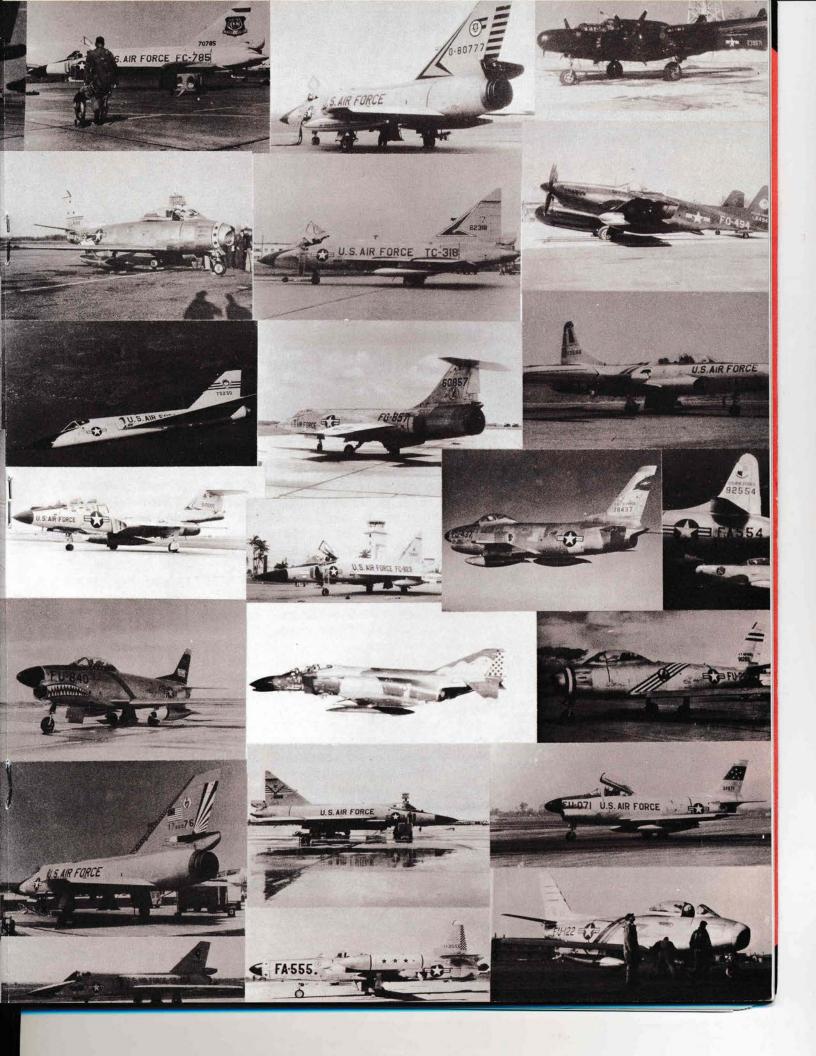
# 95th FIS

The 95th FIS was transferred from SAC to ADC at Grenier AFB in August 1949 with F-51Ds. It was, however, deactivated two months later in October. In November 1952 the 95th FIS was reactivated at Andrews AFB with F-94Bs, replacing the 121st FIS of the District of Columbia ANG. In 1953 it transitioned into F-86Ds and subsequently into F-86Ls in April 1957. In February 1958 the squadron received F-102As. It transitioned into F-106As in July 1959 and moved to Dover AFB in July 1963. On 31 January 1973 the squadron was deactivated; however, the unit designation was reactivated at Tyndall AFB in September 1974 when the T-33 Flying Training Squadron was redesignated the 95th FITS.

- Continued on Page 40







# William Tell. . . Ar



Most people know of William Tell, the Swiss archer, who was compelled by the evil prince to shoot at an apple placed on his son's head. Without going into the tale, Willy shot, split the apple, and secured his freedom, etc. In today's William Tell (WT) meet, we do much the same thing — act like sons, throw apples, and knock heads. In fact, there is some pretty decent shooting, too, but the only thing similiar to crossbows anymore might be some string-taut nerves as the competition gets stiffer.

William Tell is not new to change. Through the years, since 1954's first meet, there have been numerous arrays of "new" commands, entrants, locations, hardware, and tactics. Willy Tell began as an Air Force function. In fact, in 1954, the progenitor of WT was the U.S. Air Force Fighter Gunnery and Weapons Meet. It was won by some sharp shooters from ATC.

In 1955, several USAF teams from overseas showed up, making

the weapons meet worldwide. The shoot-out went to the last day when ADC's Eastern Air Defense Force edged ATC to win the meet.

The show got really big in 1956. Seven MAJCOMs competed flying F-86s, F-89s, and F-94s. The Eastern Air Defense Force won it a second time as the competition again went into the final two days. The deciding factor was the rocket meet on one of Arizona's ranges.

Willy Tell's complexion began to change in 1958. The show moved to Tyndall. The first supersonic entrants competed (the F-102). The meet became an Air Defense Command operation. Radical new fire control systems and tactics began to evolve. Radio controlled drones zipped up and down ranges capable of electronic scoring. The meet was broken down into three categories. But the biggest first was the first perfect score. It was achieved by the Florida ANG flying . . . F-86s.

1959 brought a meet that marked the end of an era and the beginning of another. The old F-89 competed against brand new F-100s, F-102s, and the super-sophisticated F-104. The Century Series were airplanes that could bust the mach in level flight, and one airplane flew a multi-mach. The new sophistication began to change airplane terminology and concepts: leading edge flaps, low aspect ratio, spikes, multi-stage burners . . . . Five major commands competed in an allweather, day-and-night environment. Targets moved through a multitude of speeds and altitudes. A realism began to dawn as the arena began to move away from the tactical into the strategic.

Airplanes became more specified, i.e., fitted for a *particular* mission. There were no "non-interceptors" in 1961. Interceptors were designed and produced in the form of the F-102, and the amazing new F-101 and F-106. Some of those same airframes may have seen competition in 1978. A few of those airplanes have outlasted some of the lieutenants that began their careers in them.



A new side was initiated in '63 when an unannounced intruder was launched in the form of a drone from an unknown location. Intercept directors had to find it, scramble, and shoot it down. The Air Guard was a full-time partner in the interceptor business by that time. Pennsylvania trounced the regulars in the F-102 category. The 318th won the F-106 division.

The meet became international in 1965 when Canada entered in the F-101 division. WT was now a worldwide meet with international competitors. There were 16 teams and a beautiful array of airplanes: F-102s, F-101s, F-104s, and F-106s. A USAFE team controlled by a Dutch team took home the marbles in the Deuce.

The Southeast Asia conflict halted WT operations for five years between '65 and '70. In 1970, a "miniature" meet was held at Tyndall, this time without the F-104. The Guard won two divisions, North Dakota in F-101s and Minnesota in F-102s. The 71st FIS from Malm-

strom took F-106 honors.

