

Initial English Language Training for Controllers and Pilots

Mr. John Kennedy
École Nationale de L'Aviation Civile (ENAC)
Toulouse, France

Summary

All French trainee controllers and some French pilots are recruited through annual competitive examinations organised at the ENAC in France. This paper aims to describe the English language programs developed and currently in place for these future controllers and pilots. Developments in the areas of methodology, materials and the testing procedures used will be detailed. Finally, the current resources available at the ENAC for the training of qualified English teachers to work in the field of civil aviation will be outlined.

The Trainees

Controllers

There are two distinct categories of Air Traffic controllers in France. The first are known as **ICNA** (Ingénieur du Contrôle de la Navigation Aérienne) and are recruited specifically to work in larger airports or area control centres. The second are known as **TSEEAC** (Technicien Supérieur des Etudes et de l'Exploitation de l'Aviation Civile) and are initially recruited as technicians. Some of these technicians (about a third at present) go on to be trained as Air Traffic Controllers and take up positions in smaller aerodromes. In order not to make things too complex, this paper will deal primarily with ICNA training. The principles of the approach taken with the TSEEAC trainees who are selected for Air Traffic Control are, however, very similar in nature.

Approximately 150 ICNAs are recruited each year, though this number can vary greatly depending on the staffing needs of the DSNA (Direction des Services de la Navigation Aérienne) the French Air Navigation Service Provider. The selection process is open to all in principle, with no prior aviation background being required, though some prospective candidates (very much the minority) do have such a background. The Baccalauréat (French high school graduation) in Science plus two years scientific higher education forms the minimum academic requirement. The competitive entrance examinations (Concours) include papers in maths, physics, French and English. There are two stages, first the candidate takes written papers in each subject, then, if successful, returns to the ENAC for the final stage of oral examinations.

The English oral exam aims to assess both the speaking and listening skills of the candidates. It is an assessment of the general English level of each candidate and does not relate to aviation or any other particular professional context. For this reason, we currently use our own internal ENAC descriptors, though work is in progress to move over to use of the descriptors contained in the Common European Framework (CEF). Currently the minimum pass level is a grade of 3,5 on the ENAC scale. This could be considered to be the most appropriate departure point on the road to level 4 ICAO. The principle underlying selection is that candidates should show the potential to attain and maintain ICAO level 4 during their future training at the ENAC.

It is important to point out that trainees enter the ICNA training program with different levels of English language competence, while some are at the minimum entry level and thus require a significant level of training to satisfy the ICAO requirements, others need only the addition of aviation vocabulary to attain level 4 ICAO and some recruits have higher levels (including, from time to time, native speaker levels). The aim with such higher level candidates during their training is to enable them to attain and maintain ICAO levels which are higher than the minimum level 4.

Pilots

The basic principles applied in the recruitment of pilots (EPL – Elève Pilote de Ligne) at the ENAC show many similarities to the recruitment of controllers. In terms of the final English oral exam, the test format, the grading criteria and the minimum level required for entry, they are in fact exactly the same. While some students enter at the minimum level, and thus require significant training, just as with controllers we also have pilot recruits with levels roughly equivalent to levels 5 or 6 on the ICAO scale.

Nevertheless, there are some important differences in the profile of the pilot recruits. First and perhaps foremost, it should be pointed out that the entry exam is extremely competitive indeed. The average number of places available each year is around 60, less than half the number available for the ICNAs, and the number of candidates is significantly higher. It would be wrong to conclude that the ICNA entry exam is not competitive, it certainly is, but the competition to be an EPL is that much fiercer. While the minimum academic requirement is just one year of scientific higher education after the Baccalauréat, successful candidates have usually studied more. It is not uncommon for a hopeful candidate to attempt the selection process two, three or even four times. The selection process takes place over three stages with psychological testing forming an important component of the evaluation.

