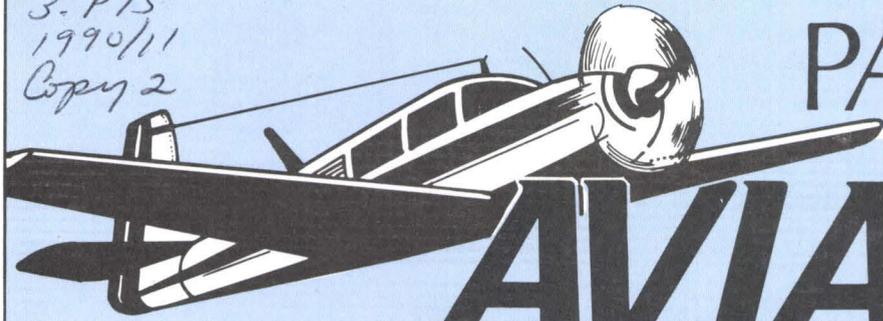


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PALMETTO

AVIATION

Volume 42, Number 11

Published by the S.C. Aeronautics Commission

November, 1990

## Astronaut Charles Bolden Praises Students for Airport Mural

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Col. Charles Bolden, a NASA astronaut and Columbia native, was in his native city recently to acknowledge area students who completed an artistic aviation mural.

The mural featured Bolden in his flight suit, the Columbia Space Shuttle and various other aviation images. The mural was painted on temporary plywood during renovation of the Columbia Metropolitan Airport terminal building.

Bob Waddle, executive director of Columbia Metro, was on hand to welcome and begin the

**Charles Bolden signs autographs for students in front of an aviation mural which features the Columbia native.**



presentation to Col. Bolden and to the students who painted the mural.

Waddle said the idea of creating the an art mural first came about in January 1990, when a large tempo-

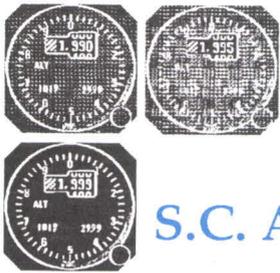
rary plywood wall was erected as part of construction efforts on one of the airport's concourses. As the idea began to grow so did the focus of the mural subject on someone familiar and admirable — Col. Charles Bolden.

Waddle said after a conversations with Dr. John Stevenson, Superintendent for Richland School District One, the idea really took shape.

Art students and teachers from Col. Bolden's old schools, C.A. Johnson High School and W.A. Perry Middle School, were recruited to design and paint it.

In a month, the mural was completed and has been viewed by thousands of people passing through the airport. Since construction on the concourse has been finished, the mural the will now be on permanent display at

*See Bolden Mural, Page 6.*



*Approaching 2000  
Aviation in the '90s*

**S.C. Airports Conference is here!**

November is the month for the 13th Annual S.C. Airports Conference slated for Nov. 13-16, at the Radisson Resort in Kingston Plantation, Myrtle Beach.

The Tuesday through Friday conference will feature some interesting and entertaining people who will inform and delight you with their knowledge of aviation and humorous anecdotes.

This year's conference should be the best ever with enthralling speakers, provocative topics and sparkling entertainment. This year the conference has been fortunate to receive nearly twice as many door prizes to

*See Airports Conference, Page 6.*



**PALMETTO AVIATION** is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities, and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the South Carolina General Assembly to foster and promote air commerce in the state.

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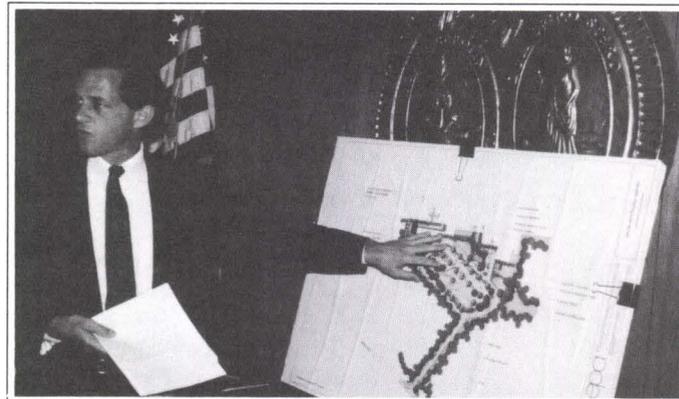
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**John Cardamone (r) presents safety and beautification improvement plans for the Hilton Head Airport at the SCAC Commission meeting.**



