

# Keeping the pilot pool stocked

**Though times are tough and pilots are being laid off, the airline market must also be ready for when the global economy grows again, as Bernie Baldwin reports.**

It's important not to get too bogged down with the current financial climate, but to put it into the context of the growth that we've seen in the industry for the last five to ten years and the return to that trend that we believe will occur." Capt Rob Clarke, CEO of CTC Aviation Services, is giving his opinion on what, in today's global economy, is the worldwide requirement for pilots and whether airlines still need to press on with their training programmes.

"Only last year, the industry was focussed on the global pilot shortage and discussing the issues that the forecast of air travel doubling in the next 20 years would bring," Clarke adds. "Most of us in the industry see the current situation as a 'blip' in the global demand for pilots, and whilst we don't know precisely how long the current conditions will last, we should be pressing on as much as possible with the training programmes previously started – airlines are obviously a critical part of this.

"There is a long lead time for training programmes, almost as long as ordering new aircraft. And, like aeroplane orders, it may be that training programmes have to be changed or flexed – but they should not be forgotten, or we will, at some point in the not-too-distant future, face an even bigger headache than we were forecasting last year."

That question of how much operators should be doing in this downturn draws differing responses from around the training providers. Petri Louhivuori, commercial director of Finnair Flight Training Center, has split leanings. "Airlines must look into the future and make sure that we have the necessary pilot resources when the business starts to grow again. Ab initio pilot training is important to secure the entry level at that stage," he proclaims, but adds: "Airline type training for entry pilots is on hold now, as the pilots are not needed and the training would be a lost investment."

## ENSURING CONTINUITY

Jim Davis, managing director of Rex and its subsidiary training arm, Australian Airline Pilot Academy (AAPA), is all for ensuring continuity. "In an environment where airlines are parking their planes, most carriers will see no growth or even negative growth in pilot numbers in the short term. This is not uniform for all countries, and there are regions like China and the Middle East that are still pressing ahead with increases in their fleets, albeit at a slower pace," he notes.

"While many orders are being delayed, there is still a tremendous backlog of new aircraft to be delivered. If demand is to pick up next year, or even the year after, then training should be in the planning stages now," Davis proposes.



Trainees at CTC using a VFD device.

At Oxford Aviation Academy (OAA), that is exactly what is going on. Taking into account an average lead time of 18-24 months to go from zero to airline qualification, OAA's managing director, Anthony Petteford, comments, "We have a number of 'white-tail' students who are amazingly enlightened about the fact that a requirement that hitherto was large has now been deferred. And they are still going ahead with their training. If the white-tail market recognises this, then surely the airlines must recognise it."

OAA is pressing ahead, getting keen candidates started in their training. Funding is a challenge, admits Petteford. "All that we ask is that the airlines support the programme to nurture young people who want to come into the industry. If you encourage people during a downtime, the quality of the candidate will be high," he stresses.

With operator support, Petteford is convinced that students will find funding slightly more



The flight line of Piper Senecas at Oxford Aviation Academy.

readily. "At OAA we have stimulated interest in the market, and enrolment is ongoing. But we will run out of steam if airlines don't back the schemes. We cannot just turn it on with a tap. Last year was a good one, and the beginning of 2009 has been, too, but the energy is coming out of the market. All we need is a contribution from carriers showing interest."

Swiss AviationTraining (SAT) has plenty of demand at present from its major customer Swiss International Air Lines. "In Europe, especially in Switzerland, there are requirements for pilots," reports Uschi Roth, SAT's head of corporate and marketing communications. "Swiss still needs 90 pilots for 2009 and another 60 for 2010. While the need for pilots has

stagnated along with the slump in air travel, Swiss is adhering to its pilot training plan.

"This year, SAT is in a better position," Roth adds. "We intend to run Embraer 170/190 type training for 600 pilots. Last year, we type-trained 577 pilots for Embraer and its international customers. And with the increasing demand for Embraer 170/190 type rating training in the last four years, we have invested in a new E-190 full-flight simulator (FFS), which has been located in Munich since the end of March 2009. Commissions to date already ensure that this FFS will be at least 80% utilised between now and the end of the year." Lufthansa CityLine, Air Dolomiti, Augsburg Airways, Baboo and Alitalia are among the customers.

Although current projections are for 25% fewer aircraft deliveries this year compared with 2008, more than 1,000 are still expected, indicates CAE's group president, civil products and training and services, Jeff Roberts. He acknowledges that the short-term requirement for pilots is softening, but adds the reminder of a source of business for all

providers. "Pilots always need recurrent training to stay current, regardless of difficult financial times," he remarks.

Xavier Hervé, president and COO of training equipment supplier Mechtronix, is not convinced of the need to pull back on training. "Right now in western Europe and North America, there is a corporate paranoia regarding investments, which is a different position from those of airlines elsewhere," he declares. "China still wants to grow, and the ab initio market is not going away there."