Program Outlines

Controllers

The program for controllers is quite complex in its conception. It runs over three years initially (under ENAC management) and includes eight modules. During the first three modules (about 15 months), trainees spend their time at the ENAC (with the exception of a brief two-month period when they undergo flight training for a Private Pilot's Licence). Each trainee is assigned a post at the end of this period and from then on they return to the ENAC for short periods only. Six weeks immersion training in an English-speaking country are also programmed during this second period. Subject to satisfactory progress, students graduate three years after entering the ENAC and the trainees are then under the management of the control facility during the three to eighteen months of further training leading up to full qualification.

During the initial intensive period of fifteen months spent mostly at the ENAC, trainees receive about 150 hours of English language instruction. It is these 150 hours of initial training that this paper will mostly deal with. This is not in any way intended to minimize the importance of the training that also takes place outside the ENAC. In France there are around 50 specialised language teachers who work in control facilities throughout the country, providing an important contribution to the ab-initio as well as in-service training.

Pilots

The basic program for pilots is rather different from that for controllers, and a good deal simpler in its design. Perhaps the most important difference is that the entire program is under the management of the national French flight training school - SEFA (Service d'Exploitation de la Formation Aéronautique). The ENAC's role in the training is to act as a ground school. Students attend the ENAC for six months of theoretical training and then, assuming they have successfully obtained the relevant certificates, they move on to the SEFA for around eighteen months of flight training. On graduation from the SEFA the trainees will be looking for employment in the private sector.

During the six months they spend at the ENAC they have around 60 hours of English language instruction. English language training continues during the time they spend at the SEFA too, 150 hours, but for the purposes of this paper I will deal solely with the 60 hours of initial training provided by the ENAC.

Classroom Methodology

There is no real difference in the classroom methodology employed in the teaching of pilots and controllers, both populations having broadly similar needs in terms of language input and the skills needed to be certified as operational.

The first point to make about the English language training at the ENAC is that the teaching of phraseology is carried out by the CA (Contrôle Aérien) department for the ICNAs and the TA (Transport Aérien) department for the pilots, not by the Language Studies Department.. The focus in the Language Studies Department is on the plain language that is needed when phraseology does not suffice. In line with their professional needs, instruction is also concentrated more or less exclusively on the speaking and listening skills, with relevant language input provided in the areas of grammar, vocabulary and pronunciation.

Traditionally the ENAC has divided training in the early stages for controllers into general English and aeronautical English. It is not easy to define each of these areas accurately, nor to say where the dividing line lies or how (if at all) they interface with each other. The division seems rather arbitrary and it is currently under review. In the case of pilots, no such division exists

At the ENAC we are fortunate enough to have sufficient resources to be able to take the students for English classes in small groups. Class sizes of 8 for controllers and 10-12 for pilots are the norm. With priority given to the comprehension and production of spoken language in the classroom, it is obviously more feasible to operate with groups which are not too large. During other lessons at the ENAC, the average class size is around 30.

One essential component of our programs for both pilots and controllers is autonomous learning or self-study. Trainees often need quite extensive listening practice to improve their comprehension of particular situations in the professional context. The ENAC has built up a large bank of aviation materials over the years, particularly listening materials, and while some of these materials are used in class as a lead-in to a particular activity, it is generally the case that students need to maximise the time they spend listening to English. By promoting and implementing a self-study program centred around listening, we are able to free up significant classroom hours for speaking.

The success of the above-mentioned self-study program seems to be closely related to the motivation of the trainees. This phenomenon is by no means unique to aviation English teaching, it is very much in line with other language teaching and language learning contexts.

Two areas of difficulty for many of our trainees are listening comprehension, already mentioned above, and pronunciation. While acquiring techniques for better listening and extensive practice seem to aid in resolving the first issue, the process of improving the pronunciation of students seems a lot more complex. The general opinion of many colleagues is that there is 'no quick fix' available. This is an area that we are working on a lot at the moment. Once again, it is not an issue confined to aviation English teaching, although it is critically important when one considers the potential consequences of being misunderstood.

