

**SOUTH CAROLINA**

**S. C. STATE LIBRARY**

APR 26 1993

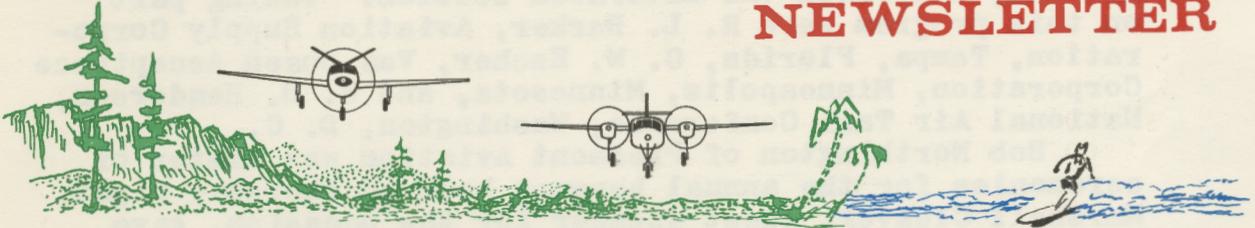
**STATE DOCUMENTS**



Ae 825  
S. A 84  
V19/8

# AVIATION

## NEWSLETTER



PUBLISHED MONTHLY BY THE SOUTH CAROLINA AERONAUTICS COMMISSION

G. C. MERCHANT, JR., DIRECTOR

**No. 8**

**AUGUST, 1968**

J. F. BARRY ASSISTANT DIRECTOR

**VOL. 19**

### SOUTHEASTERN AVIATION TRADES ASSOCIATION CONVENTION

The eighteenth annual meeting of the Southeastern Aviation Trades Association was held in Clearwater, Florida on July 24, 25, 26. 175 members registered for the meeting at the Statler Hilton Inn which is located on the beach at Clearwater.

The meeting was well attended by operators from the Southeastern states, and the Statler Hilton Inn provided an excellent setting for a combination vacation and business meeting.

Ronald Blackmon of the Champion Spark Plug Company, served as moderator for the Thursday morning session. The theme of this meeting was Professionalism in General Aviation. Serving on the panel were Ed Marshall of Aviation Insurance Service, Art Templeton of Southern Airways Co., and Vernon Strickland of Hawthorne Aviation. Also Wally Congdon of Southern Airways, Lee Gilligan, and Ken Guthrie.

Will Plentl, Director of the Virginia Aeronautics Commission, was master of ceremonies for the luncheon on Thursday, and Paul Rodgers, Vice President of Ozark Air Lines, was guest speaker.

Bob Hudgens of Montgomery Aviation Corp., Montgomery, Alabama, moderated the afternoon session. Taking part on this program were R. L. Barker, Aviation Supply Corporation, Tampa, Florida, C. W. Escher, Van Dusen Acceptance Corporation, Minneapolis, Minnesota, and W. B. Henderson, National Air Taxi Conference, Washington, D. C.

Bob Northington of Piedmont Aviation was master of ceremonies for the annual banquet held on Thursday night. Marshall Cleaver, guest speaker for the occasion, gave the members his views on un-identified flying objects.

Breakfast on July 26 brought to a close one of the finest SEATA meetings that we have had so far.

The Steering Committee wishes to thank these sponsors for their fine cooperation and generosity in helping to make the SEATA Annuals such a real success:

Aviation Supply Corporation of Florida, Tampa, Florida  
 Champion Spark Plug Company, Toledo, Ohio  
 Hawthorne Aviation, Charleston, South Carolina  
 Standard Oil Company, Florida Division, Miami, Florida  
 Gulf Oil Corporation, Atlanta, Georgia  
 Southern Air Ways Company, Atlanta, Georgia  
 Piedmont Aviation, Inc., Winston-Salem, North Carolina  
 Humble Oil Company, Charlotte, North Carolina  
 NARCO Avionics, Fort Washington, Pennsylvania  
 Van Dusen Aircraft Supplies, Hapeville, Georgia  
 Van Dusen Aircraft Supplies, Sandston, Virginia  
 Shell Oil Company, Atlanta, Georgia

#### NEW FAA INSPECTORS

C. W. Wier, Jr. and L. P. Shearer, Jr. have joined the FAA District Office in Columbia.

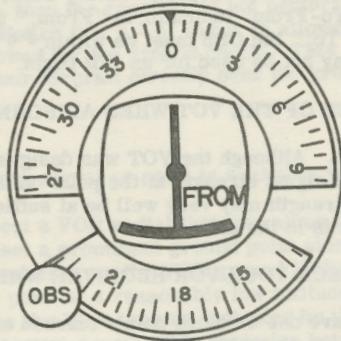
Mr. Wier comes to us from Oklahoma City where he served as the principal operations inspector and has been in aviation for over 25 years. Since he is from S. C., we would like to say welcome home.

