



FEDEXMEC
Air Line Pilots Association, Int'l

**Environmental Standards
Committee**

September 14, 2016

From: Capt. Bob Avery, Environmental Standards Committee Chairman

Newsletter #7

Cockpit headsets + oxygen mask solutions + update on talks with FedEx

Fellow Pilots,

The Environmental Standards Committee (ESC) has never surfaced a pilot work environment health and safety issue without proposing reasonable solutions that would have a direct positive impact on pilot health and wellbeing while being mindful of Company resources and limitations. With four years of history diving deep into work environment issues, and with the assistance of highly credible subject matter experts, we continue to offer the Company win-win solutions and any assistance we can render to resolve the issues.

This newsletter covers a new item on our watch list—microphone windscreens. Small, simple and inexpensive little pieces of foam that would reduce health threats in our work environment. Additionally, we are proposing a quick, inexpensive and logical short-term solution regarding potential health issues created by substandard cleaning and sanitization practices for our crew oxygen masks. Finally, we want to update you on discussions with the Company regarding outstanding ESC issues because many pilots are asking—what do we know of *where the Company is on these issues?*

Microphone windscreens

FedEx purchases Telex communications headsets for our cockpit communications. All new headsets come with a microphone windscreen—that small piece of foam that covers the microphone on headsets you have used at past flying jobs. Microphone windscreens are a small but important detail most of us forgot about along the way.

Microphone windscreens serve three useful purposes, according to Telex factory representatives:

- Reduce or eliminate 'popping,' 'voice clipping' and annoying wind sounds caused by the mechanical impact of fast moving air (your voice) across a bare microphone. The Telex 850

headset (used by FedEx) operating instructions manual states: *"The microphone includes a replaceable windscreen to minimize popping, hissing, and breathing sounds when speaking."* Reduction of these distracting noises noticeably improves the clarity of our communications with ATC, hence, increases our safety margin.

- Windscreens protect the equipment. Every pilot naturally spits when talking into the headset microphone. Many pilots over many months can deposit a lot of spit into the small holes exposing the internal works of the device. According to Telex factory representatives, spit that enters the microphone is corrosive and can degrade communications, damage the intricate microphone mechanism or render the microphone totally inoperative, [as indicated in this recent AML write-up](#). Replacing a \$400 headset destroyed by avoidable corrosive spit is a waste of our Company's resources.
- Headset microphones are positioned against our lips and frequently touch our lips. Personal microphone windscreens would prevent our lips from touching the same bare microphone that many pilots before us may have contaminated with their spit, germs and viruses.

[Here is a cockpit headset](#)

[Here is a cockpit headset microphone without a windscreen](#)

[Here is a cockpit headset microphone with a windscreen](#)

Pilots constantly spit on, sometimes sneeze on, and frequently touch the microphone to their lips. If pilots before you were infected or sick, germs and viruses can be passed on. The National Institute of Health says that at least 50% of U.S. adults have the herpes simplex type 1 virus (oral herpes, or HSV-1), an infection that occurs on the mouth and lips. The virus is transmitted by human saliva or the fluid from the herpes soar, according to the University of Maryland Medical Center. According to several websites discussing microphone windscreen hygienic considerations, using a bare microphone after another person is akin to using someone else's toothbrush. With regards to our FedEx cockpit microphones, we are talking about multiple 'someone else's' tooth brushes.

Sani Coms supplied to our cockpits can wipe off some of the undesirable substances but, because microphones are porous and are constructed with holes for sound entry, protrusions and angled surfaces, 100% removal of saliva, pathogens and undesirable particulate matter is impossible.

Sickness is an uncomfortable inconvenience for the infected pilot and generates a cost to the company when the pilot cannot work. Besides improving communications and preserving Company resources, personal microphone windscreens would provide an important sanitary barrier for the user, which could help prevent sickness.

The ESC is advocating that FedEx purchase microphone windscreens for pilot's personal use. These are low cost items when purchased in bulk from a manufacturer. If the Company would supply twelve personal windscreens annually, a few could be carried in your flight bag and easily slipped on the microphone (after you wipe it with a Sani Com). At the end of your flight, you can take your windscreen with you. Your personal windscreens can be periodically cleaned in a small wash machine garment bag and then reused. If you lost windscreens or needed more for any

reason, the product could be made available in our uniform store or purchased online through a number of sources. This new practice would be akin to brushing your teeth with your own toothbrush.

Justifying the cost of FedEx providing personal microphone windscreens would be no different than the justification for Sani Coms in our cockpit or hand sanitizer in our aircraft toilet (or soap and water in the toilets of all other FedEx workers).

Sick pilots are a significant cost to our Company when they miss trips. If that cost can be mitigated, it should be. It is highly probably, but unsupportable with data, that the economic benefit of issuing microphone windscreens to pilots would far outweigh the insignificant cost of these small pieces of foam. Especially during flu season.

The FedEx ALPA MEC will request that FedEx purchase and distribute microphone windscreens to the crew force.

More on oxygen masks

[ESC newsletter #3](#) and [newsletter #4](#) discussed crew oxygen mask sanitization and health issues. As a recap, the ESC believes O2 masks should be cleaned and sanitized more frequently than once every six years in our aircraft and more frequently than *never* in our simulators. (Note: aircraft O2 masks that break before this six-year servicing cycle are removed and sent out for repair, which may include cleaning. However, breakage does not occur often.) Mechanics who have disassembled the regulator of our crew O2 masks (behind the microphone where you cannot see or clean with a Sani Com) said, *"it looks like someone coughed a pizza into the regulator."* Remember, OSHA does not allow one industry worker to wear an oxygen mask after another worker until it is cleaned and sanitized. But, as we've discussed, pilots are not protected by OSHA and must accept the standards set by their airline.

