Growth is good, but a consensus is forming that the lack of qualified personnel is a major challenge to that growth. International Air Transport Association estimates that its member airlines will need 17,000 new pilots a year over the next 20 years. Boeing estimates look for 360,000 new pilots over the same time period, and that doesn’t include business aviation, the very light jet market and so on.

That’s a lot of pilots. So, how do we decide when new pilots are ready to go on the line flying jets? Current international regulations are not much help. The minimum legal requirement is an instrument rating and a commercial pilot license; a commercial pilot license earned on small piston-engine airplanes may have made sense 60 years ago, but it doesn’t do much to prepare a first officer for an RJ or an Airbus A320.

In the past, this hasn’t mattered; the military, the marketplace and the legacy airlines set standards far above the legal requirements. During the ’70s and ’80s, big militaries with high turnover supplied lots of pilots to the civil aviation market. Places like North America and Australia could count on the rich reservoir of their large general aviation segments for experienced personnel, while legacy airlines in Europe and Asia invested heavily in ab initio training programs to produce pilots at a controllable rate.

Things have changed. The flow of military pilots has slowed. The industry is only a few years into this new expansion, and the pool of highly qualified general aviation pilots is largely gone. The world that was dominated by legacy carriers is increasingly influenced by start-up airlines whose expansion plans do not allow for the time or overhead costs associated with ab initio programs.

The burden of deciding who enters the air transport business, and at what skill level, now falls on the shoulders of overburdened chief pilots and training managers at hundreds of regional airlines and developing low-cost carriers. They typically have few resources and must cope with massive turnover rates as their pilots get hired away by the pilot-needy legacy carriers. But somehow they have to deal with a succession of new pilots, some with minimum qualifications, and teach them to fly transport category jet aircraft while maintaining a perfect level of safety. Some have to cope with trainees that may speak different languages, come from incompatible cultures and hold certificates of questionable origin. When you step back and look at this, it doesn’t make much sense: Some of the most constrained people in our business are being asked to do something that is nearly impossible yet at the same time is absolutely essential.

What can we do? First, we had better lend these people a hand. They need the best practical tools and advice, and when they say the system is being pushed too far, we need to listen. Second, this industry should take another look at how we want to set competency and qualification requirements and put in place a sensible system of regulation that matches the demands of this century. More could be done, but that would be a good start.

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