

Highlights

- Weather on line - hot & stagnant conditions continue.
- SOS airforce all up today.
- Washington VIP visit on Thursday, July 8, 1999.

Inside

- Perspective on Fine Particles.
- 4th of July Fireworks from the Polk Building
- Amerigo's! Fine Italian cooking at a modest price.

The Daily Plan-it

The SOS Field Study
Newsletter
Issue 16
July 4, 1999



News to use from around the SOS world!

Weekend Weather Update

Well, there are a few clouds around, but, by and large, we are in receipt of a plethora of weather riches. High pressure continues to dominate our weather. It's Hot! It's Humid! It's the 4th of July! What did we expect. It has always seemed to me that it rains on the 4th. For those of you that were here in 1995 you'll remember a late afternoon deluge. Plans for a Polk Building viewing were drowned out.

The 5th of July began the slow, inexorable climb to the now world famous (or infamous) 1995 ozone "episode" beginning on July 11th and running through the 15th. We should be so lucky as to have it happen again.

The high pressure ridge is right on top of Nashville waffling back and forth and - depending on the waffle - affecting the transport wind direction. Light (< 5kts) south southwesterlies at present. Look for highs in the mid-to-upper 90's and lows in the mid-70's with more than enough moisture to generate some afternoon thunderstorms. Chances of precipitation should start to increase on Wednesday or Thursday 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** will fly today but not tomorrow. A "soft" down day will allow the NOAA AL folks to do some fine tuning.

The NOAA ETL-sponsored **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** - which flew today - will fly again tomorrow. They plan to depart Dickson Municipal Airport early afternoon to conduct a characterization of the TVA Cumberland and Johnsonville power plant plumes. The helicopter will conduct a series of multiple crosswind transects at altitudes between 1500 and 2500 ft MSL. The helicopter will refuel at Hopkinsville KY.

Upcoming VIP Tours

Several NOAA and TVA invited Congressional Staffers will be here on 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 a *preliminary* Tour plan for Thursday. Also, be aware that there's another mini-tour (à la last weeks half-day affair) scheduled for Friday, July 9, 1999. Stay tuned for updates.

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, possibly, G-1.

1:00 PM -
Lunch at Gassaway Building.

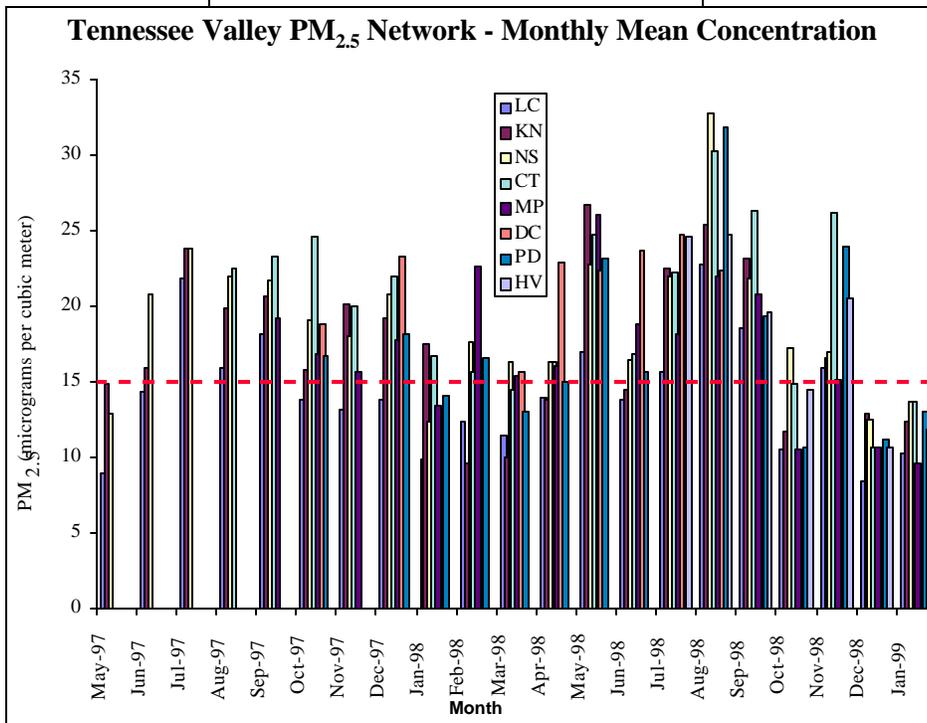
2:30 PM - Arrive at Cornelia Fort Airpark. Eric Williams, Len Stockburger, and Jochen Stutz should be on standby for presentations.

4:00 PM - Return to Gassaway.
 Wrap-up.

Perspective on TN Particulates

By Bill Parkhurst

TVA and state and local programs across the mid-south pooled their financial and personnel resources to install and operate a prototype Federal Reference Method (FRM) PM_{2.5} research monitoring network. Sampling commenced at our three core monitoring stations (Nashville, Knoxville, and Lawrence County TN) on Earth Day (April 22) 1997. Five other stations came on line during the first months of operation including Chattanooga and Memphis TN, Paducah KY, and Decatur and Huntsville AL.



Monthly mean PM_{2.5} concentrations are presented in the following graphic. While it's a somewhat busy picture, at least three things should stand out. **First**, there is evidence of a seasonal pattern with summer months yielding somewhat higher concentrations than winter months. **Second**, as it was for ozone, the summer of 1998 proved a banner year for fine particles. August 1998, in particular, exhibited several stations with monthly average PM_{2.5} concentrations over 30 µg/m³. **Third**, considering that the red dashed line indicates the level of the annual PM_{2.5} standard, it should be of no surprise to anyone that, with the lone exception of the rural background Lawrence County station (14.5 µg/m³), all stations substantially exceeded the level of the PM_{2.5} annual standard (15 µg/m³) ranging from 17.9 to 20.2 µg/m³.

Based on these recent measurements and historical

dichotomous sampler PM_{2.5} data collected by TVA throughout the 1980's, it is abundantly clear that most urban areas and some rural areas of the mid-south will be considerably challenged by the annual PM_{2.5} standard.

Amerigo's!

By Bill Parkhurst

A stalwart band of intrepid - or is that insipid -

adventurers (David Parrish, Jim Meagher, Fred Fehsenfeld, Bill Parkhurst, and Wayne ("Maturin") Angevine) assailed the West End on Friday night.

Amerigo's provided just the right blend of good food and wine at a reasonable cost. Salad, entree, and two glasses of some pretty good wines (we preferred the Australian Shiraz) and our share of the tip came in at \$28.

I had the vegetable penné pasta in pesto sauce with chicken breast and everything was done to the proverbial "t." Although not the gourmand that others in the group are, I can honestly say that it was the finest pesto sauce that I have ever eaten. The cheese-herb focaccia bread was also outstanding along with the house vinaigrette salad dressing. For very good food and at a reasonable price we rate Amerigo's at four of five stars.

★★★★