Here is a simple 2-part solution for eliminating crew O2 mask issues at FedEx:

- Immediately: FedEx can purchase crew O2 mask sanitary shield inserts to protect pilots from inhaling pathogens and undesirable particulate matter that builds up over years. These inexpensive inserts act as a mini-HEPA filter, blocking nearly 100% of all pathogens and particulate matter for 8 hours of usage life. Filters can be used in our aircraft and simulators. [Here is an example of an O2 mask insert](#) from Zodiac, the manufacturer of the Eros masks used in FedEx cockpits. This highly effective fix could be implemented as fast as the inserts could be purchased from the supplier.
- Long run: Masks, including our simulator masks, should be cleaned and sanitized in accordance with airline industry best practices. Sending masks for inspection and cleaning once per year is a common practice in the airline industry.

[This ALPA white paper](#) is an excellent document discussing a number of considerations and the seriousness of potential health issues associated with contaminated crew oxygen masks.

In Summary

In our occupation, health and safety are inseparable. The health and well-being of our pilots is critical to FedEx business and airline safety. With regards to cockpit headsets and oxygen masks, lack of proper procedures and equipment may place pilots at increased risk for contracting transmissible disease. The result of a sick pilot, especially in the middle of a long international trip, can cause a disruption of business and needless waste of our company's resources.

Recap of outstanding issues

Before we summarize the state of our discussions with the Company, here are the issues currently in focus:

- Contaminated air, including:
 - Toxic particulate matter in our aircraft ventilation systems
 - Lack of ozone converters on some long-range aircraft and maintenance on devices that are in our aircraft (more on this soon)
 - Lack of training for pilots and mechanics on fume events
- Oxygen mask sanitization
- Potable water tanks not properly serviced
- Aircraft disinsection procedures
- Substandard general hygiene conditions, including:
 - Servicing and deep cleaning of aircraft toilets
 - Lack of soap and water for washing our hands while on duty
 - Headsets with bare microphones that allow for the transmission of germs, viruses and undesirable particulate matter (a new issue)

Details of these issues can be reviewed in previous ESC newsletters, especially [newsletter #3](#), through the links below.

Update of discussions with FedEx

We are now in the sixth month following ALPA's 31 March presentation and delivery of a substantial amount of data to FedEx Regulatory Affairs and Flight Ops senior leaders. This presentation was reported in [ESC newsletter #2](#).

Last month, FedEx delivered a proposal to our MEC that offered cockpit ambient air testing on "up to" six round trip domestic flight sectors. The ESC sent the proposal to three subject matter experts—a public health scientist specializing in toxic substances found in aircraft air systems, an industrial hygienist specializing in contaminated cabin air, and a science and technology consulting firm specializing in the matters of our concern. These SMEs were asked to evaluate the FedEx proposal with ALPA objectives in mind. Regarding contaminated air, the three ALPA objectives are to: (1) Clean the toxic particulate matter out of the ventilation systems and initiate an ongoing program to keep air systems clean, and (2) install ozone converters on long-range aircraft not equipped with these devices and review maintenance procedures for ozone converters that do exist in our fleets, and (3) implement [ICAO circular 344-AN/202](#) which provides guidance on education, training and reporting practices relating to fume events.

After reviewing the FedEx air testing proposal, all three SMEs reported the same opinion—that testing proposed by FedEx did not address the objectives or achieve a healthier pilot work environment. For these reasons, our MEC replied to the FedEx proposal asking for effective remedies to counter air contamination issues and for a meeting to discuss outstanding matters.

Remedies for any of the environmental, sanitation and general cleanliness issues we have highlighted up to this point have not been forthcoming from FedEx management. They have indicated their desire to do so at some point in the future, but so far no date has been offered. Obviously we think ample time has passed, and effective actions should have already been taken to remedy these issues.

Insite—ASAP—AML (with photos, when able)

We salute the growing number of vigilant pilots who are reporting substandard hygienic and health conditions onboard our aircraft. The importance of this documentation cannot be overstated. But we need more. If we will not accept the responsibility to report unacceptable conditions we encounter, we will live with these conditions forever. In the end, we will get what we deserve. It's that simple.

No data = No problem = No change.

We need your feedback

If you have a story, question or comment on any work environment issue relating to hygiene and health, please send it to FedEx-ESC@ALPA.org or call/text Capt. Bob Avery. Your input is a tremendous help in supporting ESC efforts.

About the FDX ALPA Environmental Standards Committee

The ESC was established to foster acceptable hygiene and health environmental standards in our pilot workplace. The ESC mission is to research, document, report on, and positively impact health, safety, and hygiene-related environmental threats and issues that exist onboard our aircraft. We will work in a diligent, responsible, and professional manner with a sharp focus on our reason to exist—promoting health and wellness for every FedEx pilot, every day they fly.

[Review ESC newsletter #1 \(introduction of ALPA ESC Committee\)](#)

[Review ESC newsletter #2 \(report on March 31 ALPA briefing to FedEx\)](#)

[Review ESC newsletter #3 \(outlining environmental issues and threats\)](#)

[Review ESC newsletter #4 \(helping ourselves\)](#)

[Review ESC newsletter #5 \(use of insecticides onboard FedEx aircraft\)](#)

[Review ESC newsletter #6 \(more on use of insecticides\)](#)

Fly safe and fly healthy,

Capt. Bob Avery

Environmental Standards Committee Chairman

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