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.

Looking Forward to Your Next Accident

A Safety Management System (SMS) is a holistic program intended to identify and mitigate various safety risks within operators' organizational and operating environments. This is accomplished through reactive, proactive, and predictive methods. Reactive refers to the things (accidents, incidents, occurrences) that have already happened. It is unfortunate that these events happened to begin with but on the flip side they typically provide us with some of the most detailed and useful information, through a thorough investigation into root cause(s). In other words, it is easier to quantify the event, and as a result that makes it easier to present the case to management for action. This is reactive safety, and although it can provide excellent information, it doesn't do much to prevent the accident or incident from happening in the first place. I call this "look back" safety. Unfortunately, many companies still rely extensively on "look back safety" as an accident prevention method.

One of the benefits of SMS is that is promotes today's paradigm shift towards proactive and predictive safety. Proactive and predictive measures are not intended to replace reactive measures, but instead to complement them (there will always be events and thus there will always be reactive responses). However, much more emphasis is placed on preventing those events with the use of proactive and predictive tools. I call this "look forward safety" because we are trying to prevent events from happening in the first place by identifying and addressing the

various links in the chain that might be joining together *before the event takes place.* A *proactive* safety example is the use of hazard reporting forms by employees. *Predictive* safety examples include having a Line Operations Safety Audit (LOSA) or Flight Data Monitoring (FDM) program.

Many times when I work with clients I ask one simple question; what will be the cause of your next accident? After a few moments of awkward gaze I start to get answers. "Runway excursion", "loss of control inflight," "controlled flight into terrain," etc., etc. Then I ask what will be the contributing factors that will lead to that accident? "Fatigue," "lack of training," "management complacency," etc., etc. Then I say to them, "congratulations, you have just 'looked forward' to your next accident, now how are you going to prevent it?" Welcome to the world of proactive safety!