Highlights

- Hot & stagnant conditions continue.
- SOS flies tomorrow.
- VIP visits on Thursday and Friday, July 8 & 9.

Inside

- Ozone attainment in TN 1 hour vs. 8-hour standard.
- Science Team Meeting moves to Friday!
- Whitt's Barbeque A southern tradition continues.

The Daily Plan-it

The SOS Field Study Newsletter Issue 18 July 5, 1999



News to use from around the SOS world!

Weather Update

High pressure continues dominate our weather. It's interesting to see the clockwise circulation centering on Nashville with the high pressure ridge right on top of us. Light (<3kts) south southwesterlies at present. Look for highs in the upper 90's and lows in the mid-70's with more than enough moisture to afternoon generate some Chances thunderstorms. precipitation should increase on Wednesday when a return to southerly flow on the backside of the ridge should provide a little more moisture. Then there's that little tropical wave possibility for next weekend...

SOS Airforce Schedule

The NOAA **WP-3D** and the TVA **Bell 205** are experiencing "soft" down days today. Originally, the **Bell 205** was preparing to fly today but the continuing outage of one of the (1300 MW) units at TVA's Cumberland steam plant rendered the planned experiment of limited utility. And so, with the second Cumberland unit coming up later today, we will wait for tomorrow.

The **P-3** will depart BNA at 11:00 AM CDT tomorrow to conduct

urban characterization and transport studies. The Atlanta GA area will be the target of choice for the early part of the flight with low level passes upwind, over, and downwind of Atlanta followed by a return to the middle Tennessee area for a similar characterization of the Nashville plume in the late afternoon. Total flight time is estimated at 7 hours and 20 minutes. All urban characterization flights will be on the order of 1500 ft MSL with transit calibrations at maximum altitude (25000 ft MSL).

The **Caribou** will depart John Tune at approximately 12:00 noon CDT to conduct a "bow tie and box pattern" across and around Nashville. The bow-tie will consist of 70 km long southeast to northwest and southwest to northeast legs centering on Nashville followed by a smaller box pattern around the Nashville urban area. The 4-hour flight will be at 10500 ft MSL returning to John Tune at about 4:00 PM CDT.

The TVA **Bell 205** helicopter will plan to depart Dickson Municipal Airport at about 1200 hr CDT for a flight to study the evolution of the Cumberland plume under low-wind, west-to-east transport conditions. The helicopter will conduct a series of multiple crosswind traverses of the plume at 10, 25, and 50 mi. downwind

of the plant. Flight altitudes will be between 1500 and 3000 ft MSL. The helicopter will refuel in Springfield and the mission will conclude with a return to Dickson at about 1900 hr. In the event that the Cumberland plant is operating at significantly less than 50% of capacity, an identical mission will be conducted in the Johnsonville plume, with refueling at Dickson.

VIP Tours

Several NOAA and TVA invited Congressional Staffers will be here Thursday, July 8, 1999 for a day-long fact finding tour of SOS that may include an experimental flight on the P-3. Here's the *preliminary* Tour plan for Thursday.

The following is a list of the congressional staffers who will be attending the SOS briefing on July 8. In addition, **Andrew Larkin** from NOAA Legislative Affairs, **Tom White** from Department of Commerce Legislative Affairs and **Mary Anne Whitcomb** from OAR headquarters will be accompanying the staff.

The following Congressional staffers will be attending the Nashville SOS tour on 7/8 (the DC staffers will be flying down the evening of 7/7). **Tom Vanek**/House Science, **Brian**

Wagner/Rep. Ken Calvert, Bart VerHulst/Sen. Bill Frist's Field Representative, Emily Brooks/Sen. Fred Thompson's Field Representative

Also, be aware that there's another less formal, more abbreviated tour scheduled for Friday, July 9, 1999 for some out of town TVA folks, TN environmental groups, and **Tina Bahadori** from EPRI. Stay tuned for updates.

consequence of a series of low ozone years (1989-1994).

The 8-hour standard, adopted in 1997 appeared, at first blush, to be considerably more stringent (in the mid-South), than the former 1-hour standard.

An analysis I did in 1996, based on 1993 to 1995 ozone data, suggested that the number of ozone nonattainment areas in the mid-South northwestern quadrant of the Great Smoky Mountains National Park.

Science Team Meeting

Moves to Friday Night at 8:00 PM due to VIP visit schedule. Don't forget to mark your calendars!

Whitt's Barbecue

9:00 AM Gassaway Building.

Overview of study by Ellis Cowling, Jim Meagher, and others.

10:00 AM to 1:00 PM - BNA Airport. Tour of P-3, Caribou, Bell 205, and, G-1.

1:00 PM -Lunch at Gassaway Building. SOS planning tools.

3:00 PM - Arrive at Cornelia

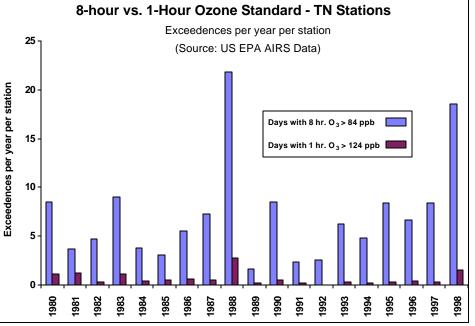
Fort Airpark. Eric Williams, Len Stockburger, and Jochen Stutz should be on standby for presentations.

4:30 PM - **Return to Gassaway.** Wrap-up.

Tennessee Ozone - 1-hr. vs. 8-hr. standard

By Bill Parkhurst

The issue of the relative stringency of the 1-hour vs. the 8-hour annual ozone standard continues to be of considerable regulatory and legal interest. In the mid 1990's many mid-South ozone nonattainment areas were reclassified to attainment as a



would increase from 13 of 122 (\sim 10%) to 52 of 122 (\sim 43%) monitored counties.

It now would seem that perhaps even this is overly optimistic. Now, with a return to more typically higher ozone levels in the late 90's, it would seem that meeting the 8-hour ozone standard will be the exception rather than the rule. Based on ozone data from the last three years (1996-98), only 2 of 20 Tennessee ozone monitors would have met the standard. These monitoring stations are in **Eagleville** a rural farming area in Rutherford County just southeast of Nashville and at **Cades Cove**, rural, low-elevation monitoring station in the

By Hunter Daughtrey

Karen Oliver of the EPA/ManTech VOC crew found Whitt's Barbecue in a Nashville Visitors Guide. It is a local chain of about 8 restaurants which serves pork, beef, and chicken barbecue. She visited the one on Lebanon Pike just of Brilev east Parkway and came awav exclaiming

that the pork 'cue was the closest to Jeff's (a former coworker) that she had had. This was high enough praise for me, so I checked it out. The barbecue itself was really excellent. I wouldn't waste much on the side dishes as they were standard food service. sauces were good, but I liked the thinner vinegar-based sauce better that the thicker red sauce. This was true southeastern pulled-pork barbecue, a food (not to be confused with the western term for grilling out over charcoal, a process). Even though it seems like carrying coals to Newcastle, I hope I can persuade my coworkers to bring me 2-3 pounds when they come home.

Editor's Note Remember that a southern pork barbecue sandwich is supposed to have cole slaw in it. Once you've had it this way you won't want it any other way.

It is amazing what you can accomplish if you do not care who gets the credit. - Harry S. Truman