## Aeronautics Approves Funds for Fairfield and Florence Airports

**Fairfield County Airport and Florence Regional Airport** received funding for projects at the State Aeronautics Commission meeting in Columbia.

The Aeronautics Commission, at their regular monthly meeting, approved \$48,293 in state funds for airport projects on October 17.

When completed, these projects will generate nearly a million dollars in total funding when combined with federal and local grants.

Commission Chairman Jim Hamilton announced the following state allocations:

• **Fairfield County Airport** — \$46,040 approved to construct a

parallel taxiway with stub connectors, and install medium intensity runway lights;

• **Florence Regional Airport** — \$2,253 approved to install lighted runway identification lights for taxiways which connect to runway 9/27 and 18/36.

The commission also heard a report regarding the state's airport and heliport system from state airport engineer William A. Walls.

In addition, the commission heard a presentation from John Cardamone and Hal Wylie on proposed beautification and safety improvements to the Hilton Head Airport.

## Breakfast Club Elects Officers

More than 200 people attended the South Carolina Breakfast Club in Orangeburg on October 28, one of the largest crowds ever.

Among those attending were the Mayor of Orangeburg and past Breakfast Club officers. EAA Chapter 242 of Columbia cooked breakfast.

Elections of new officers are as follows: President, Gerald Ballard; Upper State Vice Pres., Fred Powell; Mid-State V.P., David Oswalt;

Lower State V.P., Rudy Branham; Secretary, Ann Hawkins; Historian, Coy Derrick; Asst. Historian, Bill Hawkins.

Officers terms run from October to October when the elections are typically held in Orangeburg to honor the founder of the Breakfast Club, the late Tom Summer. Summer, a resident of Orangeburg, founded the club in 1938. The club is one of the oldest aviation organizations in South Carolina.

South Carolina Aeronautics Commission Offices are at Columbia Metropolitan Airport. Mailing Address: Post Office Drawer 280068, Columbia, South Carolina, 29228. Phone: (803) 822-5400, or 1-800-922-0574.

## EAA Founder To Speak at Chapter 242 Annual Banquet

*Founder began EAA in 1953 in his basement*

The founder and chairman of board of the Experimental Aircraft Association, Paul H. Poberezny will be the keynote speaker at the EAA Chapter 242 Annual Banquet which is slated for November 9, at Seawell's Restaurant at the State Fairgrounds.

Poberezny is one of the most decorated men in the international aviation community, having received literally hundreds of trophies, awards and honors for his countless contributions to the world of flight.

He is the founder of EAA, often described as the world's most dynamic aviation organization. The International Fly-In Convention held each year in Oshkosh, Wisconsin, draws almost one million participants and approximately 15,000 aircraft for the largest and most significant aviation event known in the world.

Poberezny organized the first Fly-In in 1953, the same year he founded the EAA in the basement of his Hales Corners, Wisconsin,

home. Paul, with help from his wife, Audrey, nurtured the small group and watched the numbers increase with each passing year.

Today, there are more than 700 chapters worldwide. Paul is one of aviation's leading spokesmen, both in the United States and throughout the world. When he speaks, he represents in the interests of more than 125,000 EAA members at local, regional, national and international events.

Poberezny has logged more than 29,000 hours of flight time in 378 different types of aircraft, including more than 170 amateur-built aircraft. He designed and built more than 15 different airplanes and is currently working on 11 separate projects in his private workshop.

While in the military for nearly 30 years, Poberezny was a pilot, test pilot and combat veteran. Prior to retiring with the rank of Colonel, he became the only man in the armed services to attain all seven aviation wings the military had to offer.

