



# The SAC ACCA Flyer

Strategic Air Command  
Airborne Command Control Association

## Recording, Preserving and Celebrating the Legacy of PACCS

Volume XII, Issue 3

November 2006

### PREPARING FOR GRAYSON, ONE PILOT'S PERSPECTIVE

By Tom Cantarano

Following the excitement and stress of the 13 days of October, 1962 (The Cuban Missile Crisis), the 99<sup>th</sup> Air Refueling Squadron, Westover AFB, slowly returned to a semi-normal state of flying training missions, refueling its assigned Chrome Dome sorties and preparing for ORI's. The 99<sup>th</sup> ARS picked up the added task of flying the 8th AF PACCS AUXCP, "Grayson," which was a modified KC-135A model.

Meanwhile, a newer and fancier KC-135B, later designated the EC-135C, was coming off the production line at Boeing. Once enough of these specialty aircraft were built, SAC assigned some to Westover, Barksdale and March AFB's. Now, the beauty of these new aircraft, from a pilot's view, was the power available from the new engines. The J-57 on the A-model was called the straight pipe and the aircraft was affectionately known as the "water wagon." The J-57 thrust was 11,600 lbs dry. Unfortunately, we could not get off the ground if we were fully loaded on a hot day without water injection. By using water we could get 12,400 lbs thrust for the full

Please see **Preparing for Grayson** on page 3

### FROM THE PRESIDENT

At the general meeting in Tucson, Dick Doolittle asked a question of the Officers. He wanted to know the duties of each position. An excellent question to ask if we are to continue as a group. Prior to his query, there had not been a prospectus. The Board decided to draw up a job description for each officer's position. The first one, completed by our current Secretary with the guidance of Steve Leazer, our forever past Secretary, is printed on page 10. The end result was the last superb Flyer.

These job descriptions will be available as a learning tool to ensure that the Association will continue with qualified individuals in the future.

### DAYTON IN 08

By Jim Dart

If you're planning ahead, its time to start looking at our next get-together. The reunion will be October 15-19, 2008 in Dayton, Ohio.

Planning is underway and by the next newsletter we should have a pretty good

Please see **Dayton in 08** on page 4

## FOLDED WINGS

*Pat Gatewood  
August 9, 2006*

## NOTE OF SINCERE THANKS

I would like to say "Thank You" to all SAC/ACCA members for the encouraging support given to me on the loss of my dear wife, Pat.

Pat always supported me and my Air Force career and my activities following retirement.

She was very patient with my frequent "burning of the midnight oil" during those hectic days of the early nineties when we were working to get the ACCA off the ground, even when I left her for a week's TDY to survey Omaha as the venue for our first reunion in 1994. Unfortunately, due to her health, that was the only reunion which she was able to attend, but she pitched right in and worked some pretty good hours at the registration desk.

Thank you very much for the ACCA contribution, in her name, to the Niceville, Florida Twin Cities Hospital Auxiliary Scholarship Fund- her favorite charitable activity her final years.

With warm regards,

Jack Gatewood

## 2006 — 2008

### Board of Directors

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**Reunion site:**  
Dayton, Ohio

This newsletter is published three times per year by the Strategic Air Command, Airborne Command Control Association (SAC ACCA) and is free to Association members.

Information, general correspondence, changes of mailing address, newsletter articles or recommendations to:

**SAC ACCA**  
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Richmond, VA 23238-3026

Renewals & New Membership to:

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Green Valley, AZ 85614-5433

**Preparing for Grayson** from page 1

two minutes and ten seconds of available supply (that's 3,200 lbs total thrust gain). You can imagine the anticipation of receiving a new aircraft with 18,000 lbs of thrust per engine with NO WATER! The TF-33 fan engine was smoother, quieter, and much more reliable without having to worry about water injection.

Before we could check out in this new aircraft, we had to demonstrate our proficiency in air refueling as a receiver pilot. Now, you've got to remember, we were all big aircraft pilots who mostly flew KC-97's and then KC-135's, so none of us had training behind another tanker. All of us had to go through the initial air refueling qualification. We began our training in the summer of 1964 with a modified A-model from Castle AFB, California, which had been converted to a receiver aircraft (we called it "Christine"). The initial training was with a Castle instructor pilot whose job was to train our IP's who would then go on to train the rest of the assigned pilots. We were authorized six crews for PACCS, but in the next two years, we never reached our full complement due to transfers, retirements, etc. As a result, those of us who were qualified took up the slack. Our A-model tanker alert cycle was every third week for seven days. The PACCS alert cycle was every other week. The one benefit was the fact that we flew at least twice and sometimes three times during that week which helped to break up the time. We did a lot more flying than the other crews.