Willy Tell expanded again in 1972. BQM-34A drones and EB-57 aircraft were added as targets. MATTS/BIDOP scoring and Data Link heralded the staggeringly accelerated electronic countermeasures/computer expansion in air combat. The Hooligans again won the F-101 trophy, and Wisconsin's 115th FIG won F-102 honors. The 460th FIS from Grand Forks took the F-106 category, but a Canadian F-101 team took TOP GUN for scoring a direct hit on a maneuvering BQM-34A.

WT '74 added the Weapons Load Competition scores to the WT shooting/intercept scores. The loading comp was won by the 416th, Chatham. An additional target, the TDU-25B was added. It was a towed target used for stern attack, infra-red missiles. The MAINEiacs took the F-101 glory. Boise won F-102 honors, and the BIG SKY won the F-106 category.

In '76, there was another series of

changes. There were no more F-102 interceptors. The F-4 was added, with some teams on "loan" from TAC, USAFE, or PACAF units. Portland's BEAVERS took the F-101 trophy, and the BIG SKY boys pulled a duplicate win in the F-106. The 4th TFW from Seymour-Johnson won the F-4 comp.

Willy Tell '78 had eleven teams competing from CONUS, Europe, the Philippines, and Canada. The F-102 reentered the competition . . . as a target drone. The ACMI was used for several profiles. The BQM-34F was introduced as a high altitude, supersonic target. The 147th FIG TEXANS from the Houston ANG took home the Voodoo honors, the team from USAFE won the Phantom category, and AD-COM's 49th FIS from Griffiss edged out its F-106 competition to win that category. All in all, William Tell '78 continued the long tradition of being exciting, enjoyable, and an excellent proving ground for aerospace de-

# Fighter Pilot's Heaven



From Chateau Thierry to Thud Ridge, all the "good" jocks who bought the farm are here where it's clear and a million.

Pilots' Heaven. I guess the fact that there is such a place comes as no surprise to you jocks down there on earth. For years you've been singing that there were "no fighter pilots"

down in hell." Well, there is a Fighter Pilots' Heaven and I'm "the Angel what's in charge of the whole nine yards." I hope you'll forgive my language, but I've been around these fighter pilots so long that I

guess I sound like them. Anyway, when fighter pilots started coming up to heaven, it soon became apparent that they wanted a place away from the rest of the angels where they could party and tell war

stories. I guess I was the natural one to head up such a project. A couple of thousand years ago two "wingmen" (pardon the pun) and I did one of the first night "psy war" jobs on some shepherds at Bethlehem. When I told the pilots about that (and even angel fighter pilots don't exaggerate), they accepted me as one of them. Now they call me "the Base Commander," the "Couth Control Officer," and some of the newer guys jokingly refer to me as a "Winged Weenie" or something like that.

I was impressed with fighter pilots from the first day, and I continue to be more so every day. Naturally I was all for a Fighter Pilots' Heaven in a special place. Besides there are some "grunts," "crunchies," and "feather merchants" here who were complaining about the sounds of breaking glasses, the 4-5-6 games, and the incessant choruses of "Sammy Small" drowning out the choir of angels. (You know, one of the guys was mentioning the other day that we don't see many "Navigators - Bombardiers" around here. Maybe they've got their own place.)

If you've got a couple of minutes I'll describe our Heaven to you. Picture a great big Fighter Lounge or Stag Bar beautifully decorated with big comfortable leather chairs and bar stools. The wall to your left is lined with squadron beer mugs belonging to the guys from the time fighter squadrons began right up 'til today. The stewards put up a new one every day or so and then we welcome a new jock. There are no empty spaces on this beer mug rack since every man is assigned here permanently and there are no TDYs. But back to telling you about our heaven. The other wall is covered with beautiful pictures that the guys have brought from all over the world. With them are a lot of "Top

Gun" and "William Tell" awards. If you guys down there on earth are missing some trophies, don't sweat it. We're taking care of them.

We have plenty of card tables, poker chips, and always a fresh deck of cards. A few of the tables are covered with Army blankets. Old habits are hard to break. There is always a good supply of ping-pong balls and paddles and there is usually a game or two going on. The pool tables are freshly recovered, the cushions are true, the cues straight, and there is no table roll. Dartboards, shuffleboards, pinball, and slot machines abound. There are several big color televisions down at the far end (from up here the reception is terrific). One set shows nothing but football games while another specializes in "Debby Drake" and "The Golddiggers."

The drinks are free here and "Happy Hour" is continuous. But just like on earth, no one gets out of line. Since money is the root of all evil, it isn't used here except for games of chance and everyone has a continuing unpaid club bill just so we'll feel at home.

When you get here you'll probably recognize some of the bartenders and barmaids we have. Others have been here for a long time before you, but you'll soon become friends wth them. There is a certain type of "tarbender" and "nurse" who really did good work on earth and, when they were ready, we had them transferred here. There is that lovely French maid that the Spad flyers in the 94th Aero Squadron requested from Toul. She has that lilt in her voice and a sparkle in her eyes when she serves them cognac and champagne. They must have treated her well during the Big War. Remember the little "bloke" with the mustache at that pub at Coxhill who kidded the "Yanks" about the

way they murdered the "King's" English? And the two friendly sisters from the Inn at Ibsley? They're here. How about the huge Algerian bartender from Tafaraoui and the smiling "Nip" at Chitose who had such a hard time learning to make a dry ("dly") martini? You'll see them here, too. We also have in our employ several beauties from Darwin, Port Moresby, Pearl, and Hong Kong as well as those lovely Thai dolls from Korat and Ubon. There are others here from other places, but you get the idea. This really is Heaven!

Our membership comes from almost every nation and since the time of the first air fighters. The dress here is optional and it really is "optional." Some of our guys flew in the most outlandish getups! There are a couple of men in riding breeches and boots talking to some fellows in jungle fatigues and "G" suits. We have many in khaki uniforms, leather jackets, and "crush" hats, and some even flew in their duty uniforms and sheepskin boots. Of course the Astronauts and Cosmonauts here stand out even in this crowd and nobody elbows them at the bar. In their mortal lives they saw and did things that no other jock could claim. Now everyone here has the view from "on high."

There is a special group of guys here that have come up from that war you're fighting now. You've got some of them listed as Missing In Action and a few died in prison. They're here now and are in good hands. Of course, they wish that they could tell their loved ones of their status, but that, evidently, is not to be for a while. We all hope that you get that thing sorted out soon so those waiting gals can know for sure one way or the other.

I guess fighter pilots are the most nonnationalistic bunch of guys

you'll find anywhere. We've got jocks here from every country who ever had a fighter squadron and there are never arguments about which country is better. Oh, there have been some real hassles about the really important things like which is better air-to-air, the F-4, or the MiG-21, and one night I thought that a "Bloke" and a "Jerry" were going to "have at it" over the relative merits of the Focke-Wulf 190 and the Mk-7 Spitfire. Of course each man is proud of his country. In most cases he gave his earthly life defending it, but here the kinship of fellow fighter pilots prevails over everything else.