### *AAAE Proposes New Department For Non-hub and General Aviation*

The American Association of Airport Executives has announced plans to establish a department for addressing the needs and concerns for its members at non-hub and general aviation airports.

Among the services AAAE will offer include customized executive manuals, a new small airport newsletter, future assistance with economic impact analyses, legislative information bulletins and various computer software.

The Non-hub/GA Airport department will begin by publishing a quarterly newsletter written expressly for small airports.

For more information, contact AAAE at (703) 824-0500, ext. 134.



## Aviation Calendar

### November 4

Breakfast Club  
East Cooper Airport

### November 9

**EAA Chapter 242  
Annual Banquet**  
Paul Poberezny, EAA  
President, guest speaker  
Seawell's at Fairground  
Columbia

### November 10

**Dedication of  
Sport Aviation Center  
EAA Chapter 242  
Columbia Owens-  
Downtown Airport**

### November 11

Breakfast Club  
Sumter County Airport

### November 25

Breakfast Club  
Huggins Airpark  
Timmonsville, SC

### November 13-16

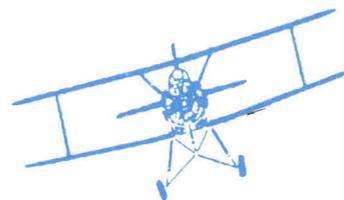
**1990 SC Airports  
Conference**  
Radisson Resort  
Kingston Plantation  
1-803-449-0006

### December 9

Breakfast Club  
Darlington Airport

### December 23

Breakfast Club  
Twin Lakes Airport



# This Lone Liberator Flies Again

By Sean Keefer

During World War II, there were more than 18,000 B-24s that flew the skies. Of that vast number, there are only ten left in the world, and of those 10, only one flies. That one B-24J was on display at Eagle Aviation at the Columbia Metropolitan Airport on October 23.

This B-24J was originally built in Fort Worth, Texas in 1944. It saw active duty in Britain during the war after being sold to the Royal Air Force.

After the war, the aircraft was sold to India which at the time was a British colony. In 1968, the B-24 ended up in a barn where it was found by a British investor. He took the plane back to England and then Bob Collings of Massachusetts negotiated a trade to make a museum display out of the plane. However, after repeated pressure from many old B-24 crew members, he decided to restore the plane to flying condition. The actual restoration was done in Kissimmee, Florida by Tom Reilly who specializes in the restoration of old aircraft. After more than \$1.3 million and four years, the aircraft again proudly sails the skies. The condition of the aircraft is amazing. To

take a few minutes and walk around the outside, you get the feeling you are checking your plane over before flying on a bombing mission. Inside, looking at the tailgunners station, you can almost hear the sound of booming dual .50 caliber machine guns spitting rounds at German planes. Forward in the cockpit, you can imagine the pilot steering through enemy flak and anti-aircraft fire.

It is no wonder many of the people who see the plane are former crew members.

Murray Price of Lexington is one of those men. He flew B-24's on 40 combat missions in the South Pacific.

The aircraft required ten crew members to fly. They consisted of a pilot, co-pilot, navigator and bombardier who were usually commissioned officers. The other six crew members were a radio operator, a flight engineer, a nose gunner, a tail gunner and a turret gunner and two waist gunners. Crew members also cross trained so in the event one was injured or unable to do his job, there was a replacement.

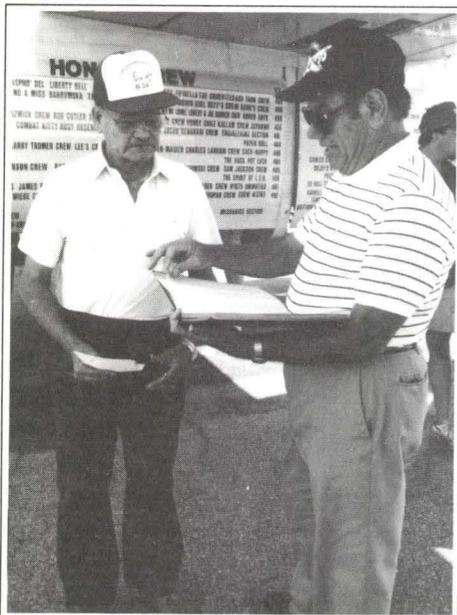
The flying conditions were much less than plush. The aircraft was not pressurized and very noisy. Due to the service ceiling of 28,000 feet, the crew was required to breathe oxygen while in flight.

