

Need to develop a customized in-house [Human Factors](#), [LOSA](#), or [SMS](#) program? [TACG](#) can help!

[Dr. Robert Baron](#) is the President and Chief Consultant of [The Aviation Consulting Group](#). He performs extensive work in his core specializations of Human Factors (HF), Safety Management Systems (SMS), Crew Resource Management (CRM), and Line Operations Safety Audit (LOSA). He consults with, and provides training to, hundreds of aviation organizations on a worldwide basis.

Articles may not be copied, distributed, or used in any way without written permission.

### **Human Factors Hotspots**

Take a good look at your Human Factors (HF) course. Does it strategically focus on current aviation maintenance “hotspots” or are you literally trying to cover dozens of topics in just two days (check the EASA HF recommended training syllabus and you will see what I mean). The good news is that all of those topics in the EASA syllabus are recommended—*they are not cut in stone*. You have the ability to customize topics to fit your organization’s specific needs.

According to our Line Operations Safety Audits for Maintenance (LOSA-M) data as well as a review of the last ten-plus years of maintenance accident/incident reports, it is clear that **safety culture** and **procedural deviations** are two of the most significant contributing factors in aviation maintenance-related accidents and incidents (and, typically, procedural deviations are a manifestation of an unhealthy safety culture). Yet, many HF courses only speak to these topics in a very cursory way, if at all. This is a missed opportunity.

I’m not diminishing the importance of topics such as, for instance—Motion and Vibration—but spending an inordinate amount of time on these types of topics at the expense of more relevant topics is not the most productive way to use your limited time to make an impact on behavioral change.

When choosing your hotspots, keep in mind that there are “global” hotspots (the things that are happening at MRO’s all over the world) and there are resident hotspots (the things that are indigenous to your specific organization). Your syllabus should address both global and local; however, more emphasis should be placed on your local issues. In many cases there is a strong similarity between global and local hotspots, but there will always be unique issues that are specific to your operation.

How do you get this local information? Your company’s Safety Management System (SMS) is a great start. Also look at Maintenance Error Decisions Aid (MEDA) data, Maintenance Operations Quality Assurance (MOQA) data, Aviation Safety Action Program (ASAP) data, incident/accident reports, occurrences, on the job injuries, etc. And don’t forget that you can get a lot of information by simply observing operations in real-time. This is where a LOSA for maintenance program is very beneficial. All of these data sources will assist you in identifying the unique hotspots that can be used for focused training in your company’s HF courses.