If you could walk through this Fighter Pilots' Heaven you'd hear some of the most exciting conversations anywhere. Over there at that big table by the fireplace are some guys from the Lafayette Escadrille, the "Hat in the Ring" Squadron, and the "Flying Circus" discussing tactics over cognac. (Here all fighter pilots speak the same language.) When these guys talk flying you can almost hear the Fokker Tri-wings, the Spads, and Nieuports as they wheel through the frozen skies over Pont du Mousson and the Marne. How deeply they are engrossed in what happened so many years ago and I know how they wish they could don those leather greatcoats and climb into their wooden craft to test their theories. They know they can never fly again, but they are true fighter pilots and they never stop seeking to improve their skills.

Over there at the end of the bar are three RAF Spitfire and Hurricane pilots with an American from the Eagle Squadron reminiscing over the Battle of Britain with some Me-109 jocks from the Luftwaffe.

"Jerry," exclaims the tall, redhaired Spitfire pilot with the blue tunic, white turtleneck sweater, and guardsman's mustache, "if your leaders could have only known how close to the bloody end we were when we fought that big air battle back in 1940. We may have looked strong, but we had literally put up every crate that would fly — the lot! There were no reserves. But you didn't know and everything that flew fought and we knocked down so many of your planes that you backed off. Just long enough for us to get our breaths. It was all we needed."

And the Germans smile and nod their heads in silent agreement. They had argued with their leaders to keep up the offensive attacks on the airfields — they were working. But the superiors won the arguments, as is usually the case, and the tactics were changed — and the initiative was lost. And if they hadn't died in battle, they would have been relegated to some insignificant post in the backwash because they lacked judgment by arguing with their superiors. There are many ways to die.

And next to them a single Luft-waffe pilot, older than a lot of the others here, remembers over his Schnapps the days that he led his squadron of mostly teen-aged boys against the armada of Eighth Air Force B-17s that came daily to shatter his homeland in the latter days of the war. How brave those youngsters were as they hurled their ships against the interminable waves of bombers, day after day!

"LeMay's 'defensive box' formations of Flying Fortresses were almost impregnable," he thinks, "no matter what Goering and those others in the High Command thought."

And the cheery grins and rosy cheeks began to fade from his boys' faces as each evening in the Mess the beautiful beer steins of those lost that day were dashed into the fireplace. He shudders slightly as he recalls that day as he was showing some brand new replacements

the basics of fighter attack against the B-17s. It was only an instant after he saw that first sun-reflected glint of metal that a half-dozen American Mustangs ripped through his formation. Although his boys fought bravely, it immediately became apparent that the Americans were good and were systematically destroying his squadron. He rolled and feinted shooting short bursts trying to be everywhere in the battle and to drive off the attackers. One Mustang burst into flames before his guns. As he turned away from his prey to help another comrade (the new boy with the blond hair who had shown so much promise since he arrived), his cockpit was ripped apart by .50 caliber H.E.I. The noise, the heat . . . the pain. But that was long ago and there is no pain here.

"But," he wonders, "how could I have been better?"

Across the room, a group of Russian pilots are in a serious discussion with some American Navy jocks. You wonder what these two groups could possibly have in common until you hear them compare the risks of operating their Stormavics and Yak 9s from the snow-covered fields near Stalingrad with those of coming aboard a "straight deck" carrier in a damaged Corsair or Hellcat. And further down the bar, a tough-looking P-40 pilot in a battered leather jacket with an American flag (48 stars) and Chinese writing below it, listens and watches intently as a Japanese "Zero" pilot vividly describes and gestures his recounting of a long ago dog fight in the skies over China. As his story unfolds, one can almost envision his expressive hands as shark-nosed "Tomahawks" and "meat ball" painted Zeros. Then distance, time, and nationality vanish as each man vividly imagines the sensations the other feels and, in a small way, relives those adventures in his mind.

And so it goes in our Fighter Pilots' Heaven. Conversations may be good-natured or "highly animated," but they are always positive. These guys never really changed from when they were down on earth with you and the guys before you. They'll argue forever (and we can do that up here) when they know they're right, but they always keep an ear open to learn something new. Maybe just that one technique that might have given him a slight edge. Oh, they know they'll never "hassle" again, but no true Fighter Pilot ever stops learning.

You know, not every guy who ever flew fighters is here. There are a lot of guys wandering around somewhere who flew in fighters while they were on earth, but weren't true Fighter Pilots. Some of them "bought it" in training - got a target fixation on the range or couldn't hack the weather when the field went down. Or maybe they hadn't been looking around enough and let some "shooter" get "into their six." The "shooter" is here, but they're not. They are not excluded because they got shot down, but because they weren't working hard enough and could have avoided getting shot down with a little more effort and discipline.

And you know something else? There are a few guys here that never even flew fighters. We have FACs, guys that flew bombers, tankers just about everything — there are even some GIBs, WSOs, and civilians. But they are still Fighter Pilots. They are because they have that attitude it takes to make a true Fighter Pilot. It's that old "I think I'm better than just about anybody, but, just in case I'm not, I'd better keep trying to improve myself" attitude. While they lived they felt that they could "fly the crate it came in" yet they respected their machines and the techniques that had proven most effective for flying and fighting — and they didn't forget them.

So they're all here. There are some famous ones and many, many "Blue Fours." But everyone is a true Fighter Pilot and their sagas range chronologically from the first air battle and geographically from every corner of your earthly world. It doesn't matter which way their prop turned, how their turbine sounded, whether their altimeters read in meters or feet, or whether they faced freezing in an open cockpit or a capsule decompression. They may have come from a Jagdgeschwader or called themselves "Yankee Doodle Dandies," "Black Sheep," or "River Rats," but they are brothers in a "here and now" that will remain forever.

Some came here at the peak of their mortal lives. Maybe they couldn't evade that SAM, or they were outnumbered (or outmaneuvered by that guy who was just a little better), or they dove through a burst of flak in order to hit the target — or maybe their engine just quit on the turn to final. At any rate, they lived life fully until their sudden death and there are few regrets. How many men can die doing what they liked to do best?

Others came here long after their flying days were over. They had left the cockpit and gone into other, less thrilling fields of endeavor. And they were usually successful because they applied the same effort, determination, and discipline to these other careers as they did to their flying — and, as a result, they "Did It Better."

Maybe that's what all this "Fighter Pilots Do It Better" business is about. They weren't born better. I think the secret is that they care more and try harder to be as good as they can be — at flying and at anything else they try. And I guess

they realized that in the fighter business, you can only really depend on "ole Ish." The good ones never stopped learning and working at being the best they could.

I sometimes see them look down at you there on earth and shake their heads when some "hot rock" dings a perfectly good fighter and himself because he misjudged a "hot nose" or buzz job, or almost flew under that bridge. He may have been a good man who lived a good life on earth. Maybe he deserves heaven, but he wasted his talent and gave all fighter pilots a smudge on their good name. If he makes heaven, it won't be this part. Our Rules Committee is extremely fair, but good Fighter Pilots aren't "hot dogs" and it takes more than a "G" suit, a big "stache", and a scarf to qualify here.