My first time behind the boom was really exciting. The aircraft was all over the sky while I was trying to make smooth, coordinated turns to correct back to centerline which was called the pre-contact position. By the time I recognized I was drifting left of centerline and put in a smooth correction, I was passing the left wingtip of the tanker in a 15-20 degree right bank. Within moments the tanker's right wingtip came

into view while we were in a 20-25 degree left bank, followed quickly by a 30-degree right bank opposite the left wingtip again. Things were definitely getting worse. By that time the IP said, "I have the aircraft," and he smoothly brought the plane back to the pre-contact position. This went on most of the afternoon with the four different student pilots on board. What a disaster! The next day, the 99<sup>th</sup> Bomb Wing Commander came with us to try it out for himself. Being an experienced B-52 pilot, he moved right in there and made contact on his first attempt, chuckling and saying that it was a "piece of cake." We were so frustrated we could have spit. After a few more flights my Initial Qualification in air refueling was completed on 11 September 1964.

A tragic disaster was narrowly averted by quick actions taken by both the tanker and receiver crews on one of these training missions. I have to begin by stating that the training aircraft, "Christine," was modified by feeding the four-inch fuel line from the receptacle, along the right side of the cockpit over the Navigator's station, and then down into the fuel tanks. At best, this was a jerry-rigged arrangement. One day, during the time a student pilot was in contact receiving fuel from the tanker, a coupling on the four inch fuel line came loose and fuel, LOTS OF FUEL, under pressure, came spilling into the cockpit soaking all crew members with JP-4. The pilots immediately executed an emergency disconnect and turned off all electrical power, leaving only the battery switch on for primary instruments. When the boomer notified his pilot that the receiver looked like it was in trouble and was diving for lower altitude, the tanker pilot (I think his name was

(See **Grayson** on page 5)

PACCS MEMORY JOG

Who was the AEAO and what was the aircraft serial number of the final, continuous airborne alert LOOKING GLASS mission on 24 July 1990?

(Answer on page 8)

## **DASH 2 - EARLY YEARS**

By Wilton Curtis

The above title is readily recognizable by all personnel who had anything to do with the technical aspects of the EC-135C aircraft. The term served as an abbreviated means of describing the *Communications Center Electronics Manual, T. O. 1C-135(E)C-1-2*. The original edition, often amended by *Change Notices*, consisted of 294 pages pertaining to the in-flight operations and maintenance of the airplane's communications/electronics.

The Tech Order was divided into four main areas: System Descriptions, Theory of Operation, Operating Procedures and Malfunction Analysis. The Introductory paragraph stated



See **Dash 2** on page 6

## **Dayton in 08** from page 1

itinerary established. Thanks to Ken Witkin, we have secured rooms at the Dayton Doubletree Hotel at a cost of \$94.00 a night. The hotel looks great and we will have our Hospitality/Reception room, Opening Mixer, Reunion Banquet, Business Meeting and Memorial Service at the hotel.

A survey in the last newsletter asked for activities you would like to do while in Dayton. To those that responded, thank you for your input. The responses included some of the obvious things such as the National Museum of the Air Force and Wright-Patterson Air Force Base. Another is lunch at the Dayton VFW, "one of the largest and most modern there is." Others suggested shopping trips for the ladies to The Shops of Oakwood, Prime Outlets and the Dayton Mall as well as additional interesting things to do in and around the Dayton area.

From the suggestions in the survey, I have been contacting as many of those venues as I can in order to see what they would offer us during our stay. So far, the response has been good and they are eager to accommodate us and to have us stop by for a visit.

One of the more interesting items that I have been exploring comes from the National Museum of the Air Force. The event is billed as "Dinner Under the Wings." This would give us FULL RUN of the Museum for an evening. The event would include a catered dinner and a cash bar in the "Modern Flight Gallery" which has aircraft from the Korean and Vietnam eras. If this is feasible and not overly expensive, it might be something worth doing.

So, as you can see, Dayton will have a lot to offer us. The challenge is in selecting the best events for our group to take advantage of during our stay while keeping the costs reasonable.