To conclude this section, a mention of a new innovation in our language teaching program: content-based instruction in English has recently been introduced in the form of lessons on 'Human Factors: Communication and Cultural Differences'. This training is being provided by an English language teacher who has developed expertise in the area.

Materials

Recordings of exchanges on the frequency, which are for the most part routine, have been collected by the department for many years. While these dialogues are not usually rich in vocabulary input, due to their everyday nature, the range of accents and the different recording conditions involved do mean that they provide excellent practice in the listening comprehension skill. Non authentic simulations of pilot-controller dialogues, recorded in studio conditions, offer a much richer vocabulary input, a wide variety of scenarios having been prepared over the years. They also offer a useful model for some interactive role-plays.

In terms of listening and vocabulary input, the department has also built up a large collection of incident reports, interviews with aviation professionals and aviation videos. The latter cover a wide range of subjects including aircraft, airports, airlines, safety, security, historical and future developments and environmental issues. These reports, interviews and videos form a launching pad from which speaking and discussion activities are organised.

The department also makes use of a wide range of written documents. It is important to note that the aim is not to improve the students' reading skills, but rather to reinforce vocabulary and to introduce subjects of interest which may then form the basis for classroom discussion activities.

The table below gives a brief overview of the different kinds of materials available to support the English language teaching programs:

Types of Materials	Vocabulary	Listening	Speaking
Recordings of routine live traffic		✓	
Studio recordings of model pilot-controller dialogues	✓		✓
Recordings of live traffic incidents	✓	✓	✓
Incident reports	✓	✓	✓
Interviews with aviation professionals	✓	✓	✓
A wide range of written documents	✓		✓
Written accounts of incidents / Returns on experience	✓		✓
Videos on a wide range of topics of general interest	✓	✓	✓
Role play scenarios (non-routine situations)		✓	✓

I Materials used and language areas developed

Sources of Materials

The Language Studies Department at the ENAC benefits from its internal links with other departments in the school to develop its materials base. Over the years relations have also been developed with outside organisations and recordings have taken place in cockpits, in control towers and with aviation professionals from around the world. The news and media sources which are available to all are also used in the development of courses and lessons by our teaching team.

ENAC staff regularly participate in the ICAEA (International Civil Aviation English Association) and the school is also actively involved in Flight English, a web-based forum where ideas for materials development and effective aviation English teaching practice circulate freely.

These are no more than a few examples, there are many more potential sources of interesting materials that can be used in the Aviation English classroom.

Testing

Controllers

Trainee controllers are tested at regular intervals and after each of the modules they undertake. For at least two years now the Language Studies Department at the ENAC has been using the ICAO rating scale in all oral examinations involving controllers. The rating scale has generally been well received by trainers and trainees alike as being fairly straightforward to implement and understand. Controllers are told throughout their training that level four is the minimum objective, higher levels are of course desirable outcomes and particularly for those trainees who obtained high scores on entry.

At the end of the three-year initial training period, a level of 4+ is required to obtain an ENAC diploma. The reason for this increase in the requirement is to ensure future maintenance of the minimum of level 4. Trainees who fail to attain this level may resit after remedial training.

Pilots

In contrast with the situation for controllers, ENAC is not the manager of the training programme for pilots. Thus it is not responsible for official certification. The current rules in France require that all students at flight schools (private or public) obtain an official certification of their language level through the **FCL 1.200** exam, which is organised at three-month intervals by the **DGAC** (the French Civil Aviation Authority). This examination contains three sections: comprehension of written documents, comprehension of live traffic extracts and an oral exam based on an in-flight situation. Further details can be obtained at the following address:

(www.aviation-civile.gouv.fr/html/prospace/exam/ecoles_formation/FCL1200)

In an official capacity ENAC also tests all trainees using the ICAO rating scale for a final oral exam at the end of the six-month training period. If they are not successful in the DGAC or the ENAC exams, it may delay their transfer to flight-training. In practice, there is a very low failure rate. This, we believe, is due to the high levels of motivation observed among the trainees and appropriate levels of recruitment.