I guess you've all lost a buddy or two in this flying game. Well, if he was a good Fighter Pilot, he's here. If you want to see him again when your tour on earth is over, be a good Fighter Pilot too. Follow the rules, work hard, learn all you can - be better. Everyone knows that you can't always be safe in the fighter business, but you can limit those chances you have to take to those chances you have to take. Be the old Master of the Calculated Risk. Don't expose yourself to any unnecessary ones by overextending yourself, showing off, or not paying attention to what you're doing.

If you've taken what I've said here seriously, you already have the right attitude and you may be well on your way to becoming the "good Fighter Pilot" I've been talking about.

If so, we'll see you here when it's time. There's plenty of room and all the guys say it's Sierra Hotel. Just walk right in, throw your hat on the bar, and ring the bell.

Cheers ... you did it better! \*

Major David C. Hubert, 1972

#### **Unit Histories Continued**



### 96th FIS

The 96th FIS was transferred to ADC from SAC at Grenier AFB in August 1947 with F-51Ds, only to be deactivated in October. The squadron was reactivated at Newcastle County Airport in November 1952, replacing the 142d FIS of the Delaware ANG with F-94Bs. In July 1953 a transition into F-94Cs was completed which were flown until deactivation on 1 December 1957.



### 98th FIS

The 98th FIS was activated in March 1956 at Dover AFB with F-89Ds. In 1957 it received F-89Hs and Js. A transition into F-101Bs was completed in the summer of 1959 and in July 1963 the unit moved to Suffolk County AFB. On 30 September 1968 the squadron was deactivated.



### 97th FIS

The 97th FIS was transferred from SAC to ADC at Grenier AFB in August 1949 with F-51Ds. It was deactivated in October 1949, only to be reactivated in December 1950 at Wright-Patterson AFB with F-86As. In 1952 a transition into F-86Es was completed followed by another into F-86Ds in 1953. The unit designation was transferred to Newcastle County Airport in August 1955 to an F-94C equipped unit. On 1 December 1957 the squadron was deactivated.



### 317th FIS

The 317th FIS was activated in August 1947 at McChord Field with P-61 aircraft. In November 1947 the squadron moved to Hamilton Field and the following spring of 1948 transitioned into P-82s. The squadron moved to Moses Lake AFB in November 1948 and back to McChord AFB in April 1950. In the fall of 1950 the squadron transitioned into F-94As and in December 1956 into F-102As. On 1 August 1957 the 317th FIS was transferred to Alaska under AAC.



The 318th FIS was activated in May 1947 at Mitchell Field. In December 1947 it was transferred to Hamilton Field where it received its first aircraft, P-61s. In the spring of 1948 the squadron received P-82s and in November 1948 moved to McChord AFB. In the fall of 1950 the squadron transitioned into F-94As. In June 1953 the squadron moved to Thule Air Base, Greenland, under control of the North East Air Command. The squadron came back under ADC in August 1954 when it was moved from Thule to Presque Isle AFB with F89Ds. In August 1955 the squadron moved to McChord AFB and transitioned into F-86Ds. In March 1957 the squadron began a transition into F-102As and three years later in March 1960 into F-106As. The 318th is still located at McChord flying F-106s.







NEW

OLD

### 319th FIS

The 319th FIS was assigned to ADC in May 1949 after it moved from the Canal Zone to McChord AFB. It received F-82 aircraft and in September 1949 moved to Larson AFB. In the fall of 1950 the squadron transitioned into F-94As and in February 1952 moved to Suwon Air Base, Korea, under the Far East Air Force. In November 1955 the squadron returned to CONUS and ADC at Bunker Hill AFB and in March 1956 received F-94Cs. The squadron transitioned into F-89Js in the fall of 1957 and in February 1960 into F-106As. In March 1963 it moved to Homestead AFB where it flew F-104As. In December 1969 it was deactivated. ADC's last F-104 unit. In July 1971 the squadron was reactivated at Malmstrom AFB, replacing the 71st FIS with F-106s. Shortly thereafter on 30 April 1972, the squadron was deactivated.



### 321st FIS

The 321st FIS was activated at Paine Field in August 1955 with F-89Ds. In the spring of 1956 it transitioned into F-89Hs and a year later into F-89Js. On 1 March 1960 the squadron was deactivated.



### **322d FIS**

The 322d FIS was activated in August 1955 at Larson AFB with F-86D aircraft. In the spring of 1957 the unit transitioned into F-86Ls. In April 1959 the 322d moved to Kingsley Field and received F-101Bs. The squadron was deactivated on 30 September 1968.



### 323d FIS

In November 1952 the 323d FIS was activated at Larson AFB. It was not until the following spring of 1953 that it received aircraft, F-86Ds. In August 1955 the unit designation was transferred to Truax Field and in the fall of 1956 it transitioned into F-102As. In October 1957 the squadron moved to Ernest Harmon AFB where it was deactivated on 1 July 1960.



### 324th FIS

The 324th FIS was activated at Westover AFB in October 1955 with F-86Ds. In the fall of 1957 it received F-86Ls and on 25 June 1958 it transferred to USAFE.



The 325th FIS was activated at Travis AFB in April 1953 with F-86Es. In February 1954 the squadron moved to Hamilton AFB and later transitioned into F-86Ds. In August 1955 the unit designation was transferred to Truax Field. A transition into F-102As was completed in the spring of 1957. On 25 June 1966 the squadron was deactivated.



OLD

326th FIS



NEW

In December 1953 the 326th FIS was activated at Fairfax Field without personnel or aircraft. It was relocated to Grandview AFB (later named Richards-Gebaur AFB) in March 1954 with F-86D aircraft. In May of 1957 the unit transitioned into F-102As which were flown until deactivation on 2 January 1967.



### 327th FIS

The 327th FIS was activated in August 1955 at George AFB with F-86Ds. In April 1956 it began transitioning into F-102As to become the first operational Deuce squadron. The unit moved to Thule Air Base, Greenland, in July 1958 and was deactivated there on 25 March 1960.



### 329th FIS

The 329th FIS was activated in August of 1955 at George AFB with F-86Ds. In the spring of 1957 it received F-86Ls and a year later transitioned into F-102As. In July 1960 the unit began flying F-106As. The 329th was deactivated on 31 July 1967.



The 330th FIS was activated in November 1952 at Stewart AFB with F-80 aircraft. In the summer of 1953 it received F-86As and subsequently F-86Fs. It transitioned into F-86Ds in early 1955 and into F-86Ls in late 1956. On 1 July 1959 the squadron was deactivated.



### 332d FIS

In March of 1953 the 332d FIS was activated at New Castle County Airport with F-94C aircraft. In August 1955 the unit designation was transferred to an F-86D unit at McGuire AFB. In November 1956 the squadron received F-86Ls and in July 1957 transitioned into F-102As. In July 1959 the unit moved to England AFB and in September 1960 to Thule Air Base, Greenland. It remained there until 1 July 1965 when it was deactivated.