Hervé's comment about the Chinese market echoes the feelings of the training providers – in particular, OAA's Petteford. "The Asia-Pacific region as a whole still needs more, but they are

at least continuing with training," he explains. "Vietnam shows no drop-off – in fact, there is considerable growth. And in Malaysia, there is demand from AirAsia, which has its own academy but needs more pilots right now than that academy can currently supply, so it is looking outside, too.

"Australia, on the other hand, saw Qantas suspend training programmes almost overnight. In other markets, Europe and North America are fully catered, while South America is growing. With the regulatory model there largely based on the FAA system, we will probably see a lot of US pilots heading there."

"For training in Africa, most organisations are nervous about taking risks in the market," Petteford adds, continuing his global review. "The Middle East is interesting, as a lot of people are having a go at building training centres – but is anyone doing it successfully enough for the long term? There is a strong push to get indigenous pilots, but I don't know if there'll be enough people who will want to do it. For a while, I'm sure we'll see a mixture with some ex-pats. In India, where demand remains high, the regulatory system is decades behind where it needs to be. It's possible to get a CPL only by training in a Cessna 152."

## MPL VALUE

If airlines do not keep enough students going through programmes in lean times, then a rapid scramble to train enough for the good times is likely to follow. Such a scenario could be helped by the multi-crew pilot licence (MPL) programme, which can take candidates from ab initio status to the right-hand seat of an airliner in 60 weeks. Each provider has its own views on the programme and its relevance to their carrier customers.

"MPL has, so far, not been favoured in Australia, where there is a ready pool of pilots of regional aircraft to feed into the requirements of the bigger airlines, and there is no incentive for these carriers to invest in the extra time and money required for an MPL," states AAPA's Davis. "Even Qantas, which runs an ab initio cadet programme, has not gone down the path of an MPL. For our pilot academy, we →

**Artist's impression of the AAPA Training Academy to be constructed in Wagga Wagga, NSW, Australia, by 2010, housing all AAPA cadet training and Rex pilot and cabin crew ground schools.**



are still adopting the traditional approach of a CPL and command instrument rating [CIR] for airline cadets.”

Nor is MPL a priority at Finnair. “The training alternative needs to be looked at once we are back to larger training volumes,” Louhivuori remarks. “Presently, the ‘old system’ is sufficient and does not require investment.”

CAE, while supporting MPL, simply views it as an alternative that clients can use to create commercial airline pilots. “Every customer has different needs and requirements, and this is one option,” observes Roberts. “We developed an MPL programme because we believe some of the market will want it. We are continuing to develop other traditional programmes. In the end, we will give our customers what will serve them best.”

SAT, meanwhile, is convinced that MPL is the future of basic pilot training. “Traditional ATP training has hardly changed at all since the start of the jet era in the 1960s,” Roth declares. “MPL reflects the future use of customised basic training for commercial pilots. Increased use of synthetic training equipment and an augmented focus on training in a multi-crew concept will ensure targeted development of the required skills.”

“The very early rollout of MPL by SAT means we can contribute actively to specific implementation of the programme, and help to shape the regulatory requirements to a certain extent with the Federal Office of Civil Aviation [FOCA],” she adds. “Increasing training effectiveness by applying MPL is in the interest of our customers. The new training path will allow future airline pilots to prepare better for commercial cockpit work without having to go through all the previous intermediate stages in licensing (PPL, CPL and IR).”

Just as convinced is CTC’s Clarke. “We’re a longstanding supporter of MPL and believe there is a place for it in the industry,” he declares. “Targeting training towards the end goal of becoming a commercial pilot is one of the foundations that our company is built on. Our ab initio programme – CTC Wings – adopts a ‘vertically integrated’ [VI] approach to training. This mirrors some of the MPL methodology

whereby, wherever possible, we adopt airline standards, disciplines and procedures – we apply this philosophy as early as selection. Therefore, our pilots are trained with a continuous focus on their end goal, rather than training to PPL standards and then converting to commercial operations. Taking a step-by-step approach, we continue towards producing an MPL that is workable for all, but before it can really take off, the carriers do need to be involved in the process a great deal earlier than the majority are currently willing to be.”

OAA has more than embraced MPL. The company will be launching a programme shortly in collaboration with Flybe. “On the first course, we will have 12 students who will be trained at Oxford. We decided to hold the course here to be able to manage and control it better, and will be the first to deliver an MPL course in UK airspace,” Petteford claims.



**Computer-based training at CTC Aviation Services.**

“To ‘de-risk’ the course for the students, we are creating a parachute scheme. This means that should the MPL fail, OAA will provide – at no extra cost – the incremental flying hours required to qualify via the CPL/IR route. So we’re not using the students as pawns. We and Flybe, as 50:50 sponsors of the course, are taking the risk. It might not end up being the most profitable thing we’ve done, but how do you develop new things without putting funds in and trying?”

Of course, MPL is not the only advance that the training providers are making. Other new or improved techniques and procedures are in development, aiming to make a difference to training quality and/or time taken, lowering costs without losing fidelity.