**Grayson** from page 3

Tom Smith) declared an emergency with ATC and began to dive after the injured aircraft. ATC immediately directed all other aircraft out of the area and gave the two planes vectors to base. By this time, Tom Smith and his crew were frantically trying to make radio contact with the receiver aircraft. Being unable to contact them he made a crucial decision to speed up and get in front of the stricken bird and guide them to a safe landing. The boomer stayed in the pod, kept an eye on them and reported that they were following his lead.

When they approached Westover, Tom declared an emergency for the two aircraft and requested fire and crash equipment to be standing by. He led the stricken bird to final approach and when he lowered his landing gear, the boomer reported the other aircraft's landing gear also came down, one at a time, using the emergency system. The tanker made a low approach while the receiver made a successful landing, stopped on the runway and immediately shut down all engines. Once the crew hatch was opened, the fire department estimated that several hundred gallons of JP-4 poured onto the ground. The crew came down the ladder in their boots and skivvies, as all of their flight suits were soaked with JP-4. With the exception of some skin burns due to fuel contact, there were no other injuries. A "well done" to all crew members on both aircraft!

I began transition training in the EC-135C in December 1964, and completed my proficiency and instrument evaluation on 5 February 1965. As soon as enough pilots were qualified, we began flying "Grayson" in earnest. The missions were six to eight hours in duration and initially did not include air-refueling training. SAC, in its wisdom, however, said we were wasting flight hours by scheduling air-refueling training missions

separate from our orbit missions, so we began to refuel with the full team on board while on station with the link established. Boy, were you guys unhappy!

Our main orbit was in the vicinity of Wilkes-Barre, Pa., not far from Lake Erie, at 31,000-33,000 feet at 255 knots and pinned on the upper right corner of the racetrack pattern using 30-minute orbits. We would make good the designated point in the orbit each 30 minutes to ensure our relay aircraft were turning simultaneously in the same direction at the same time. The purpose was to maintain the same relative position and distance from each other so the proper link with "Looking Glass" could be maintained. We would meet our tanker in this orbit, and because we had to maintain the link, we had to do our refueling training while in the turns. It caused more maneuvering than usual and the back end of the aircraft moved around a bit more. I had one of the guys from the back come to the cockpit complaining that they were all uncomfortable and unhappy, but there wasn't anything I could do about it. He finally went back muttering to himself. I imagine a few airsick bags were used. Sorry.

There was one mission that lasted approximately 24 hours in duration due to a severe snowstorm, and "Grayson" was unable to be released. They sent up a couple of tankers who were not familiar with refueling us and didn't realize the orbit we were trying to maintain. It caused a bit more juggling and much more maneuvering. No one was happy that night.

Griffiss AFB was one of several bases tasked to replenish "Grayson," if necessary. We were required to exercise this tasking periodically. One night, about 0200 or 0300 after our normal mission, we were redirected there to test their response time (target was a

(See **Grayson** on page 7)

**Dash 2 from page 4**

that "electronic equipment for command post communication is installed in the airplane main cabin (also known as the communications center) and information pertaining to the communications center electronics is contained in this manual."

Among some of the topics covered were the Staff, Radio Operator and Crypto Consoles, Interphones, Multiplexing, Electronic Switching, UHF Radio, Liaison/HF Radio, Tape Recorder, and Teletype Communications Systems. The liberal use of diagrams and pictures was used to supplement the very-detailed text and the prominent use of flow charts also aided in helping to provide a clearer understanding of system operations.

Some representative pages copied from old T. O. Change Notices are shown here:

**DATA FLOW, From T.O. Change 1 Dec 64**

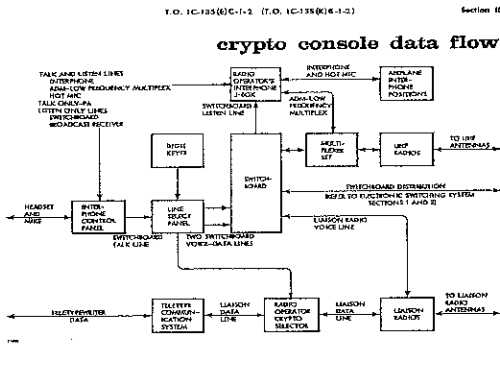


Figure 2-4  
 Talk only voice lines are available through the interphone system and the switchboard. When the interphone selector is set on TA, the crypto operator has a direct talk line to the staff positions via RO loop 3-line and interphone positions. The talk signals through the switchboard are handled by the touch-tone-dialing electronic switching system. The talk signals from the interphone pass through the interphone panel, selected to SW12, to the line select panel and through the line select panel to the switchboard on one of two switchboard lines initiated by pressing VOICE 1 or 4 on the line select panel. The talk signals pass through the switchboard to the staff party on a line selected by dialing the desired directory number on the digit keys. Refer to ELECTRONIC SWITCHING SYSTEM, Sections 1 and 2, for details on distribution of switchboard signals.