### 331st FIS

The 331st FIS was activated at Suffolk County AFB in February 1953 with F-51Ds. Shortly thereafter it received F-86Ds. In August 1955 the unit designation was transferred to Stewart AFB. In December 1956 the unit transitioned into F-86Ls and in August 1958 it moved to Webb AFB. A transition into F-102As was completed in early 1960 and another into F-104As in the spring of 1963. On 1 March 1967 the unit was deactivated.



### 334th FIS

The 334th FIS was transferred to ADC from SAC in December 1948 with F-80 aircraft. It soon moved in May 1949 to Langley AFB and began transitioning into F-86As. In August of 1950 the squadron moved to New Castle County Airport and control was transferred from ADC to the Far East Air Force on 11 November 1950.



The 335th FIS was transferred from SAC to ADC in December 1948 at Andrews AFB with F-80 aircraft. In May of 1949 it moved to Langley AFB and soon thereafter transitioned into F-86As. In August of 1950 the squadron moved back to Andrews AFB and on 11 November 1950 control was transferred to the Far East Air Force.



### 337th FIS

The 337th FIS was activated in July 1954 at Minneapolis-St. Paul Airport with F-89Ds. In August 1955 the unit designation was transferred to an F-86D unit at Westover AFB. It received F-86Ls in early 1957 and 'transitioned into F-104s in the spring of 1958. The squadron was deactivated on 8 July 1960.



### 336th FIS

The 336th FIS was transferred from SAC to ADC in December 1948 at Andrews AFB with F-80 aircraft. It moved to Langley AFB in May 1949 and received F-86As. In August 1950 it moved to Dover AFB and was transferred to the Far East Air Force on 11 November 1950.



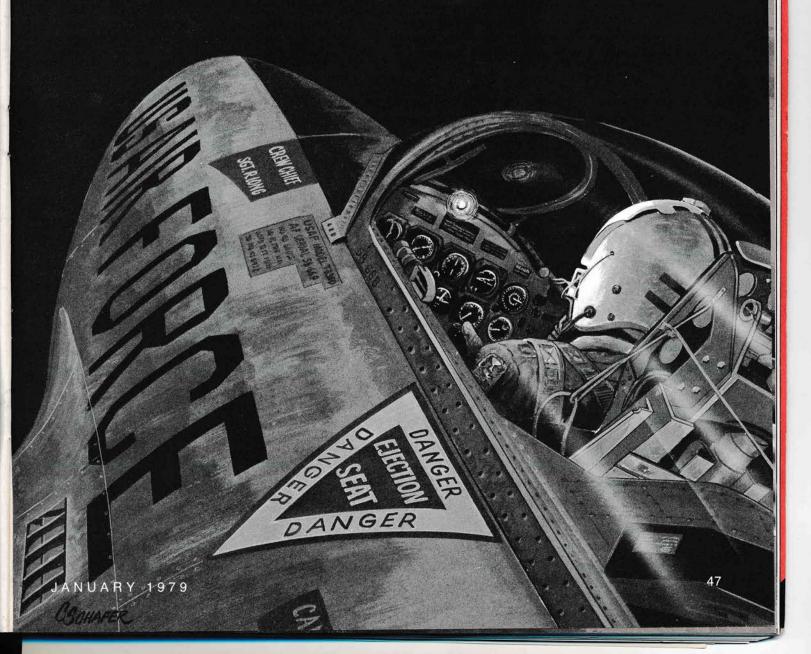
### 354th FIS

The 354th FIS was activated in November 1952 at Long Beach Municipal Airport, replacing the 188th FIS of the New Mexico ANG with F-51Ds. In December 1952 the unit moved to Oxnard AFB and transitioned into F-94Cs the following spring. In August of 1955 the unit designation was transferred to an F-86D until at McGhee Tyson Airport. The 354th received F-86Ls in the spring of 1957 but was deactivated shortly thereafter on 8 January 1958.

Continued on Page 54

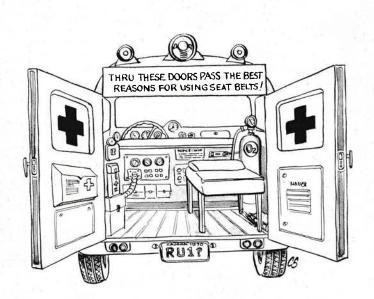


A screaming Watusi war dance from the rear cockpit only leads to deeper frustration.





"As part of debriefing, I need to talk to you about your management techniques."



"Now, what have I forgotten?"





JANUARY 979

CSCHAFER

# PASTEBOARD SIMULATOR



Do you know whether or not a minor emergency will cause you to do something foolish in your effort to bring her down in a precautionary landing? We don't like the word foolish, but what else is appropriate when well trained people throw away their best advantages to favor a new scheme which was really suggested by the lump in their throat.

**EXAMPLE:** You've been airborne for ten minutes when the primary system goes out. You name the system, it could be any one; fuel, hydraulic, electrical-the details don't matter. The point is that you make a successful changeover, and set course for a precautionary landing.

A situation like this will produce an accident in a large percentage of the cases. No. not because the alternate system fails; they're as good as the manufacturer says. It will be the pilot whose alternate system fails under the high pressures. For some reason, minor systems failures seem to cause some outsized deviations or variations of the "ungarbled word."

WHY - we wanted to know -would a normally dependable pilot throw away his most familiar traffic pattern in favor of an unfamiliar straight-in, just because a different set of cogs was turning deep inside his airplane. Some months ago, we set out to find the answer to this mystery. What we got was a story of a rather enlightening nature. The author claims that he has discovered a means of simulating the emotional pressures and reactions which accompany an inflight emergency. You be the judge ... here's his story.

As I pulled my bet back she said, "I can tell you why, in fact, I could tell you just which pilots will do that sort of thing before they do it."

"Astounding," I observed. "Are

you psychic?"

"No," she replied, "just accustomed to watching people fracture under the strain of emotional pressure.

Under normal conditions, my professional pride would have forced

me into a casual rejection of such a statement, but these weren't normal conditions. I had entered the game with a \$20 bill, and by this time I was betting \$50 per hand. Having already torn off my tie, bitten three fingernails to the knuckles, and lit a third cigarette with two burning in the tray, I just wasn't in a position to challenge this doll on the subject of excitement.

"How much do you intend to win tonight?" she asked.

"I'm not quitting until I hit

\$3,000," I told her.

This was not just talk; I had made this decision long ago. Having encountered bad luck on every previous visit, I had decided that when a good run came along I would ride it to the hilt. You know; double up and beat the dealer with his own money! Well, I was well on course, having climbed from two dollars through five, ten, twenty, twentyfive, and now fifty. It was running as smoothly as a T-bird riding a 90 knot jet stream on a VFR day. The trouble was that my heart wouldn't stay in the cruise range. No matter what I said to myself, the old pump kept pushing a lump up into my throat and telling me to cut the bet while I had it made.