Mr. Shearer joins us after 10 years at the Atlanta Center in control of high altitude traffic; he has also served as flight instructor in an aero club and as an airline pilot. Twenty years in aviation qualify him well to serve you as general aviation operations inspector.

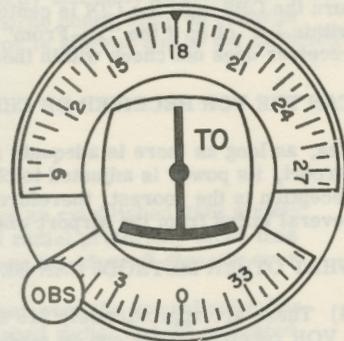
Department of Transportation  
 FEDERAL AVIATION ADMINISTRATION  
 IFR PILOT EXAM-O-GRAM\* NO. 22

VOR Receiver Accuracy Check

VOT CHECK  $\pm 4^\circ$  TOLERANCE



$0^\circ$  FROM



$180^\circ$  TO

In actual operations, Air Traffic Control has reported instances where IFR aircraft have been several miles from the center line of the airway. In some of these cases, it is suspected that this course error was due to the inaccuracy of the aircraft's VOR receivers. Results from the Instrument Pilot Written Examinations indicate that many pilots need to review the correct procedures for checking their VOR receivers.

FAA regulations state that no person may operate a civil aircraft under IFR using the VOR system of radio navigation unless the VOR equipment in that aircraft--

- (1) is maintained, checked, and inspected under an approved procedure; or
- (2) has been operationally checked within the preceding ten hours of flight time and within 5 minutes before flight, and was found to be within the limits of the permissible indicated bearing set forth... (FAR 91.25 b and c).

\*\*\*\*\*

Assume that your aircraft is not maintained, checked, and inspected under an approved procedure. You last checked your VOR receiver 11 days ago and during the ensuing period, your aircraft has flown 6 hours. In this case,

- (1) can you legally take off on an IFR flight before checking your VOR system?
- (2) can you take off on an IFR flight when the weather is VFR if you check your receiver by a ground point after becoming airborne?

The answer to both of these questions is NO. You must comply with both aspects of the rule. The check must have been made within the preceding 10 hours of flight time, and also the check must have been made within the preceding 10 days.

## WHAT IS A VOT AND WHAT PROCEDURE SHOULD BE USED TO CHECK YOUR RECEIVER BY USE OF THE VOT?

The VHF Omnitest Equipment (VOT) is a complete facility for transmitting and monitoring a standard test signal used for checking VOR receivers. The VOT can be described as a low powered VOR facility which transmits omnidirectionally a zero (0) degree VOR course. When you tune in the VOT, you should get the same indications as you would for any VOR if you were on the 0 radial: If you set the Omnibearing Selector (OBS) to 0, then your receiver should indicate "From" on the "To-From" indicator, and the Course Deviation Indicator (CDI) should be centered. If you set the OBS to 180 then the "To-From" indicator should indicate "To" and the CDI should be centered.

The recommended procedure for using the VOT to check a VOR receiver is to tune the VOR receiver to the published frequency of the test facility, found in the Airport/Facility Directory of AIM. Next, turn the OBS until the CDI is centered. If the "To-From" indicator is "From," the OBS must be within  $\pm 4^\circ$  of 0; if the "To-From" indicator is "To," the OBS must be within  $\pm 4^\circ$  of 180. If the receiver does not check within these limits it may not be used for an IFR flight.

## CAN THE VOR RECEIVER BE CHECKED BY USE OF THE VOT WHEN AIRBORNE?

Yes, as long as there is adequate signal strength. Although the VOT was designed to be used on the airport, its power is adjusted to obtain sufficient signal strength at the point on the airport where reception is the poorest, therefore, the signal strength may very well be at sufficient strength several miles from the airport when the aircraft is in the air.

