

DOM and Technician Professionalism

In this article I will try and develop a few useful points on the professionalism of maintenance technicians and Directors of Maintenance. Over a long aviation career one sees a lot of success and failures linked to professionalism or the lack of. I did wonder if professionalism is the right word or should I be using an older one to explain what I want to discuss, like airmanship?? One definition I found is as follows. *“Airmanship is the consistent use of good judgment and well-developed skills to accomplish flight objectives. This consistency is founded on a cornerstone of uncompromising flight discipline and is developed through systematic skill acquisition and proficiency. A high state of situational awareness completes the airmanship picture and is obtained through knowledge of one’s self, aircraft, environment, team and risk”*. One can modify this to fit maintenance by simply substituting maintenance for flight

Professionalism refers to the methods, characteristics, and attitudes of a person performing a task that requires higher education or advanced training. The noun *professionalism* is usually used to describe the type of behavior you would expect from them. Regardless of the word chosen, I will be looking at the characteristics and behaviours expected of aviation technicians and Directors of Maintenance in today’s aviation environment.

If you have been following my articles in DOM, you will have noticed I did write about attributes needed to advance in the aviation field. Another article spoke to the reasons why governments round the world standardized training, technician certification and licensing. Hopefully this all fits together in some understandable manner.

Technician Professionalism

The first step in being a professional technician is to ensure you are as well educated and trained as possible in aircraft knowledge. This includes a thorough understanding of aircraft, engines and aircraft sub-systems, emergency procedures, avionics, theory of flight, etc. In addition, one must develop the necessary hand skills to repair aircraft and systems which requires troubleshooting analytical skills. A professional technician must attain a high level

of knowledge of their environment. This includes understanding their physical environment as well as the societal, regulatory environment they work in.

They need to understand the organizational environment, including company and corporate culture. The advent of mandatory Human Factors training in many countries really brought to the attention of the technicians that subjects normally were contained in supervisor or manager education and training also applied to them. Gordon Dupont a fellow DOM contributor and well known educator in the field can attest to the fact that human performance directly affects professionalism or the lack thereof. The Dirty Dozen does covers them all. Being just good enough, complacency, failure to follow procedures and following negative company norms can undermine your efforts to be professional. The proof lies in many accident reports and enforcement actions where well meaning and technically competent technicians and licenced individuals fell foul of one of the human factors which led to the unfortunate event.

Professional technicians need to have an in-depth understanding of risk, including understanding the risks to discipline, skill, and knowledge They need to be able to do simple, in the head risk analysis in real time as well as doing more complicated analysis as required. This can be as simple as having someone check your work, or going back to see if I really did close that panel, or more complex risk assessments using written analysis.

Professional technicians are ones who continue to develop their technical skills by continuous education, taking advantage of all possible employer training, including attending college courses in their own time. Physical skills cannot be neglected and proper attention needs to be paid to health matters so that hand and eye coordination and good brain functions are not impaired. Understanding the effects of chemicals, alcohol and other substances is part of being professional and task ready.

Director of Maintenance Professionalism

Once a person begins to climb the path to more senior management positions in maintenance operations a new set of professional skills is needed. Management skills acquired by education, training and experience become more critical. The percentage of time spent on being a technician shifts as one rises higher and takes on more management tasks. One needs to move away from any over reliance on technical skills, recognize one's bias and avoid becoming complacent

as one's life becomes more involved in human and financial resource management. One sign of a DOM's professionalism is treating these matters as seriously as technical challenges.

Information management skills and communications skills become a major part of one's professional tool kit. A DOM who practices his communication skills, being vigilant in how they communicate by using the appropriate words and engages in active listening is a true professional. Looking for feedback and actively soliciting it is another good sign.

One cannot be a professional DOM without good cognitive skills. This can be developed by education and training to be able to understand your situation and problem solve within it. Being able to make decisions under stress using the tools you have acquired and remain calm truly indicates a professional approach to the DOM tasks. Being aware of your own limitations, self awareness, and compensating for them is professional. Fully understanding the effect of over work fits into this skill. An over worked and tired DOM can lead to poor decision making and the possibility of falling into one the Dirty Dozen traps.

Team Skills

Part of being a professional is how well you play with others on your team. Technicians in general tend to be loners who seem to be most content to plan their work and accomplish it by themselves. In fact, much of their work can be found in situations where only a single person can access the equipment. This does not mean they do not like company at breaks and meals, just different type of personality trait. However, having said that we all know of situations where team work is needed, some simple examples are aircraft engine runs, towing, working many snags at one time and so on. As soon as one starts to be promoted to team lead or on up to DOM, team work is unavoidable. The professional needs to be able co-ordinate programs and tasks, lead and align decision making among the group.

This requires performance monitoring of all the team members and providing feedback in a positive manner. Leadership imitative is part of the professional approach and this all takes good interpersonal skills. Professionals are also skilled at communications and situational awareness.

Summary

In the beginning I decided to use the word professionalism rather than airmanship. The principles overlap somewhat. Airmanship among many may sound too old fashioned and maybe too tightly linked to flight operations. My main point is that aviation flight operations and maintenance have both developed “airmanship” or professional standards. Many of these are now written in regulations, advisory material, training guides, manuals and polices. However, some are still known as good trade practices developed and practiced over the last century or so.

Professionalism can also be understood as following the values and principles embodied in airmanship. Attitude can also be a major part of being professional. Do not let hazardous attitudes affect your work and career. Some are as follows. The regulations are for others; I can do better. Don't be impulsive, check the manuals and procedures before acting. Don't think your bullet proof, bad things can happen to you as well as others. Avoid taking unnecessary risks by thinking you can do it by taking chances outside of what is prudent under the circumstances. Try to avoid being negative, its better to think there may be something I can do to fix this.

One sign of acting and being professional is continuous self improvement by attending course, seminars and reading literature relating to your area of expertize. You will also find as you advance, that the more non aviation education and learning interests you have make it easier to circulate among the leaders of the aviation industry and other segments of society. Continue to strive for self assessment and excellence in what you do. Be disciplined in managing your workload, performance, attitudes and stress. Last but not least be positive and enjoy your aviation career serving a vital transportation system.