

## Highlights

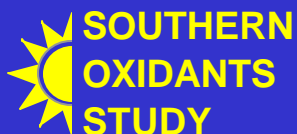
- Hot & stagnant weather to end this PM & Saturday
- SOS Air Force Staying on Ground on Saturday.
- What happened to the P-3? Inquiring minds...

## Inside

- VIP Tour Summary
- Science Team Meeting here Friday at 8:00 PM.
- SOS Field Study T-shirts Arrive. Here's how to get one!

# The Daily Plan-it

*The SOS Field Study  
Newsletter  
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## News to use from around the SOS world

### Weather Update

Our hot and humid weather should come to an end this evening with an approaching cold front presaging a fast moving continental high-pressure system. Precipitation probabilities increase as the front slides in with a chance convective thunderstorms this afternoon. These unsettled conditions should give way to general showers throughout the day tomorrow and on into Sunday morning. General clearing is expected on Sunday afternoon.

### SOS Airforce Schedule

So far as I know, everyone's staying on the ground on Saturday as we take a moment's respite in the expected rainy conditions. What with the aggressive flight schedule and the VIP visits and all, it's been a pretty hectic week.

It will be a wonderful time to catch up on data analysis, fixing that wayward instrument, enjoying an enriching Nashville cultural experience,



pronouncing absolution on that long-suffering laundry, or finding the time for a good, relaxing meal.

### VIP Tour Summary

Well, I wasn't there for all of it but what I did see appeared to be both well done and well received. After introductions and welcomes by Dr. Ellis Cowling, State Commissioner Hamilton, and TVA's John Shipp, Jim Meagher and Fred Fehsenfeld used their patented scientific tag-team approach (and a nice Power Point presentation) to explain the breadth and depth of the 1999 SOS Nashville Air Quality Field Study.

With the hallmark of flexibility that has made them veritable legends in their own time, Jim and Fred managed to segway flawlessly back into the science when the P-3 was "altitudinally challenged." The aircraft tours were well received as SOS has once again put together a fine array of airborne instrument platforms. The P-3, G-1, Bell 205, and Caribou were all in attendance. One thing's for sure, it sure was hotter 'n blue blazes out at Cornelia Fort yesterday

afternoon.

A particular round of SOS applause should go out to NOAA's **Mary Anne Whitcomb** and TVA's **Tim Meeks** for helping put together this soirée.

### What Happened to the P-3?

#### By Jack Parrish

By now it must be common knowledge that we had a malfunction on the P-3 today that caused the cancellation of the Nashville urban plume/VIP flight. Here are a few details we've found so far.

The failure was in the fire warning loop surrounding the turbine of the Number 3 (starboard inboard) engine. It is a continuous loop, and if an actual fire burns through the element, the circuit is broken and a fire warning light and alarm occurs.

One hour before flight, the system tested fine, but just before engine start, the test indicated an open circuit. After the quick fix items were checked, we determined at least part of the loop had a short and would need replacement.

The loop is made up of three zones in which there are seven sections. When one of the sections fail, the others still work. So, when you think about it, to have serious trouble in flight, first you must have an engine fire (something rare in turboprops) or bleed air leak, then your fire would have to be in the engine with the bad fire warning loop, and further, your fire would have to be in the area of that engine with the bad section, before the fire could get out of control before proper indication occurred.

All that being said, we had no second thoughts about canceling the flight for safety reasons. Thanks to warning systems like these, and our policy that says either they (the safety systems) work or we don't fly, we really do believe the most hazardous part of any flight is the drive to and from the plane (even to the Gassaway

Building, depending on who's driving the dump trucks).

Just thought y'all might want to know.

### Meetings & Changes

Don't forget the **Science Team Meeting** tonight at 8:00 PM. I am told that a significant amount of really good **data** will be considered.

### How to get a '99 SOS T-Shirt?

We can't give these away to just anyone, so we will expect validation of some or all of the following requirements.

- Spend a significant portion of the prior year planning to get all your essential stuff to the Nashville SOS Study while avoiding the Fan Fare rush.

- Spend most of your summer in Nashville working 12- to 14-hour days in the heat and humidity while being vilified by your boss back home who doesn't know how much "fun" field work is.

- Do laundry at the "Jumbo Washeteria" on Antioch Pike while discussing religious tracts and the relative merits of wrinkle remover sheets with the local gentry.

- Get terminal case of ticks & chiggers at Cornelia Fort Air Park.

- Show up at the Polk Building for an abortive attempt to see the fireworks.

- See that Bill Parkhurst gets your proper name, e-mail address, and phone & FAX numbers.

- Lock your keys in the car with the engine running or get your car towed by parking on 2<sup>nd</sup> Avenue.

- Forget which shopping center your visiting wife is at or get lost on way to Nashville from Huntsville Alabama and explain it by saying that the "forecast model must have gotten it wrong."

- Use at least one authentic southern slang term or euphemism such as, "That dog won't hunt," or "You can't swing a dead cat in here without hitting a gol-durned meteorologist."

### Thoughts for the Day

**"It isn't pollution that's harming the environment. It's the impurities in our air and water that are doing it."**

- Dan Quayle

**"You got to be very careful if you don't know where you're going, because you might not get there."**

- Yogi Berra