## WHAT OTHER METHODS CAN BE USED TO CHECK YOUR VOR RECEIVER WHEN ON THE GROUND?

- (1) There are approximately 215 airports that have one or more points marked on the airport where a VOR receiver check can be made. A list of these airports, giving the certified radial and the point on the airport for checking VOR receivers is found in Part III of the Airman's Information Manual. If you are at one of these airports, you can check your receiver by taxiing to the designated point on the airport, tuning the VOR receiver to the VOR facility to be used, and then setting the OBS to the certified radial. The receiver should then read "From" on the "To-From" indicator and the CDI should be centered. If the OBS has to be turned more than  $4^\circ$ , right or left, to center the CDI, an IFR flight shall not be attempted without first correcting the source of the error in the VOR system.
- (2) If you have dual system VOR (units independent of each other except for the antenna) and are able to obtain an adequate signal from a VOR facility, then you may check one receiver against the other. The maximum permissible variation between the two indicated bearings is  $4^\circ$ .

<b>AIM Excerpts</b>	<b>VOR RECEIVER CHECK POINTS</b>
	<b>AIRBORNE</b>
	<p>Abbeville, S.D.: 278°; 7.5 mi, grain elev; 2500'.</p> <p>Abilene, Tex. (Municipal): 047°; 10.1 nmi silos in center of Ft. Phantom Lake; 2800'. Alternate for lgt acct 090°; 9 NM cit twr and bcn; 2800'.</p> <p>Albion, Ohio: 177°; over twr 7 NM; 5600' MSL.</p> <p>Alexandria, La. (Moloch): 152°; over hangar 3.6 nmi over hangar; 1000'.</p> <p>Alexandria, Minn.: 224°; 8.3 mi, over apch end of rwy 22; 2800'.</p> <p>Allendale, S.C. (Barnwell Co. Arpt): 342°; 15 mi, over N/S rwy.</p> <p>Allinson, Mich.: 307°; 4 nmi over outdoor theatre E edge of town; 5000'.</p> <p>Alpena, Mich.: 256°; 10.5 NM, over Dam NE corner of Fletchers Pond; 2100'.</p> <p>Anniston, Ala.: 082°; 9.5 NM, over center of segmented circle; 2000'.</p>
	<b>GROUND</b>
	<p>Albany, Ga.: 150°; 6 NM, center of tie down area on N edge of ramp.</p> <p>Alexandria, La. (Euler Fld): 151°; 3.5 nmi in front Admin Bldg.</p> <p>Alexandria, La. (England AFB): #1, 822°, 6 mi, run up pad rwy 14. #2, 824°; 4.2 mi, run up pad rwy 32.</p> <p>Alice, Tex. (Jim Wells Co. Mun): 270°; 0.5 mi, on taxi strip N of hangar.</p> <p>Allentown, Pa. (Allentown-Bethlehem-Easton): 178°; on rwy 17 near the intersection of rwy 24.</p> <p>Amarillo, Tex. (AFB/Muni): 207°; 4.5 mi, lctd 985 ESE of centerline on NE end of the NE/SW rwy.</p> <p>Amarillo, Tex. (Tradewind Arpt.): 002°; 3.2 mi, S end on curve of taxiway 50' W apch end rwy 35 centerline.</p> <p>Anderson, S.C. (Muni): 089°; 6 NM, on ramp in front of Trnl Bldg.</p>

## WHAT PROCEDURE SHOULD BE USED TO CHECK YOUR VOR RECEIVER WHILE AIRBORNE?

Note: This check should be made on a VFR flight.

Suggested steps:

1. Check AIM (Part III) for a check point on the ground, the certified radial to use, and the minimum altitude to fly (if given).
2. Tune the VOR receiver to the proper facility.
3. Set the OBS to the certified radial.
4. Fly directly over the ground check point.

When directly over the ground check point the CDI should be centered; if not, turn the OBS until the CDI is centered. If the indicated course with the CDI centered is more than  $\pm 6^\circ$  from the certified radial, then the receiver is not performing satisfactorily and must be corrected before an IFR flight. Notice that a  $\pm 6^\circ$  error is allowed for this airborne check while an error of only  $\pm 4^\circ$  is allowed for the ground check. This additional error is allowed due to the difficulty of positioning your aircraft directly over the ground point.

Note:

If no check signal or point is available while in flight --

- (1) Select a VOR radial that lies along the centerline of an established VOR airway;
- (2) Select a prominent ground point along the selected radial preferably more than 20 miles from the VOR ground facility and maneuver the aircraft directly over the point at a reasonably low altitude; and
- (3) Note the VOR bearing indicated by the receiver when over the ground point (the maximum permissible variation between the published radial and the indicated bearing is  $6^\circ$ ).

## WHAT PROCEDURE SHOULD BE FOLLOWED BY THE PILOT AFTER MAKING A VOR EQUIPMENT CHECK?

FAR 91.25 d states: "Each person making the VOR operational check as specified... shall enter the date, place, bearing error, and his signature in the aircraft log or other permanent record."