Also, the plane was not heated and at such altitudes the temperatures dropped well below freezing. The waist gunners were exposed to wind blowing through the sides of the plane, at a maximum cruising speed of 250 mph and you have some very cold air. To combat the cold, the crewmen wore fur lined suits, boots, gloves and helmets. Later versions of the plane even featured sockets in the plane to plug in electrically heated suits. In the Pacific where the temperature on the ground was sometimes 100 degrees, or more, the temperature in flight seemed more severe.

The area for each crew member to operate was cramped and uncomfortable. The bombardier had to lie down in a tight cramped area to spot targets. The nose and tail gunners were also in cramped, tight spaces that were hard to reach.

But by far and long, the crew member with the most uncomfortable, vulnerable spot was the ball turret gunner who was locked into a steel ball barely five feet in diameter. Sticking out of the ball were twin .50 caliber machine guns. The ball was lowered from the plane and would freely rotate to shoot at enemy planes. However, the turret was often damaged so it could not be retracted into the plane.

Murray Price piloted 40 B-24



At left, Claude Rauch shows a scrap book from days as a nose gunner to another veteran. At right, Murray Price, former B-24 pilot, sits in the cockpit of newly reconditioned B-24J.





While in Columbia, this B-24J attracted hundreds of visitors, young and old alike. After leaving Columbia, the B-24J was scheduled for Charleston and Savannah.

missions. In May of 1944, he was stationed in Hawaii flying submarine patrols and also did sea searches, and August of 1944, he went to Sai-pan and began flying combat missions to places such as Iwo Jima and other South Pacific Islands.

Overall, he flew 30 missions out of Hawaii. In February of 1945, he was assigned to another bombing group in Guam. While there, he flew combat missions over the same targets as he did while in Hawaii.

On the day of the Allied invasion, he flew over Iwo Jima a few hours prior to the Marines landing. For this flight, the B-24 was at 4,000 feet. With a wing span of more than 100 feet, the B-24 was an easy target at such a low altitude. "If you could imagine a B-24 at 4,000 feet, I mean they could shoot at us with .22's," he said.

In May of 1945, he was sent home for reassignment. Since the war in Germany was winding

down and the war with the Japanese was soon to end, Price chose to retire.

His most memorable moment during his time as a pilot is, strangely enough, not a memory of something that happened in the air, but an event on the ground. After the completion of his 40th mission, there was a big luau. It seems celebration and relaxation was an important part of being a B-24 crewmember.

The average flight in the South Pacific lasted between eight and ten hours but flights as long as 12 were not unusual. Price says he remembers his longest flight was 14 hours.

It was clear that the presence of the bomber brought back many memories. It is not uncommon to be standing, staring in awe at the plane and hear a person next to you say: "I remember we had to stand up in the bomb bay when we took off," or "One time, the pilot got hit in the foot by some flak from un-

derneath the plane and the co-pilot had to fly. I think I could have flown better than him and I don't know a thing about flying." Sometimes, you just see people stare and think.

The sides of the plane are adorned with names of other B-24's such as "Flak Magnet," "Complete Miss," "Angel in the Sky" and "Georgia Peach." Also there are the names of many crew members and their units.

All have contributed to the restoration and maintenance of the plane which is handled by The Collings Foundation.

It was truly a unique moment for the young people who had never seen the great bird, as well as for the old, who spent several years of their lives with the B-24 as a central part of their existence.

Price, however, puts it in a manner that only a former B-24 crewman could. "It never gets any better. Every time I see this plane land, I want to cry," he said.

