Maintenance is to fix and restore systems. But is there another function that can be specified to give crews something to think about? Are there other decision making criteria available?

**MB:** Is the pilot (Captain) willing to exercise his emergency authority when a system fails? If he decides to do that he has to realize the implications if the system fails further. If the captain decides not to exercise his emergency authority, maintenance will not give that extra information for trouble shooting (i.e., recycling a circuit breaker which is not advisable in flight). If the information the pilots are looking for is not in the flight manual, then they can call us.

**JJ:** From a dispatch point of view it may be an ETOPS issue. So, we don’t want the aircraft landing at an airport that doesn’t have the capability to fix it. Maintenance is a big help to us in making this decision. For example, Maintenance may say it’s okay to continue to destination airport which allows us to confidently get the aircraft to an airport that is equipped to handle it and its passengers.

**IB:** We sometimes find in Maintenance the “Fix it” attitude. Pilots are often guilty of this as well. There’s a problem - we want to fix it. However, we don’t want to think about fixing the problem as an immediate solution: get the airplane on the ground and then fix it.

Boeing manuals will often lead the flight crews to troubleshooting. How do you feel about trouble shooting from this perspective? Some pilots are reluctant to do certain things.

**MB:** Troubleshooting can be diagnosis. You may have the symptoms but not know the cause. We are very careful about doing and determining the cause. Troubleshooting outside the flight manual is not done. As long as it is in the flight manual, you are not stepping outside the bounds. Troubleshooting is when you go beyond the flight manual.
We sometimes see the ATC issue where a controller tells a pilot, “when you get on the ground you will have some paperwork to fill out.” This is the last thing a pilot needs to hear when they are in a stressful situation. Can’t ATC just shut up?

JJ: ATC’s job is separation. Operational control is up to the pilot and dispatcher; it is not shared with ATC. Pilots tend to follow ATC instructions without question when they don’t have to.

PO: Training ATC to shut up – pilots don’t want to hear too much. ATC sometimes talks too much in certain situations. In this case, it’s not deliberate to cause trouble.

The discussion is mostly about in flight emergencies. But what about once you are on the ground? The emergency is not over. There are fire trucks to deal with, fire on board possibly, diverting, etc. Does the panel feel that dealing with emergencies on the ground is as important to address in relation to emergency and abnormal situations?

JJ: Yes. Passengers have to be taken care of. Runway closures for example, if the distressed aircraft closes a runway down in ORD. Are passengers going to be taken care of medically? What about passengers without visas? These are all issues that needs be addressed as well as reports to make. There are many things that come up when this happens.

Are all ATC training scenarios based on airborne emergencies? Do you train for ATC emergencies that happen on the ground? For example, loss of radar?

PO: We do train for ground emergencies and we train from the beginning. We treat it as a normal situation not as an abnormal situation. (Pat continues to explain that all of the European states have different systems for each state, they are working towards standardizing it.)

Pilots are afraid of declaring an emergency because of maybe getting a violation or even losing their license. Safety comes first! Do what you have to do; pilots need to speak up so we can help you.

PO: Bad publicity is a factor, for example, the press monitors the frequency. It’s a problem. Just change your squawk – the press can’t hear that!