Changed 1 December 1964 2-15

**MUX DIAGRAM-Original T.O.**

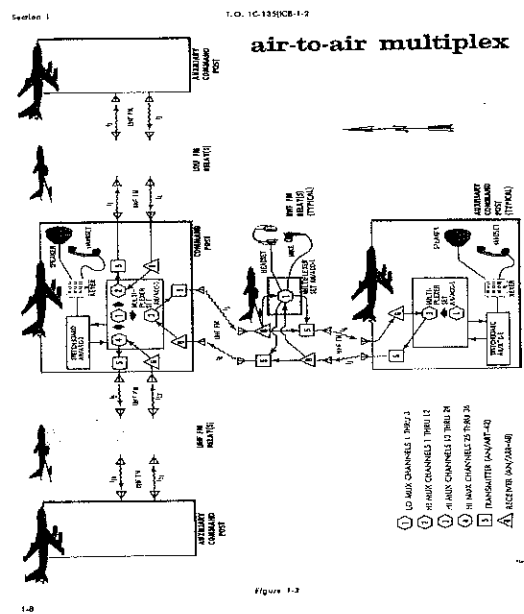
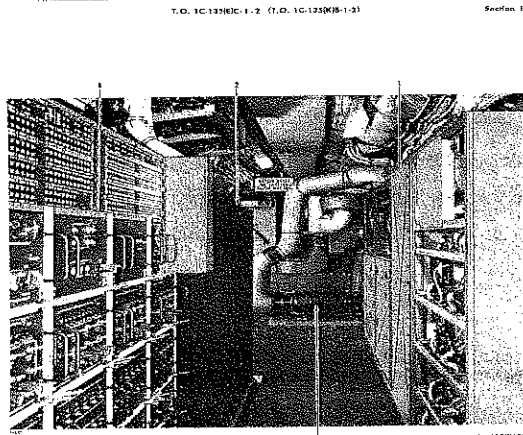


Figure 1-2

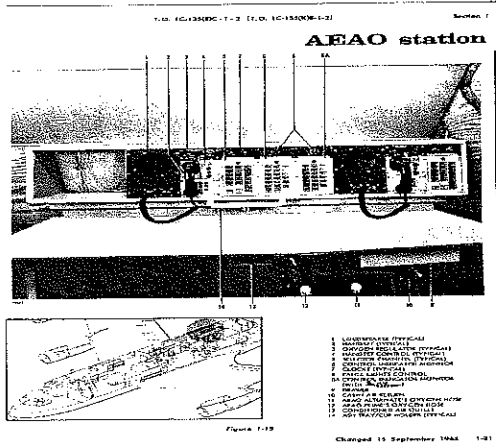
**COMPARTMENT No. 1, T.O. Chg. 1 Sep 64**



COMPARTMENT NO. 1 - LOOKING FORWARD

Figure 1-1 (Sheet 2 of 8) Changed 4 June 1964 1-11

## AEAO POSITION, T.O. Chg 15 Sep 65



### Grayson from Page 5

30 minute turnaround.) They were tasked to provide all essentials just as in wartime: fuel, oil, oxygen, food, water, etc. It was just like an ORI with the Wing CC, DO, and DM all out there to make sure things went well. It was the one and only time I was on the team initiating the inspection, instead of being on the receiving end. Needless to say, it all went well and we were airborne in our allocated time.

We used to get the launch message via klaxon alert and a Green Dot 10 message. We'd receive our ATC clearance while taxiing to the end of the runway to await the battle staff. When the team from the Notch was seen coming onto the base we'd call for our takeoff clearance. We had priority over all other aircraft and were cleared for takeoff at our discretion. After receiving the report that the group was aboard and in their assigned seats, we'd takeoff and head for our orbit. The target response time was not longer than 15 minutes from alert notification to takeoff. We usually beat this time by several minutes.

By using the klaxon to activate "Grayson,"

the entire alert force at Westover responded and was required to start engines. SAC, again in its wisdom, thought this was wasteful so we began being activated by telephone notification from the Command Post through the CQ, a one or two-stripe admin clerk whose primary job was to answer the phones and pass messages. This took a bit longer for the notification to be received by all PACCS crewmembers. Unfortunately, the response time remained at 15 minutes causing things to be compressed quite a bit due to no klaxon or flashing lights on base and if we were in the bathroom or outside instead of the day room, the CQ had to chase us down.