## Would you like to contribute to the B-24J?

### Contribution Categories:

**Plane Sponsor:** \$5,000 -- Name, position, unit and honor crew listing on plane. Special jacket, photo and flying priviledges.

**Distinguished Flying Command:** \$1,000 -- Name, unit and honor crew listed on plane and flying priviledges.

**Honor Crew Status:** \$240 -- (represents \$24 each for 10-man crew) Plane or crew (pilot) name on plane.

**Centuray Club:** \$100 -- Name on plaque in plane.

**Crew Member:** \$25 -- Newsletter and certificate.



For a contribution, crewmembers can have their names painted on the side of the reconditioned aircraft.

# Col. Bolden Mural Given to C.A. Johnson High

Continued from Page 1

C.A. Johnson High School.

During Waddle's opening remarks, he also recognized Bolden's mother, Ethel, for her cooperation in getting her son involved in the project.

Col. Bolden presented each student with a plaque which featured a picture of the mural. Bolden took time to shake each student's hand and offer them a word of support.

During his sometimes emotional talk, Bolden spoke of the people who influenced his life the most — his mother, father and wife, but also Norman Pendergrass, Sr. a Richland-Lexington Airport Commissioner.

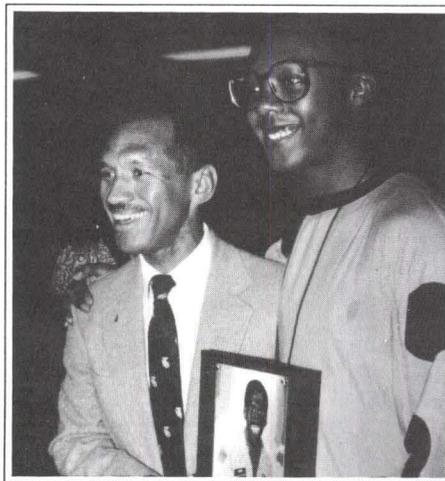
"Mr. Pendergrass took me on an airplane when I was about 9 years old. I had never seen an airplane close up, much less an airplane from the inside, and it changed my life."

He fought back tears when he talked about his contact with Pendergrass who has been a long-time mentor.

"I don't know if I would have ever gotten involved with the space program if it hadn't been for the early encouragement from him."

Bolden told the group of students to persevere and learn all they could. "By completing this mural you have accomplished

**Bolden (clockwise) took time to auto-graph programs and smile for photos with students honored for their work. Bolden's mother, Ethel, was instrumental in getting her son to agree to the project.**



something no one else has ever done. Each and every one of you is gifted. It can be the best gift in the world, but it isn't a gift until you've given it away."

Bolden added, "You will be remembered by the gifts you've given away to other people and your community. Don't keep the



gifts you've been given, give them away. In return, others will give you their gifts and your reward will be a rich life."

Bolden's visit to Columbia will be remembered for a long time by the students who received so many supportive words from "their" astronaut.

## *Airports Conference Begins at Radisson Resort in Myrtle Beach*

Continued from Page 1

give away to our conventioners.

This year's conference will offer more of what you need to know about aviation and airports including an entire afternoon featuring the FAA's program on airport safety.

On the informative side, airport engineers from Wilbur Smith Associates will present their report

on the Economic Impact of Aviation in South Carolina, one of the most significant impact studies made on the state. The Economic Impact study will be used as a reference guide for development in the state and as a recruitment tool for future economic growth.

On the lighter side is Ralph Hood, speaking at our Thursday

luncheon. Hood, a columnist and humorist from FBO Magazine, will trick us into laughter with his down-home Southern style humor.

These are just a few highlights of this year's conference. You won't want to miss any of it. Plan to get there early and stay late.

**For a complete conference schedule see page 8.**

# FYI From the FAA

## Military Flying Activities: A Refresher of Basic Terminology

The following information was taken from FAA's Advisory Circular # 210-5B which may be obtained from your local Flight Standards District Office.

This circular provides information about military flying activities in the National Airspace System (NAS), describes the various types of routes and areas allocated for this purpose and explains how information on the location and status of these routes and areas can be obtained.