## NEED FOR PILOT VIGILANCE STRESSED IN NEW FAA RULE

The Federal Aviation Administration has amended Part 91 of the Federal Aviation Regulations ("General Operating and Flight Rules") to spell out the specific responsibility of pilots to maintain a vigilant watch for other air traffic in order to avoid mid-air collisions.

FAA said this responsibility is now implied in various sections of FAR Part 91 and is generally understood by pilots. However, the agency feels that "a specific statement of the requirement is desirable to emphasize its importance."

Specifically, the new rule states: "When weather conditions permit, regardless of whether an operation is conducted under Instrument Flight Rules or Visual Flight Rules, vigilance shall be maintained by each person operating an aircraft so as to see and avoid other aircraft...."

The rule becomes effective immediately upon its publication in the Federal Register, scheduled for July 24, 1968.

## HELICOPTER GIVES RIDERS VIEW FROM TOP



Lester Hembel helps Mrs. Sylvia Ratchfield aboard. Mrs. Ratchfield is the assistant coordinator for welcome centers in the state.

Les Hembel of South Carolina Helicopters, Inc. made one of his Hughes 300 helicopters available to the chief executives and their wives while they were in Charleston last month attending the Governor's Conference.

By using his three-passenger helicopter, the resident of Saluda provided the dignitaries with short flights over the city and surrounding areas.

South Carolina Helicopters, Inc. operates the helicopters for many other purposes than instruction. Aerial pest control is one use and this Hembel does throughout the Southeast.

Hembel emphasizes the variety of uses to which the helicopter can be put which include flight instruction, charter trips, photography, forest survey, and special promotions.

A love of flying extends throughout Hembel's family. His wife, Caroline, is an instructor and a daughter, Bunny, a school teacher, also flies. There is a son Henry, in the U. S. Air Force and a brother and brother-in-law who are commercial airline pilots.

CAP SOUTHEASTERN REGION CONFERENCE

The Southeastern Region Conference held recently at the Diplomat Hotel, Hollywood, Florida, focused on CAP's role in search and rescue, cadet activities, aerospace education and assistance to the public in time of crisis. One of the highlights of the region's meeting was the pilot upgrading program conducted by the Aircraft Owners and Pilots Association. Over 60 pilots took advantage of the scheduled program to improve their flying proficiency. The flight training clinic was under the direction of Mr. Ralph Nelson, AOPA, Washington, D. C.

Col. Ward F. Riley is commander of the Southeastern region.

Lt. Col. Betty McNabb of Albany, Georgia, was coordinator for cadet activity.

The Southeastern region encompasses the Geographical area of Tennessee, Mississippi, Georgia, Alabama, Florida and Puerto Rico.

BREAKFAST CLUB Con'd

The August 24 meeting will be at the Hartsville Airport and on September 8 at Charles Davis' Airport in Estill. Members are invited to bring their swim suits and roller skates to spend the day at Mr. Davis'.

Plans are being made for a tour to Daytona weekend of September 29, departing South Carolina on Friday afternoon or Saturday morning and returning Sunday afternoon September 29. Additional information will be available by the next meeting.

NOTAMS

New airports at Laurens and Saluda have been completed. Both of these airports are paved and will be lighted by Commission by early Fall. Final inspection by the FAA Airports Division has not been completed.

Stevens Aviation of the Greenville-Spartanburg Airport at Greer has been named dealer for the Hawker Siddëley DH 125 Executive Jet Aircraft.

The Flying Farmers met at the Florence Airport on July 27 with 45 members present. The main topic of discussion was agricultural aviation.

BULK RATE  
U. S. POSTAGE  
PAID  
Columbia, S. C.  
PERMIT NO. 61

---

### BREAKFAST CLUB NEWS

One of the largest crowds to attend the Breakfast Club meeting in the past several years was on hand for the July 30 meeting at Anderson. 152 members had breakfast at the Hartwell Dam. The breakfast was provided by a group of local Anderson pilots headed by Lee Blume. Due to the large crowd, an informal meeting was held on the lawn. After breakfast 50 of the members took advantage of an offer for a sight seeing trip and enjoyed a two hour boat ride on Hartwell Lake.

The August 11 meeting was held in Walterboro with approximately 90 members in attendance. Pilots were met at the airport by 6 young ladies from Walterboro who provided red carpets for their arrival. President Kirkwood reported that several members landed three or four times to take advantage of the reception.

Hickson Skinner's son, a 17 year old student pilot, was awarded the bouncing ball. It hardly seems fair to present such an award to a youngster. Cash prizes were awarded for first, second and third places in a spot landing contest. The names of the winners were not available at this time.