



Mirage 3Bs will be progressively retired

attend the EPNER. "Age is indeed a problem", he says. "Attending the school means working very hard because you have to learn a lot in a very short time," he says.

Forced by decreased budgets and fewer military programmes, the French aerospace research establishment is looking for increased international co-operation. The school already has co-operative agreements with the Empire Test Pilot School in the UK, and the US Navy and Air Force Test Pilot Schools. Students are exchanged to perform flight tests in each other's aircraft.

"We recognise each other's diplomas, and it is very useful to have different aircraft from outside France," says Zundel. "It is also interesting for the students because they learn how flight tests are conducted outside France".

A major problem faced by the school is that courses have been taught in French since it opened in 1946. When a high-ranking Dutch air force officer was asked if there were any plans to delegate a Dutch pilot to the EPNER, he said bluntly, "no," because he did not have any French-speaking pilots.

This will change with the new non-experimental flight test course due to start next year, which will be the first one to be conducted in English.

The idea is based on the realisation that with growing international co-operation and the resulting need for greater exchange of knowledge, an English speaking course will be more attractive for foreign students who now need to learn French first.

"We would like to see more foreigners," says Zundel. "It is a very good opportunity to show what France can offer in terms of industry and flight test facilities. To develop its European dimension, the EPNER already includes a foreign instructor on its staff. "Moreover, it will be valuable to get foreign experience and knowl-

more difficulty adapting. "A test flight is never the same as the previous flight. Unexpected things may happen which the pilot has to handle quickly," says Bertrand Zundel.

Ruidiger Knoepfel is an experienced German navy Panavia Tornado pilot, who entered the 1998/9 class. He was asked by his employer, the German Ministry of Defence's Wehrtechnische Dienststelle at Manching, to

edge. But it is not so easy. Convincing other countries to send instructors to our school is a long process. It took us five years to get a German test pilot as an instructor."

Learning the language before attending the school brings an additional complication to an already demanding syllabus. Flt Lt Al Smith, a veteran Royal Air Force Puma pilot, acknowledges the problems. "You have to concentrate a lot harder on language during classes. It is also difficult to brief in French. Another problem caused by several months of language training was that we lost some of our flying skills."

Pilots do, however, appreciate that they are learning another language and realise that the opportunity to attend a test pilot school is a pilot's dream.

"It is an honour for which not many people get the chance," says Smith, who looks forward to flying the new EH Industries EH101 and Boeing AH-64D.

According to Zundel, it has not been decided whether all courses will be in English. Converting existing courses to English is not easy, and while technicians, air traffic controllers and groundcrew must speak English, the interest in speaking French is not dead. All books, manuals, and other technical publications also have to be translated.

TEST FLEET UPGRADES

Other changes concern the test fleet. The school flies with specially instrumented Mirage 3Bs, Alpha Jets, a Nord 262, a Falcon 20, Cap10s, Alouette 3, Dauphins, Puma and an Ecureuil. From the year 2000, the EPNER will retire progressively its three Mirage 3B fighters and accept two Mirage 2000D fighter-bombers.

"The Mirage 3 is getting too old and requires too much maintenance. With the 2000D, we will have a modern fighter with sophisticated weapon systems and fly-by-wire controls," says Dumoulin. He adds that at the end of 1999, a Eurocopter Puma helicopter will be modified with flexible avionics displays.

"This will be an important tool. Normally, the design of a cockpit is tested on a simulator, but not enough to assess if design works well. Often, the in-flight situation is different to what was expected."

In addition, a wide variety of aircraft are loaned from outside the school, and some are rented from the French air force, navy and army, the CEV and industry. A special example of this is the variable stability Learjet supplied by US company Calspan, that can be used to develop the latest flight control software.

Zundel admits that further thought needs to be given to a common European flight test centre. "But it is difficult to find a consensus. Having the same rules and regulations could make negotiations easier, but there remain major differences between the various centres. Countries are also very reluctant to give up similar, well equipped facilities." □



Mirage 2000D with test pilots at the start of a test flight from Istres