Our national security depends largely on the deterrent effect of our airborne military forces. To maintain aircrew proficiency the military services must continually train in a wide range of military tactics. Various routes and areas have been developed to inform the public of locations where military aircraft are practicing maneuvers and tactics which hamper the see-and-avoid aspects of visual flight rules (VFR) flight. VFR pilots can significantly enhance flight safety by availing themselves of the latest information regarding military activities which may affect their planned flight.

### SPECIAL USE AIRSPACE

Special use airspace (SUA) consist of airspace wherein activities must be confirmed because of its nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. The purpose of SUA is to identify for other airspace users where military activity occurs, segregate that activity from other users to enhance safety and to allow charting to keep airspace users informed.

### PROHIBITED AREAS

Designated airspace within which the flight of aircraft is prohibited without the permission of the controlling agency. Prohibited areas are designed for security or other reasons of national welfare.

### RESTRICTED AREAS

Airspace established to denote the existence of unusual, often invisible hazards to aircraft such as artillery fire, aerial gunnery or missiles, etc. Penetration of restricted areas may be extremely hazardous to the aircraft and its occupants and is le-

gally prohibited. Authorization to transit restricted areas which are not in use may be obtained from the using or controlling agencies.

### MILITARY OPERATIONS AREAS (MOA'S)

Airspace established outside the Positive Control Area (PCA) to separate/segregate certain military activities from instrument flight rules (IFR) traffic and to identify for VFR traffic where these activities are conducted. Whenever a MOA is active, nonparticipating IFR traffic may be cleared through the area provided ATC can ensure IFR separation; otherwise, ATC will re-route or restrict non-participating IFR traffic. Although MOA's do not restrict VFR operations, pilots operating under VFR rules should exercise extreme caution while flying within an active MOA. During initial preflight briefing, pilots should always request information on the status of MOA's along their planned route of flight (local flight service stations retain and update schedules, as provided by the appropriate military authority, for MOA's within its flight plan areas.) This information is available, but only upon pilot request. Additionally, prior to entering an active MOA, pilots are encouraged to contact the controlling agency for traffic advisories due to the frequently changing status of these areas.

### WARNING AREAS

Areas established in international airspace to identify for pilots where military activities occur that can be hazardous to nonparticipating aircraft. Pilots planning to penetrate warning areas should contact the using or controlling agencies for real-time information on the activities being conducted along their route of flight.

### ALERT AREAS

Airspace which may contain a high volume of pilot training or an unusual type of aerial activity. Alert areas do not impose any flight restrictions or communications requirements. Operations within Alert Areas are conducted in accordance with Federal Aviation Regulations without waiver. All pilots flying in an alert area are equally responsible for collision avoidance and they

should be particularly alert when operating within these areas.

### CONTROLLED FIRING AREAS

Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to nonparticipating aircraft. Limitations are imposed on the use of CFA's to ensure that these areas do not impact civil aviation operations.

### MILITARY TRAINING ROUTE (MTR'S)

Routes established to accommodate low-altitude training operations that must be conducted at speeds in excess on 250 KIAs below 10,000 feet MSL (some segments may extend above 10,000 feet MSL due to terrain or other requirements). Only the route centerline is depicted on aeronautical charts. Although normal route width is 5 to 10 miles from centerline, some segments may be as narrow as 2 miles or as wide as 20 or more miles from the centerline.

### WHAT ACTION SHOULD BE TAKEN BY CIVIL PILOTS TO AVOID POSSIBLE CONFLICTS WITH MILITARY TRAINING ACTIVITIES AND TO ENHANCE SAFETY?

It is extremely important that, during preflight, pilots contact the FSS and check the latest issues of aeronautical charts and the AIM to familiarize themselves with military training activities. Special emphasis should be placed in SUA/MTR's along their proposed route of flight. FSS's can provide the frequency of the controlling agency which may be able to issue clearance to transit the area ifg conditions permit. A number of SUA areas have a specific frequency depicted on the sectional chart through which pilots may obtain up-to-the-minute status information. It should be noted that schedule use does not necessarily reflect real-time utilization of these areas/routes. Operational requirements, weather, aircraft availability, etc., have a dynamic effect on military training activities; therefore, it is incumbent upon the pilot to always keep alert for other traffic. Pilots should not hesitate to call a FSS to determine the current status of SUA/MTR's in the vicinity of their flight.