"It's time to go to \$100," she

said.

"Yes, I know, I was figuring on

doing it on the next hand."

"No you weren't, you're starting to lose confidence. What kind of a pattern would you fly if your F-102 lost its primary hydraulic system?" As she asked this, she dealt me a soft twelve.

"A normal pattern of course," I answered. "The secondary system is just as reliable as the primary, and it's no threat to the power source; why compromise your best techniques for an emergency that is wholly isolated."

She had a stiff to hit, so I couldn't see risking a split on the bullets at these prices. I took a hit; got a hard

twelve, and stayed.

"If you fly like you play cards, you'd probably call for a straightin." she said, as she completed the round. Yes, she broke her hand and

paid off all around.

Picking up my aces, she continued: "You haven't got the nerve to overcome your doubts in a card game. What makes you think the same doubts wouldn't break you up in the air?"

"It's different," I said. "Flying is a science. I KNOW what I'm doing

up there!"

"Malarky!" says she. "Splitting aces is just as safe as a normal traffic pattern. You would have split them without a second thought if the bet was \$10. You let the risk spook you out of being sensible.'

She was right. If I could only get that heart of mine to quit choking me, I could make my decisions on

common sense.

"You'd better settle for the pile you have now Captain," she advised, "and stick to T-birds from here on—

will you please?"

The insult overrode the fears of the moment. "I've got 700 hours in bent wings already, sweetheart, and 35 of them are in Century series! The hundred goes on this hand.'

She didn't say a word until she turned up ladies back-to-back. As she scooped up my biggest bet -"I'll lay you fifty to ten that you haven't been put to the test yet.'

"What do you mean test?"

"Well, use the truth of your own Air Force parable: 'Flying is comprised of endless hours of sheer boredom, interrupted by occasional moments of stark terror.' It's those moments of stark terror that separate the men from the boys.

She was right again. I couldn't take the bet. However, we can't have smart-alec women theorizing on the psychology of flying, so I assumed my most indignant tone of voice and expression—thrust my \$25 bet forward—and proceeded to take a good

"You may be an expert in this duel for plastic chips, Miss Airpower, but you're not built for free flight. Flying is a practice of rights and wrongs, and you're not quite qualified to advise on it!"

"Of course it is Captain, but you're exaggerating aren't you? There are more shades of gray and choices to make in flying than in a fast craps game. There are dozens of winning combinations, and just as many losers. The trouble is that when the stakes get abnormally high, the hunches and doubts start creeping in. This isn't something you can take or leave, this is basic emotional makeup; you have to learn to be bigger than your fears."

Was this mere woman daring to suggest that a USAF pilot lacked the courage to see a known truth through? My outrage was cut short by the obvious contempt in her eyes as they crossed my \$25 bet.

"You haven't even got the fortitude to parlay your best lucky streak

to your destination."

"I'm playing a hunch," I said defensively.

"Hah!" she snorts. "My last hand flamed you out. You're sitting at 30,000 feet and looking at a beautiful 12,000 foot strip, but you can see more ways of missing it than making it."

This is murder, I thought. I can't find the strength to push \$100 out there. Worse; she knows why.

I got a momentary chance to save face when she beat me.

"Well, I saved \$75 with that shrewd little bet, didn't I?"

"Sure you did brave man, but if that hand marked the point where you start giving in to your fears, you might as well quit now. If you sit here and waste all your good luck, I'll eventually get to you. That's the name of the game.'

This girl was too sharp. It was like flying with a co-pilot; you simply have to play in the prescribed manner. When you get shook, you can't show it-it would be disasterous. I can recall a similar feeling in Korea: The flight ahead called in ten "Bandits." My heart jumped - reminded me that I didn't HAVE TO see them — but that would be a breach of faith with everybody.

The world is made of crises; whether big bets, MIG's overhead, or flameouts doesn't matter much, they're all big decisions, and they determine the "haves" and "have nots." The "haves" are the ones who jump over the lump in their throats and CHARGE!

"O.K., the bet's \$100 and the destination is 3,000. Just don't change decks on me now."

Boy, what pressure! This was like being on solid instruments without radios; dead reckoning your way toward destination with a new "hot light" popping up every two min-

I played nine consecutive hands at \$500-that is, she did. I had long since slipped into total "red-out."

First thing I knew, she pushed the pile toward me, grabbed me by the arm, and started to take me away.



My anxiety gave way to more conventional anticipations.

"Come on Captain," she was saying. "I've been relieved, and you need to be.'

There was quite a crowd of admirers as I scooped up my impressive bundle of winnings, but I was not in fit condition to accept their plaudits. I felt rather like the guy who brought his "DOG" home dead-stick at midnight . . . because the pins were still in his seat.

By the time we reached the C.C. dispensary, my anxiety changed from desperate indecision to more conventional anticipations; this doll did have a female side to her disposition.

I asked her how she learned to compare gambling to flying.

"I've been here for a while," she answered. "I've had a chance to study pilots under both combat and normal training conditions.'

"Is there a big difference?"

"None really, the presence of a war only affects attitudes. I don't recall that they had any different TYPES of accidents during the Korean rush—as near as I can figure it, the types and reasons were the same as they are today."

"Well, that certainly seems to be true, but I'd sure like to know why we can't stop the 'snowball' typeyou know where a minor emergency turns into misjudgment and a crash on landing."

"Doggone it Ace," she chided. "You've missed the big point. You sat for over two hours tonight and fought your instincts over and over. Every new hand at the \$500 level threw you into the same stress that a flame-out would. Your instincts told you to run, and your pre-game planning demanded that you stay. These fears are instinctive with everybody—no human can eliminate them; we can only hope to control them."

She was well wound up, and I was content to listen, so: "When an engine stops, or a red light comes on, your heart goes over to the emergency side. This is nature's defense mechanism, and we all have it. In flying, you can't exactly run from danger, but your instincts will still demand it. They say bail-out, but your conscious mind cries only for time to think. Now, if the conscious mind is 100% trained for this type of trouble - and that means 100% convinced that the recommended procedures will bring you home safely—then you will proceed in good health. BUT-if you only half believe in what you've been taught, or don't remember the details of the emergency procedures. then your instinctive fears will pile enough doubts in your mind to louse up everything you try.'

"By George," I conceded, "you make a lot of sense at that."

"Well, it's pretty obvious that something is wrong with the think ing process when a man practices flameout approaches for two years. then tries a straight-in for the first time in his life when his bird does flameout. If he really believed that the prescribed approach was the surest and safest way, nothing could shake his confidence.'

"Suppose he didn't have the altitude to hit his familiar high key?'

She didn't answer-just stared Realizing that a promising evening could be destroyed by one such stupid question, I quickly recouped.

"Oh yes, if you can't stack the situation 100% in your favor. LEAVE IT."

