Can the captain fly the plane?

New licence replaces stick-and-rudder talent with EFIS competency and multi-crew skills, as **Pat Malone** reports

The new Multi-Crew Pilot Licence is being fast-tracked onto the statute books in the face of misgivings from some training organisations and ambivalence among the airlines it is designed to help.

The purpose of the new licence is to train pilots more specifically for the job they will be expected to do for an airline – the team management of complex systems on a highenergy EFIS flight deck. The MPL downgrades "stick and rudder" skills to the point where some say they may as well be dispensed with. Holders will be able to progress to the left seat of, say, an Airbus A380 without ever having flown more than ten hours' solo, and they will not be qualified to fly light piston singles, even privately.

While FTOs agree that the principle of the licence is sound – it is desirable to tailor commercial courses more closely to the real world of modern hands-off airliner flying – there is disagreement and some concern over how it is being done. The MPL has cleared all hurdles at ICAO and is whistling through the JAA at unprecedented speed, with EASA having said they will accept it if it is established before they take over from the JAA in summer.

As far as *General Aviation* could ascertain, no UK training organisation or airline is yet advising students to look at the MPL route. Misgivings centre on the fact that in order to

make the licence work there will have to be a

partnership between an airline, a training organisation and an ab initio student which guarantees the student a job two years later – something that is extraordinarily difficult in a cyclical industry like aviation, and especially so in the UK.

The cost saving on the MPL is a secondary issue. Industry estimates say that a student who is currently paying some £60,000 for an integrated ATP course plus £20,000 for a type rating might expect to save around £10,000 on an MPL, depending on what the synthetic training element eventually turns out to be. But the MPL will be entirely type-specific, meaning the student would only be fitted for flying a single multi-crew Boeing or Airbus type, chosen early in the course – and if a prearranged job falls through, the student would not be qualified for any other flying work.

In its draft form the MPL calls for a minimum of 240 hours flying, of which 70 will be in an aircraft, while only 10 hours need be solo. The remainder may be done in a simulator, the sophistication of which has not yet been settled. Some pilots who already consider the integrated ATLP course to be light on flying – it currently calls for 140 hours in single and multi-engined aircraft from ab initio to licence issue, plus 55 in simulators or FNPT2s – believe that the further erosion of hands-on aircraft flying is undesirable.

If the MPL becomes the industry standard it will require training organisations to change

their business models quite radically, investing in more synthetic training aids and fewer aircraft. But it's hard to see how the MPL can become a gold standard qualification when there are still many holes in the plot.

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The qualification would suit airlines like Lufthansa which train pilots from the ab initio stage in their own aviation college – and indeed it was Lufthansa who originally promoted the idea to ICAO. As well as producing pilots for the flight deck of tomorrow, the MPL will theoretically save money.

But with relatively few exceptions, airlines in the UK do not pay for pilot training. British Airways, in fact, refused to discuss the MPL on the grounds that they only take pilots from other airlines, therefore it has little relevance to them. But it is known that the MCPL has been the subject of great debate in the company.

Graham Austin, Chief Executive of Cabair College of Air Training, says: "Training for the airline industry for the last ten years had been paid for largely by the independent student. I have reservations about whether any selfsponsored student would put up the money for an MPL, and we are not currently advising people to look at the MPL route."

The FTOs agree that change is desirable to fit pilots more closely with their ultimate jobs. Steve Green, Head of Training and Standardisation at Oxford Aviation, says: "The MPL is driven by the need to put people into the right seat of airliners who have been trained specifically for the job they will be asked to do. Where once we looked only for stick and rudder skills, today we also look for computer skills and numeracy, multi-tasking



Left: Lufthansa flight training on an Airbus A320-200; the airline is pushing the MPL hard Above: Unlike British airlines, Lufthansa trains pilots from the ab initio stage in their own aviation college

Right: Type-specific MPL will be less attractive to pilots whose first jobs may be flying the BAe 146 or Bombardier Q 400 for Flybe Lower right: Holders may be able to progress to the left seat of an Airbus A380 without ever having flown more than ten hours' solo Below: FTOs like Cabair support the principle of the MPL but are concerned about some of the important details



ability, and the ability to work as part of a team.