Knowing that rapid response was necessary, we cocked the aircraft by placing all switches in their proper position for takeoff, so when the alert was sounded all we had to do was turn on the battery switch, activate the brake pump and press the starter switch which energized the cartridge starter on number three engine. The entire engine start procedure took just a matter of one or two minutes before we were ready to taxi.

Very late one night we were activated by klaxon while sound asleep. We rushed to the alert bird and started engines. That night it was a Green Dot 10 and we were on our way. Climbing through 20,000 feet my brain finally woke up. I looked at the co-pilot and asked him if we had completed the required checklists. He looked at me with a stricken look on his face and replied that he couldn't remember. Needless to say, we ran all checklists over again and found that they were all completed properly. A thorough scan of all cockpit instruments and switches showed that everything was normal. We had known what to do and had done everything instinctively; our subconscious brain kept us going properly.

I flew "Grayson" until December 1966, when I left Westover. In my 94 PACCS missions I can say there were no bad ones, just some better than others. WHAT A RIDE!

## AUGUST SURVEY RESULTS

The participation by members to the **Reunion Preferences Survey** published in the August edition was very light – only 5% of the forms were returned.

JOINT REUNION: The predominant answer was “no preference” (this included forms with nothing selected.)

DAYTON, OHIO 2008: Suggested activities, in no particular order, were:

1. National Museum of the U.S. Air Force
2. Wright-Patterson Air Force Base
3. Dayton Aviation Trail (Wright Cycle Co., Wright-Dunbar Interpretive Center, The Wright Brothers Aviation Center and Huffman Prairie Flying Field)
4. Carillon Historical Park
5. Woodland Cemetery and Arboretum
6. Luncheon at the Dayton VFW—“one of the largest and most modern there is”
7. Shopping trips for the ladies (For example: The Shops of Oakwood, Prime Outlets and The Dayton Mall)
8. Dedication of the SAC Memorial if the reunion is scheduled at that time

ADDITIONAL ACTIVITIES: Along with some of the members making a presentation on PACCS programs, our Historian, Greg Ogletree, was also suggested as a presenter.

### 2010 LOCATION:

<u>Position</u>	<u>Location</u>	<u>Suggested Activities</u>
1st	Seattle	Boeing Air Museum Boeing Factory Tour Paul Allen Collection Paine Field 747 Mc Chord AFB Mount St. Helens Space Needle
2nd	San Antonio	Air Force Bases Alamo, Missions River walk

3rd	Washington DC	Smithsonian War Memorials Air Force Memorial Andrews AFB Arlington Cemetery Government sites
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## EDITOR'S REQUEST

In order to continue recording and preserving the legacy of PACCS, **please consider writing some comments of your recollections and forwarding them to us.** If you prefer, just jot down some notes and we'll assist you with the writing and editing.

## **\*\*\* REMINDER \*\*\***

**DUES OF THE ASSOCIATION COVER THE TIME PERIOD OF 1 JAN—31 DEC AND ARE DUE ON JANUARY 1ST EACH YEAR.**

**IF YOUR MAILING LABEL INDICATES A (06), PLEASE USE THE ENCLOSED MEMBERSHIP/ ANNUAL DUES FORM AND FORWARD YOUR 2007 REMITTANCE TO THE TREASURER, WHEN CONVENIENT. THANK YOU.**

ANSWER TO PACCS MEMORY JOG (Page 3)

General John T. “Jack” Chain, No. 63-8046

(Boeing KC-135 Stratotanker - R. S. Hopkins III)



## **AIR FORCE MEMORIAL DEDICATION**

By Wilton Curtis

On October 14, 2006, more than 30,000 people attended the dedication of the new Air Force Memorial sited on a rise of land situated between the Pentagon and Arlington National Cemetery. It was erected to honor the millions of men and women who have served in the Air Force and its predecessor organizations and the more than 54,000 killed in action.

What a privilege it was for Pat and I to have the opportunity to drive up from Richmond to the Washington area on the morning of the fourteenth in order to see the numerous exhibits at the AF Open House, to chat with several of the veterans and their families and to view the dedication program on giant screens while seated next to the Pentagon. Ahead of us, just a few short

blocks away, the three stainless-steel spires of the Memorial rose majestically into the blue sky of a nearly perfect weather day.