# MIGHTY MEN ARE THESE Out front. Searching. Observing. Identifying. Maintaining a constant, intensive surveillance of the sky. Isolated from those they guard, Aircraft Control and Warning personnel of the Air Force stand sentry over freedom...armed with electronic shields. They're up-to-the-minutemen; streamlined Paul Reveres, whose mission is to sound the alarm of approaching enemies . . . Quiet, watchful heroes to be sure. America can rest assured the mission will be accomplished, for mighty men are these. They're gifted with the human capacity to comprehend and accept their responsibility They are dedicated to the moral rights of man. Stand alert on the frontier of freedom expecting no glory, yet receiving it each day from the unannounced burst of sunlight dawning on our democratic land. George Coakley 1/Lt., USAFRES JANUARY 1979 53

### **Unit Histories Continued**



357th FIS

The 357th FIS was activated in November 1952 at Portland Airport, replacing the 123d FIS of the Oregon ANG with F-86Fs. The squadron was transferred to USAFE shortly thereafter on 25 May 1953.



398th FIS

The 398th FIS was activated in November 1956 at Hamilton AFB and scheduled to receive F-104s. Before personnel or equipment were in place, the unit was deactivated on 18 February 1957.



### 413d FIS

The 413d FIS was activated in July 1954 at Travis AFB with F-86Ds. A year later on 18 August 1955 it was deactivated.

### 414th Night Fighter Squadron

The 414th was transferred to ADC from TAC in March 1946 at March Field. Before personnel or equipment were in place, it was reassigned back to TAC on 31 July 1946.



## 425th Night Fighter Squadron

The 425th was ADC's first fully operational squadron. It was transferred from TAC to ADC on 21 March 1946 at March Field without personnel or equipment. On 1 September it was relocated to McChord Field, manned, and equipped with P-61s. Less than a year later on 25 August 1947, it was deactivated.



### 431st FIS

The 431st FIS was activated at Selfridge AFB in November 1952, replacing the Michigan ANG 172d FIS with F-51Ds. In May 1953 the unit received F-86Fs, but was transferred to USAFE a month later on 22 June 1953.



The 432d FIS was activated at Truax Field in November 1952 in F-86Fs, replacing the Wisconsin ANG's 126th FIS. In the fall of 1953 the F-86Fs were replaced with F-86Ds. In August 1955 the unit designation was transferred to an F-89D squadron at Minneapolis-St. Paul Airport. The unit transitioned into F-89Hs in the spring of 1956 and was deactivated on 2 January 1958.



### 433d FIS

The 433d FIS was activated in November 1952 at Truax Field with F-89Cs. It replaced the 176th FIS of the Wisconsin ANG. It began transitioning into F-94Bs the following spring but it was curtailed. In July 1954 the squadron moved to Alaska under AAC. In November 1957 the squadron moved to Minot AFB under ADC without personnel or equipment. Before receiving the proposed F-89Js, it was deactivated on 8 January 1958.



### 437th FIS

The 437th FIS was activated at Otis AFB in November 1952 with F-94Cs. It was the first operational F-94C unit. In August 1955 the unit designation was transferred to Oxnard AFB and in March 1956 it transitioned into F-89Ds. The squadron received F-89Hs in July 1956 and F-89Js in March 1958. In January 1960 the squadron transitioned into F-101Bs. It was deactivated on 29 April 1968. In July 1968 the 456th FIS moved from Castle AFB to Oxnard AFB with F-106As and was redesignated the 437th FIS, only to be deactivated on 30 September 1968.



The 438th FIS was activated at Kinross AFB (later named Kincheloe AFB) in April 1953 with F-94Bs. In the spring of 1954 it transitioned into F-89Ds and in the summer of 1957 into F-102As. In May 1960 it received F-106As. The squadron moved to Griffiss AFB in August 1968 and on 30 September 1968 was redesignated the 49th FIS.



440th FIS

The 440th FIS was activated at Geiger Field in February 1953 with F-86Ds. It was soon transferred to USAFE on 31 May 1954.



### 444th FIS

The 444th FIS was activated at Charleston AFB in February 1954 with F-86Ds. In the spring of 1957 it received F-86Ls and in the spring of 1960 F-101Bs. The squadron was deactivated on 30 September 1968.



### 445th FIS

The 445th FIS was activated at Geiger Field in March 1953 with F-86Ds. The unit designation was transferred to an F-89D unit at Wurtsmith AFB in August 1955. Receiving F-89Hs in March of 1956, the 445th became the first squadron to fly this model aircraft. In the latter part of 1956, it transitioned into F-89Js and in December 1959 into F-101Bs. On 30 September 1968 the 445th was deactivated.



456th FIS

The 456th FIS was activated at Truax Field in August 1954 with F-86Ds. In August of 1955 the unit was deactivated only to be reactivated again

at Castle AFB in October 1955 with F-86Ds. In the fall of 1957 the unit transitioned into F-86Ls and in June 1958 into F-102As. In September 1959 it received F-106As. The squadron moved to Oxnard AFB on 18 July 1968 and was redesignated the 437th FIS.



460th FIS

The 460th FIS was activated in March 1954 at McGhee Tyson Airport with F-86Ds. In August 1955 the unit designation was transferred to an F-89D squadron at Portland Airport. The squadron transitioned into F-102As in May 1958 and was deactivated in March 1966. In September 1968 the squadron was reactivated at Oxnard AFB with 437th FIS F-106s. The squadron moved to Kingsley Field in November 1969 and to Grand Forks AFB in April 1971. The 460th was deactivated on 15 July 1974.



465th FIS

The 465th FIS was activated in February 1953 at McChord AFB with F-86Ds. It was deactivated in August 1955 but in October 1955 it was reactivated at Griffiss AFB with F-89Ds. It subsequently received F-89Hs in 1956 and F-89Js in 1957. The unit designation was transferred to L.G. Hanscom Field in July 1959, replacing the 49th FIS which replaced the 465th at Griffiss. The squadron remained there flying F-89Js until deactivation on 15 March 1960.



469th FIS

The 469th FIS was activated in December 1952 at McGhee Tyson Airport replacing the Tennessee ANG's 105th FIS with F-47Ds and F-47Ns. In the spring of 1953 it transitioned into F-86As and a year later F-86Ds. The squadron was deactivated on 1 December 1957.



482d FIS

The 482d FIS was activated in April 1956 at Seymore-Johnson AFB with F-102As. It remained there flying Deuces until deactivation on 1 October 1965.

The 484th FIS was activated at KI Sawyer AFB in June 1956. It was scheduled to receive F-89Js however it was deactivated on 16 February 1959 before being equipped.



496th FIS

The 496th FIS was activated in March 1953 at Hamilton AFB with F-51Ds. Later in the year it transitioned into F-86Ds and was transferred to USAFE on 31 May 1954.



OLD





NEW

The 497th FIS was activated in February 1953 at Portland Airport with F-94As. In the spring of 1954 the squadron received F-89Ds. The unit designation was transferred in August 1955 to an F-86D squadron at Geiger Field and on 20 June 1958 it was transferred to USAFE.