Compliance with ICAO Requirements

ENAC graduation levels for controllers for at least the last ten years have been broadly in line with the 2008 ICAO requirements (level 4). Fortunately, sufficient resources are available at the ENAC to ensure that controllers are given adequate training in the English language. No trainee is permitted to take up a post without having demonstrated a satisfactory level.

The **PELA** (Proficiency Test in English Language for Air Traffic Controllers), developed and validated by **Eurocontrol** is used to certify controllers at the end of their training at the ENAC. The school makes use of both the Listening Comprehension paper and the Oral Interaction exam. Use of this external exam provides additional validity to our testing procedures. Details of this test can be found at the following address:

(www.eurocontrol.int/humanfactors/public/standard_page/Pela.html)

Future Challenges

There are a number of projects that the Language Studies Department at the ENAC is working on at the moment. We are currently studying ways to improve pronunciation training; a key area for us because when students do not pass exams it is often this point that has let them down. We are also rethinking our division of language lessons for controllers into general and aeronautical English. In terms of our testing procedures, we are looking for ways to build in more external checks in order to improve the validity of our overall approach.

The department has also to respond to the new requirements that will come into force as a result of the New European Licence. Under the language proficiency requirements of this licence, to come into force in 2010, a certified level 4 will be necessary to obtain a student licence. This means that we need to implement a more intensive initial language programme to facilitate much earlier certification of trainees. One way for us to use class time more efficiently and to speed up language development is to further encourage autonomous learning. An integrated computer-based materials project is under way in an effort to achieve this and to free up more class time for speaking practice.

One further area where we see potential for development is the possibility of shared language training for controllers and pilots at some stages of their programs. The aims, the required standards, the classroom methodology and the materials used are more or less identical. It could make our operations more efficient as well as providing a valuable experience for both sets of trainees, who are usually taught in isolation.

Teacher Training

Most members of staff in the Language Studies Department at the ENAC joined with little or no previous experience in teaching aviation English. Mostly, they have been trained 'on the job'. Close contacts with other departments in our school has meant that such training has usually been quite efficient. Also, through some in-service training programmes they have had the opportunity to work with groups of qualified pilots or controllers and to benefit from their professional experience.

For teachers working in the control facilities across France the situation is somewhat different. They are often a good deal more isolated and they are in an environment where knowledge of basic ATC procedures is fairly essential to attain credibility in their role. For this reason training courses have been run at the ENAC for these teachers to familiarise them with the aviation environment in order to develop their skills in teaching aviation English.

Building on its experience of running these courses for teachers from control facilities throughout France, the ENAC is now offering (from 2007) a one-week intensive course entitled **Instructing Aviation English (INSTAV)**. Areas covered during this course include the following:

Aviation Background

- ✓ An overview and a brief history of English language teaching in the aviation field.
- ✓ An explanation of ICAO language proficiency requirements.
- ✓ An introduction to the key aspects of Air Traffic Control for non specialists.
- ✓ A description of the role of the pilot in civil aviation.
- ✓ Training strategies to improve and maintain the language level of Air Traffic Controllers
- ✓ Importance of effective communication in ensuring the safety of civil aviation.

Aviation English Teaching Methodology

- ✓ Effective teaching of listening and pronunciation for clear and safe communications
- ✓ Effective aviation topic-based teaching for useful and relevant speaking practice
- ✓ Overview of aviation sources available for materials production.
- ✓ Useful techniques for preparing motivating and effective lessons.
- ✓ Constructing reliable and valid English language tests for aviation professionals.
- ✓ Designing and presenting a series of lessons for aviation professionals

Future dates and further details on this course are available from: john.kennedy@enac.fr

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