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AERONAUTICS COMMISSION**  
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Columbia, SC 29228

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## This Month... Inside Palmetto Aviation

- SCAC Approves Funds for two airports
- This B-24J is the last of the breed
- 1990 Airports Conference is here

... and much, much more!

# 1990 SC Airports Conference Schedule

## Tuesday, November 13

2 p.m. - 8 p.m. Exhibits  
2 p.m. - 6:30 Early Bird Registration  
Golf, Nature Walk Sign-Up  
6:30 - 8 p.m. Horry County Reception

## Wednesday, November 14

8 - 4 p.m. *Registration Desk Open*  
7:45 a.m. - 8:45 Breakfast - sponsored by  
Columbia Metropolitan  
Airport  
9 a.m. - 9:30 **Welcome:**  
Jim Hamilton, Chairman  
SCAC  
9:30 - 10:15 **Aviation Congressional  
Overview**  
10:30 - 11:15 **FBOs, Airport Managers &  
Commissioners**  
11:15 - 11:45 **Environmental & Land Use  
Issues**  
Noon **Lunch:**  
**Approaching 2000: Aviation  
in the '90s**  
**The National Transportation  
Policy**  
Cas Castleberry, FAA  
Regional Administrator  
12:30 p.m. **Golf Tournament —  
Possum Trot**

1:30 p.m. Nature Walk — Tom Kohlsaet  
6 - 7:30 p.m. Sponsor's Reception  
Exhibits

## Thursday, November 15

7:30 a.m. - 8:30 Breakfast - sponsored by  
Greenville-Spartanburg  
Airport  
8:30 - 9 a.m. **Working together: The  
relationship between  
consultants, sponsors and  
government**  
9 a.m. - 9:30 **FAA Compliance 1990 —  
What are the changes**  
9:30 - 10:30 **FAA/State Listening Session  
FAA Update on federal  
programs**  
10:45 - 11:45 **Aviation Legal Issues —  
Are there any answers?**  
Noon **Lunch:**  
Ralph Hood, Southern-style  
Humorist  
FBO Magazine  
1:30 **FAA Airport Safety Session**  
Roger Hall, FAA Airports  
Division  
2 - 2:30 p.m. **Airport Safety Committees,**  
2:30 - 3 p.m. **Airport Lighting & Marking,**  
3:15 - 3:45 **Airport Self Inspection**

3:45 - 4:15  
4:15 - 5  
1:30 - 5 p.m.

7:00 p.m.

**Safety During Construction**  
**General Aviation Security**  
*Southern Region,*  
**State Directors Meeting**  
**Seafood Bash Extraordinaire**  
**Marker 350 Restaurant**

## Friday, November 16

*exhibits 7:30 - 12:30 p.m.*  
7:30 a.m. - 8:30 **Breakfast - Sponsored by  
Charleston Aviation  
Authority**  
8:45 - 10 a.m. **S.C. Economic Impact  
Report**  
Bob Zuelsdorf, Wilbur  
Smith Associates  
10 - 10:45 a.m. **Distribution of S.C.  
Economic Impact Reports  
to Airports & Counties**  
11 a.m. - Noon **How to best use  
the Aviation Economic  
Impact Report**  
Questions and Answers  
Noon-12:30 p.m. **Closing Remarks —  
Jim Hamilton**  
**Grand Prize Drawing:  
Will You Be the Winner?**

This publication is printed and distributed by the South Carolina Aeronautics Commission in the interest of aviation safety and to foster growth of responsible aviation in the state. The viewpoints expressed in articles credited to specific sources are presented as the viewpoints of those writers and do not necessarily reflect the opinion of the South Carolina Aeronautics Commission.