### 498th FIS

The 498th FIS was activated in August 1955 at Geiger Field with F-86D aircraft. In February 1957 it transitioned into F-102As and in May 1959 into F-106As. It was ADC's first operational F-106A squadron. In July 1963 the squadron moved to McChord AFB followed by moves to Paine Field in June 1966 and Hamilton AFB in September 1968 where it was deactivated on 30 September 1968.



518th FIS

The 518th FIS was activated at George AFB in January 1955 with F-86Ds. In August 1955 it was deactivated but in June 1956 it was reactivated at Klamath Falls Airport. The squadron was deactivated on 1 July 1959 never having been equipped.



The 519th FIS was activated in December 1954 at Sioux City Airport with F-86Ds. Deactivation followed soon after on 18 August 1955.

### 520th FIS

The 520th FIS was activated at Geiger Field in December 1954 with F-86Ds. Like the 519th FIS, it was deactivated on 18 August 1955.



### 538th FIS

The 538th FIS was activated in August 1955 at Larson AFB with F-86Ds. It transitioned into F-86Ls in June 1957 and into F-104As in March 1958. The squadron was deactivated on 1 July 1960.



### 539th FIS

The 539th FIS was activated in April 1954 at Stewart AFB with F-86Fs. In January 1955 it received F-86Ds and in August 1955 the unit designation was transferred to McGuire AFB where it received F-86Ls. In May 1959 the squadron transitioned into F-106As. It was deactivated on 1 June 1967.



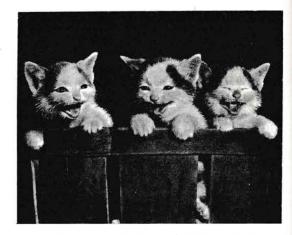
# BLUE ZOO



"OK, when I say break, break right!"



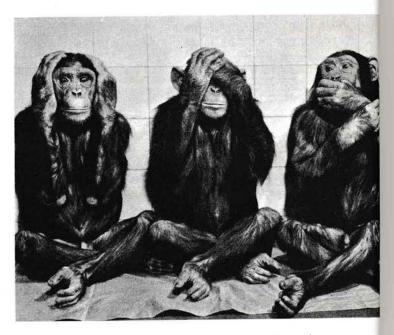
"Mummy knows you don't want to go to the Academy, but Daddy knows best!"



Formation! Is that what that was?



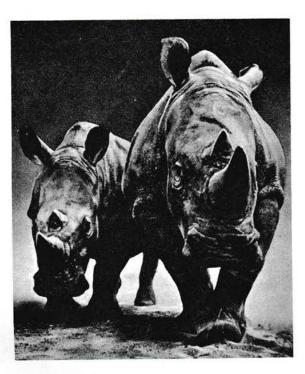
"Night fly! You must be outta your mind!"



The accident investigation board



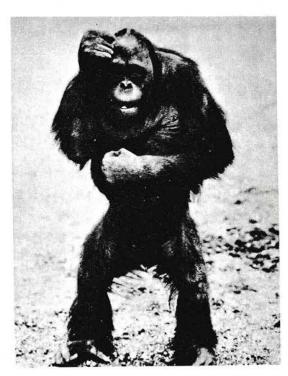
"My landings have been getting worse ever since the barber shop prices went up!"



"When I nod my head, release brakes and stay in there."



I've got the feeling I didn't pass that instrument check.



"Honestly, dear, I haven't the slightest idea how she got my name."

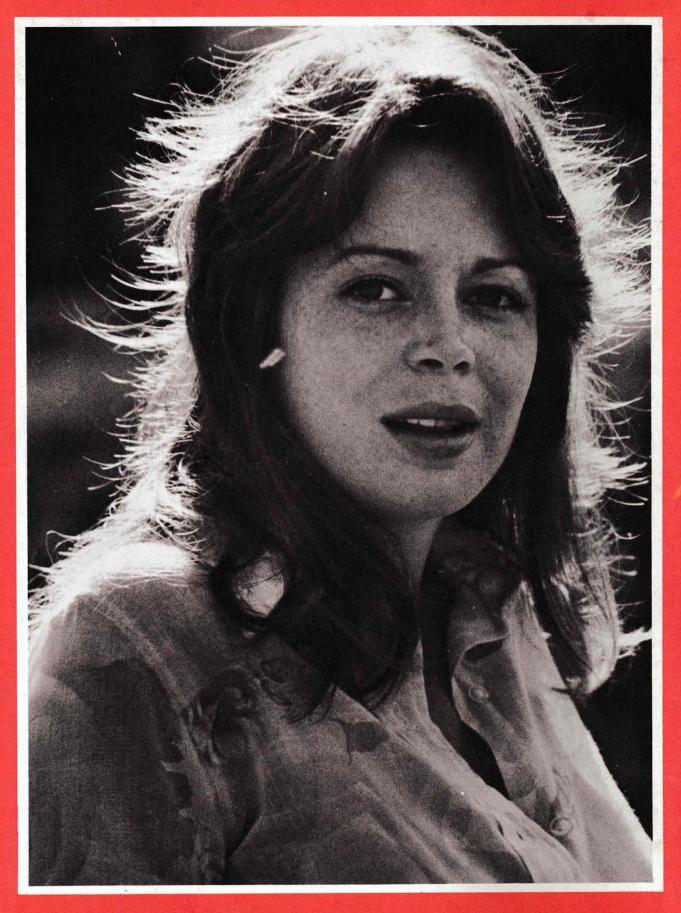
JOIN OF CAP

62

INTERCEPTOR

# FIGHTER PILOTS DO IT BETTER

he fighter pilot has certain characteristics which give him a distinct individual identity. The ideal fighter pilot puts his all into everything he does. He has a "can do" attitude. He displays enthusiasm and instills this feeling in those about him. The fighter pilot believes the job should be done the right way and only one time, the first time. He tries hard to be the very best at everything he does. He expects others to do the same. The fighter pilot tries to be an expert in his field, always seeking new knowledge and experience. He tries to broaden his experience by not confining himself to one narrow channel. The fighter pilot believes in himself. He has a tremendous amount of pride in himself and in everything that he does. He works hard and plays hard; always a competitor in both, to the very best of his ability. When he discovers a problem he always comes up with the answer. Although he thinks for himself he never fails to seek the advice of those who might lead him to the right answer. He respects those who have earned respect. He is more than willing to help those who need help. Do "fighter pilots do it better?" Yes, they do everything better! But nowhere above does it state that fighter pilots fly aircraft or engage in aerial combat. You don't even have to fly to be characterized a fighter pilot. A fighter pilot is more than a flyer. A fighter pilot is an attitude and people with that attitude, no matter what their station in life or their job, really do it better.



We're pleased to have Arlene as Miss Interceptor for our anniversary issue. Arlene is an Admin Clerk in the 49th FIS, Griffiss AFB, NY. She tells us that she's made a number of resolutions for 1979 and hopes that all of you have done the same, especially that this will be the safest year ever for yourselves and ADCOM.