“One good cost saver is internet-based training on certain topics,” notes Finnair’s Louhivuori. “The pilots can perform this when suitable for them and in their own time, as long as they are ready on a given date. This we have seen as a growing trend among cost-conscious operators.”

AAPA’s Davis identifies necessary improvements in some basic areas. “Pilot training is essentially a combination of textbook knowledge plus flying and simulator time. There can be no substitute for real flying hours, nor can there be any shortcuts, although we employ fixed-base trainers extensively to provide simulator time. However, it is in the area of classroom training that there can be the most innovation,” he opines.

“Classroom training has not changed fundamentally for the last 30 years. At AAPA, we are in the process of evolving towards a total CBT [computer-based training] approach. The beauty of this is that the course instructor will be able to pinpoint exactly the areas of weakness of each student through the system and can tailor the assistance to where it is needed.”

OAA’s Petteford has similar thoughts, believing that ATPL theoretical knowledge can be improved. “It’s been stagnant for about 10 years. It will improve with the use of CBT, which has been successful in type rating training,” he explains. “The initial investment may be expensive, but by the year-end, the entire ATPL should be available on CBT.”

“Also, good bridge training – converting from single-pilot ops to multi-pilot ops – will make a difference, saving airlines tangible amounts of cash. It could amount to the equivalent of eight hours of FFS training per student.”

According to CTC’s Clarke, technology is still advancing at a rapid rate, in terms of both simulators – FFSs, FTDs and OTDs – and CBT/WBT. “Whilst there is a need for investment in technology to retain fidelity, overall costs are being reduced through enabling training to take place at locations where

it wouldn’t previously have been possible,” he highlights.

“Increased fidelity in all training aids is enabling a reduction in all ground school and sim footprints in particular, and the sophistication of OTDs is facilitating a decline in the number of FFS details previously required.”

As an equipment provider, Mechtronix’s Hervé is pleased with the move away from FFSs. “This is all part of the change that is happening in training equipment. Ten years from now, training equipment will be radically different. The sensory systems in the human brain are better understood now. So if the cueing is done properly, who cares what the

system is, so long as the performance-based training is right,” he states. “However, I believe that there are a whole bunch of people in this world who don’t want to see it that way,” he adds, cryptically.

#### ■ TRAINING PHILOSOPHIES

Though many of the philosophies of the training organisations overlap, each has ideas of its own which it believes differentiate it from the competition. CAE’s Roberts concentrates on the company’s comprehensive approach.

“We provide an operationally oriented, scenario-based, end-to-end solution supported by simulation-based training tools from ground school all the way to the simulator. We believe that this is the most efficient way to train the pilot and that it delivers the

highest-quality training,” he confirms. “The end-to-end solution includes many initiatives like e-learning and is geared to make training more efficient, more cost-effective, without sacrificing quality. It can be ‘bundled’ or ‘unbundled’ to meet the operational needs of our customers. We can recruit, screen, select and train the pilot for you, or we could just sell you a piece of everything in between – for example, a simulator hour.”

For SAT, Roth notes customised training and on-site training as advantages. Also, coming originally from an airline, operational experience is strong. “We do carrier-orientated training from day one, all adapted to the customer’s SOPs [standard operating procedures].”

Time is a differentiating factor at AAPA, according to Davis. “We have proven that →

we can pick a bright high-school student off the streets, and train him or her to CPL standard plus ME CIR within eight months. This duration will be shortened for the quicker students once our complete CBT system is in place. A shorter course will mean lower fees and, of course, a quicker earning capacity for the trainee pilot. It also enables airlines to respond in a more timely manner to changing pilot demand," he remarks.

Clarke underlines CTC's policy to remain carrier-focussed and embrace new technology wherever possible. "Our courses are almost always conducted around the airline SOPs, and we work closely with individual training departments to provide a tailored service.

"Finally, innovation remains a key tenet of our success," he continues, "and some recent examples include CTC FlexiCrew, launched in

response to the global slowdown to provide flight-deck resourcing solutions for carriers worldwide. The concept has been very well received, and large numbers of pilots have already been successfully placed.

"About to be launched is CTCi [CTCinteractive], an online library of data and courses that individual pilots, training organisations and airlines alike can access."

#### ■ PERSUASIVE CASE

Putting your money where your mouth is can often be a good way to differentiate your product, and it's a tactic used by OAA. "What differentiates us is our willingness to underwrite courses," Petteford reiterates. "At ab initio level, we assess candidates rigorously and put faith in that assessment. So if a student fails the

course at any point due to unsuitability, we refund 100% of their fees.

"That makes a persuasive case for those providing the funding – the student, parents, the banks and the airlines – because they see two risks to their finances: failure of the course, and no employment on completion. So we take half of that away. In fact, with our graduates currently finding themselves in the middle of a recession, we are paying for recurrent training to keep them up to date until they find jobs.

"We recently opened a door with an airline, and I was really pleased with a comment from them, when they said something to the effect of: 'If you take that ethical position with our white tails, then you're the sort of company that we'd like to do business with'," he concludes. ■