Among some of the speakers were President Bush, Defense Secretary Rumsfeld, Air Force Secretary Wynne and Chief of Staff, General Moseley. A portion of the program included an aerial tribute entitled "Airmen of Yesterday and Today." Watching the procession of aircraft that flew directly overhead, beginning with a bi-plane and ending with the B-2 Stealth Bomber, and including classics such as the B-17, B-24 and C-47, was a moment to remember.

However, even more inspiring, was listening to the Air Force Band playing at the conclusion of the President's remarks as the Thunderbirds, in a perfect diamond formation, soared over the Memorial and banked to the right crossing above the Pentagon. It was a scene we'll not forget!



## **Duties of the Secretary**

1. In accordance with the Bylaws of the Association, Sec. 5.4: "The Secretary shall keep minutes of all proceedings of Directors in Membership meetings, shall serve such notices as required by these Bylaws, and shall maintain the records of the Association, except those of the Treasurer."
2. Answer all correspondence of the Association when received or referred by the President/Vice President.
3. Mail a "welcome" letter and a copy of the most current newsletter to each new member.
4. Maintain a database containing the names of all members and ensure that it is compared with the membership list of the Treasurer at least once a year.
5. Publish the newsletter a minimum of three times per year; typically in February, June and October (per 5 Oct '96 minutes.)
6. Have available at business meetings the Bylaws and previous minutes of the Association.
7. Draft the minutes of the business meeting and circulate them to the other officers for review as soon as possible. Publish the minutes in the next newsletter after they have been reviewed and any corrections, additions, and/or deletions have been made.
8. Attend a "pre-business" planning meeting, if called by the president, and assist with preparation of the agenda for the membership meeting.
9. Maintain a folder of Standard Operating Procedures for the secretarial position as well as a Master File of the other offices. Prepare and distribute change pages, as necessary.
10. Provide all Association records and materials expeditiously to the new secretary following election as well as professional assistance to ensure a smooth transition.



**Strategic Air Command  
Airborne Command Control Association  
SAC ACCA**

Recording, Preserving and Celebrating the Legacy of PACCS  
**Membership Application or Annual Dues**

Name: \_\_\_\_\_ Spouse's name: \_\_\_\_\_  
(Last, First, Middle)

Rank/Title: \_\_\_\_\_ Branch of Service: \_\_\_\_\_ Status: \_\_\_\_\_  
(Active, Retired, Other)

Mailing Address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ Email address: \_\_\_\_\_

Indicate your affiliation with PACCS, ACCS: [Organization - Duty - (Dates)] Examples: [22<sup>nd</sup> ARS - IP (74-82)], [34ARS - BO (63-66)], [HQ SAC - ABS (69-71)], [2<sup>nd</sup> ACCS - In-flight Maint (69-72)], [55<sup>th</sup> SRW - Staff (72-73)], [(4<sup>th</sup> ACCS - Crew Chief (74-76)], [AEAO/40ADIV (74-76)], [SAC Hq - Planner (88-90)].

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Amount Enclosed:

\_\_\_ Initial Fee (\$10.00) \_\_\_ Annual Dues (\$15.00) Year \_\_\_\_\_ \_\_\_ Reinstatement (\$10.00)

**If paying annual dues, please indicate for what year you are enclosing payment. (The current paid year for your dues will be found in parentheses on the mailing label of your most recent newsletter)**

New memberships require the payment of the initial fee and dues for the year (\$25.00). Dues are for the period 1 Jan through 31 Dec and are due the first day of January (\$15.00) each year. A reinstatement fee, plus current dues, is due for inactive members who wish to reactivate their membership after an absence of two years or more (\$25.00).

**Please indicate** your preference regarding the publication of your name and address on membership rosters which may be provided to the membership of SAC ACCA.

I authorize: \_\_\_ Name, U.S. Mail and Email addresses on ACCA rosters to the general membership.  
\_\_\_ None of the above to be published on ACCA rosters to the general membership.

Send to: SAC ACCA  
George Birch, Treasurer  
2031 W. Placita de Enero  
Green Valley, AZ 85614-5433

**SAC Airborne Command Control Association**  
**Wilton O. Curtis, Secretary**  
**2319 Pleasant Run Drive**  
**Richmond, Virginia 23238-3026**

ADDRESS SERVICE REQUESTED



**PIMA AIR & SPACE MUSEUM, EC-135J , NO. 63-8057**

**8 Apr 06**