

Highlights

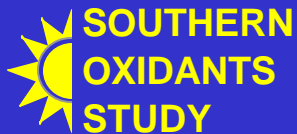
- Weather: (1) getting worse, (2) improving, or (3) same.
- July 1st VIP Visit Summary
- Canister study planned.

Inside

- Entire SOS airforce flies tomorrow!
- Have a Bang Up 4th of July!
- Tomorrow: Fireworks from Polk Building.

The Daily Plan-it

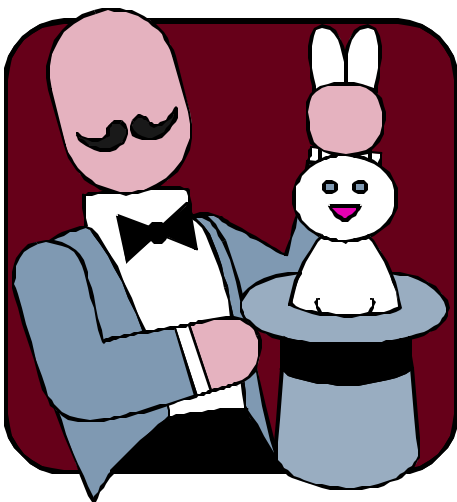
The SOS Field Study
Newsletter
Issue 15
July 2, 1999



News to use from around the SOS world!

Weekend Weather Update

Okay, I was watching **Sports Center** when I should have been watching the **Weather Channel** as I got dressed this morning - and the crack UAH Weather Team is not doing a weather briefing until 1:00 PM. To make matters worse, I'll be at the Tennessee Laboratory Services Building at 1:00 PM meeting with Bill Lonneman and state and local air quality folks to discuss the canister sampling effort so I won't be able to make even an educated guess about the weather later this PM.



Nevertheless, I have discussed the weekend weather prognosis with UAH's own Dick McNider—who, by

the way got lost on the way to Nashville last night—and *he* swears (i.e., "...both the long-range and short-range models agree...") that the long-anticipated high-pressure ridge **is** coming and that things will be hotter and more stagnant as we move into the weekend. And—be still my beating heart—that this ridge should stay in place until mid-week.

Today's weather should be clearing late with high temperatures in the upper-80's and lows in the low 70's. With all the residual surface moisture, there will be a reasonable (20%) probability of connective activity and an isolated thunderstorm or two tomorrow and Sunday.

VIP Visit Summary

In a word, or two, the VIP visit yesterday went very well. Shockingly, as these things go, we were even almost on time. Notwithstanding a blown overhead lamp—and the spare bulb which joined in the "land of SOS blown bulbs" a minute or so later—Jim and Fred impressed the audience with their manifold gifts of expression. Over the years they have both passed over from being communicators to orators. While their technical expertise remains omniscient, their use of analogies, similes, and apocryphal

stories also allow them to "spin a good yarn." Several good and pointed questions suggested that their presentations hit the nail right on the head.

The **P-3** was resplendent as always and jump-suited Jack Parrish and Captain Don Winter added just the right touch of "taut ship" regimentation to the experience. Commissioner Hamilton, a former pilot himself, was most interested in the stories about both the P-3 and our SOS "wounded dove" the G-1.

The next stop was Cornelia Fort where Eric Williams covered all the bases in the succinct and straightforward fashion of a man who has much science on his mind.

Following our CF visit we proceeded to the Tennessee Laboratory Services Masonic Old Folk's Home—which now should be thought of as "Heidelberg East" or the young "volk's" home, where Jochen Stutz, Gerd Höenninger, and Bjorn Aliche showed off the Heidelberg DOAS. Again, the VIPs were highly impressed with the operation of this instrument and its capabilities.

Finally, after dueling with horrible downtown traffic the Polk Building was the *pièce de resistance*. It was a

beautiful windy day with low ozone levels, about 25 ppb.

Canister Sampling Experiment

Under the watchful eyes of Jim Meagher and Bill Lonneman, and with the assistance of the Tennessee Division of Air Pollution Control Tennessee, the Nashville/Davidson County Metro Health Department, and a few SOS folks, the SOS Field Study will collect evacuated SUMMA canister samples at six or seven sampling locations across the Nashville Metropolitan area.

The local program will (Matt Grupke and Doc Rayford) will sample at **Centennial Park** and **Trinity Lane** sites. The State folks (Billy Pugh and Joe Maness) will sample at **Hendersonville** and the **War Memorial Plaza**. SOS operators will collect samples **downtown** (Polk Building), **Cornelia Fort**, and the **Gassaway Building**. Two 10-minute, evacuated-cylinder samples will be collected on each sampling day—one at 10:00 AM and the other 1:00 PM LDT. These days will be timed as to

coincide with the TVA helicopter urban plume flights.

SOS Airforce Flies Tomorrow

It's taken almost four weeks into the 1999 SOS Nashville Field Study, to have the first opportunity for all three aircraft to fly simultaneously. But the day has finally arrived.

The **WP-3D** will depart BNA at about 11:00 AM CDT to conduct a series of crosswind transects characterizing chemistry and meteorology upwind, over, and downwind of the Nashville urban area and downwind of three TVA power plant plumes (Johnsonville,



Cumberland, and Paradise).

The **Caribou** will depart John Tune at approximately 11:00 CDT to conduct a series of 25 nautical mile crosswind transects upwind, over, and

downwind of Cornelia Fort Airpark. The winds, presently predicted to be from the south-southwest the precise orientation of the crosswind legs will depend on the wind direction at the time of flight. The entire 4-hour flight will be at 10500 ft MSL returning to John Tune at about 1500 CDT.

The **Bell 205** will depart Dickson Municipal Airport at about 12:00 Noon CDT to conduct a characterization of the TVA Cumberland power plant plume. Taking care to avoid the Fort Campbell military operations area (MOA), the helicopter will conduct a series of multiple crosswind transects about 10, 35, and 70 miles downwind of Cumberland. All flight altitudes will be at between 1500 and 2500 ft MSL. The helicopter anticipates refueling at the Hopkinsville KY Airport immediately following the 35 mile crosswind transects. The helicopter will return to Dickson at about 7:30 CDT.

Fireworks at the Polk Building!

See story tomorrow!