Jeff Griffiths comments for Conference Call July 24 2008

Response to the EPA's Charge Questions Regarding the Proposed Aircraft Drinking Water Rule and Statistical Sampling

1. Statistical Sampling: EPA asks for SAB's recommendation on (1) the use of statistical sampling methodologies, specifically on what type of monitoring scheme would allow a statistical sample to be representative of the whole fleet, and whether such methodologies, if allowed, should only be used in conjunction with onboard or other supplemental treatment such as adding as disinfectant or ultraviolet light?

The comments received to date from the Committee have been informative. To add to the mix, I would like to note that the fleet is composed of a finite number of different kinds of aircraft. I would like to make sure that the sampling that is done represents the fleet mixture, since some aircraft may be less or more prone to contamination.

One member has suggested an initial 1 in 10 screening to obtain some initial data on contamination. I think this idea has merit. Having said that, I am more persuaded by the comments of another member that each aircraft is an "independent entity with unique source waters" and that none are identical. In my opinion, the suggestion of doing sampling just prior to maintenance, which is both required and frequent for the jet fleet, is more protective of the public. Tying the sampling to the start of the maintenance period does allow for cleaning of the system during the maintenance period without having the plane grounded during an active flight schedule.

2. Temperature of Sample Taps: **EPA asks for SAB's recommendations on (1) whether sampling should only be limited to cold taps when they are available; and (2) if a cold tap is not available in the galley, should the air carrier measure and provide sample temperature to EPA to provide some indication of whether the temperature achieved is high enough to alter the microbiology results.**

The obvious basic issue here is that hot taps will kill or decrease the number of microbes that might be detected using standard culture techniques. While the public health benefit is that the heat may decontaminate water that is contaminated, it is still contaminated water and we do not allow people to drink contaminated water in the US because we think someone will heat it. This is inconsistent with public health policy. Heating systems also malfunction and the danger is that a source of contaminated water will not be identified when the heating system is functional.

Cold taps should always be sampled when cold.

Hot taps should have the heating circuit turned off when sampled, and sampled cold. I don't know what a negative result from an hot water tap that contains truly contaminated water is telling us, and my guess is that in some proportion of flights, the hot water "doesn't heat" and that supply is then separately heated or used.