"Many FTOs support the MPL concept, and I have been urging our regulators to adopt it for a decade or more. The real issue is not the principle of the licence but rather how many flight hours it requires. The figure of 70 appears to have no science behind it, and it's more the arbitrary distribution of hours that is causing misgivings.

"But as far as hands-on skills are concerned, if I were to draw an analogy it would be with a person who is trained to drive an advanced modern train but is unable to drive a steam engine. Today it's the systems that operate the aircraft, and the people are there to monitor and manage the systems." Graham Austin adds: "We are expecting changes in the professional licensing structure anyway, notwithstanding the MPL, and they are overdue because the current system has been in place since 1948. Three years ago I presented proposals for change which included introducing crew co-operation at a much earlier stage in the live flying syllabus, with single-engine flying involving three people – an instructor and two students. Co-operation would be incorporated in the core course, then after the IR you would go to the jet simulator and arrive with a generic rather than a type-



specific licence. Those proposals have not been taken up, but I believe they are superior to what is proposed for the MPL."

Some airlines share the FTOs' concerns. Flybe, the rapidly-growing regional carrier which predicts it will need another 300 pilots in the next four years, is one of the few airlines currently part-sponsoring pilot training. Ian Cheese, General Manager of the company's turboprop fleet, says: "We're reserving judgement on the MPL. While we do have our own pilot mentoring schemes and are more actively involved in pilot training than most airlines, we cannot commit to a student two years ahead.

"At the moment we're experiencing a boom, but I cannot predict what the world will look like in 2008."

From the point of view of airline passengers, a lack of traditional flying skills in a captain, or even a first officer, would be a worry – but is that concern misplaced? No aspiring pilot can expect to hand-fly a modern airliner, and he or she must be prepared to be over-ruled by the systems if more is demanded of the aircraft than the computers think is wise.

Graham Austin thinks we are going too far

in taking so much "flying" out of the course. "The MPL won't really give evidence of command decision-making ability in the real world," he says. "You cannot replicate in the virtual world the stresses you encounter in real-world flying, when you're on your own at 3,000 feet with hills to the left and fog to the right, and decision-making becomes increasingly difficult. However realistic the simulator, in the back of your mind you always know you're going home for supper tonight. I want to know who can keep his head when the chips are really down.



"I think we're wrong in relegating stick and rudder skills to the point where, frankly, you might as well dispense with them. There are those who say that the probability of losing your automatics is so small as to be statistically insignificant, but you can't foresee all circumstances. There was a case of intrusion onto a 747 flight deck where the captain was attacked and control was lost. The wings went to the vertical and the first officer, who was a former Tornado pilot, recognised that the only thing that was going to stop that nose slicing through the horizon was top rudder.

"Then there was the Airbus that was hit by a missile going into Baghdad. It was saved entirely by command decision-making under extreme pressure, and excellent piloting skills. All three hydraulic systems were knocked out and the landing was made using only differential thrust. You can't be totally reliant on the system to correct all errors. At some point you need piloting skills."

AOPA's chief executive Martin Robinson is concerned at the speed with which the MPL is progressing through the regulatory system. "I think there's a lot more to be debated, and that shouldn't be done in an unseemly rush," he says. "There is a shortage of pilots at the moment and some are going into the right seat with as few as 200 hours. You have to remember that for a small air taxi operation, JAR-OPS 1 stipulates a minimum of 800 hours' flying experience. Theoretically the 200hour first officer could be called upon to do everything that was necessary to save the situation if the captain was incapacitated. Are we really going to equip them for that responsibility with the MPL?"



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