



# Teaching aviation English to student pilots

Some challenges

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## Introduction

In spite of a pandemic which has shaken and battered our industry to its core, ab-initio flight training appears to be showing contradictory signs of both contraction and growth. In the midst of damaged economies, national lockdowns and the near collapse of international air travel, some flight schools are reporting rapid growth in student numbers and, with a keen eye on the forecasts, are running flight instructor recruitment campaigns alongside investment in new aircraft and infrastructure. The adequate supply of professional pilots will be one of the keys to the hoped-for recovery of the airline industry over the next few years which presents an opportunity for flight schools and aspiring pilots in the here-and-now.

For the rebuilding of the industry to be effective and just, aviation English language training will play a vital role. This is especially true in ab-initio flight training where, on one hand, the majority of the world's future pilots do not have English as a first language, and on the other, much of the world's flight training capacity exists in the English-speaking world. Even in regions where English isn't spoken as a first language, the language of flight instruction is often English. Setting students up for success on day one means equipping them with the language they need to interact effectively with training manuals, documentation, instructors and peers in the flight training environment.

Regardless of where they train, at some point all students will need to demonstrate proficiency to the baseline ICAO level 4 should they intend to fly internationally, with some airlines setting even higher standards for recruitment. In order to support safe and sustainable civil aviation operations, the need for specific purpose aviation English training to equip students for success at flight school and their career beyond is as pressing as ever.

When Latitude started life back in 2013, it was always our mission to develop products and services to enable individuals to pursue a career as a professional pilot. This was driven by three factors. Firstly, our team has first-hand experience of the challenges of gaining entry to the industry, the stamina, commitment and determination necessary to make that journey. Flight training is expensive, and there is frequently significant pressure on both the individual and the flight school to achieve results. Even for highly proficient users of English, learning to fly is hard work. With weaker language proficiency, the pressure grows exponentially, and for some students, it is sadly a matter of 'sink or swim'. We felt that developing targeted training and assessment would help ease this pressure, both for students and their instructors. Secondly, once training is complete and the newly-qualified pilot takes their seat on the flight deck, language proficiency and communication skills become fundamental to safe and efficient operations, not only in communications with air traffic control, but with crew members who, more than ever before, do not share the same culture and first language. Quite aside from ICAO level 4 regulations and airline recruitment policies, the communicative demands for the airline pilot are real, complex and acute. We felt that if we could help students with language at the front end of their training, we would be setting them up with sound foundations for their future career. Finally, in our experience, working with student pilots is both a privilege and a

joy. In the main, they are intelligent, bright and highly-motivated by the prospect of a career in an exciting, technologically advanced and dynamic industry. They are quick to learn, are unencumbered by experience and have a thirst for all things aviation. As language teachers, there are few experiences as rewarding as monitoring a group of student pilots working with target language while deeply involved in spoken interactions around aviation subject-matter, or watching a student climb out of the aircraft after their first solo, or even bumping into a former student in pilot's uniform on LinkedIn. We knew that if we could play a small part in helping individuals fulfil their career aspirations, then we would be achieving our aims.

Over the years, we've spent a lot of time thinking about language for successful flight training, considering the many facets of design, development and delivery of aviation English programmes for student pilots. If you've read this far, it's likely that you have, too, in one capacity or another. What follows is a summary of six of the challenges that we observe in this exciting area of English for specific purposes. For some of these challenges, we have found solutions, but many questions remain; our understanding of our work evolves through product research and iterative development, through experience and through the conversations we have with our community peers, our customers and our learners. It is these on-going conversations that keep us committed to achieving the best results that we can.

### Challenge #1: Material

Today, there is very little professionally-produced aviation English teaching material for student pilots which is available in the public domain. The majority of published coursebooks address radio communications between professional pilots and air traffic controllers (which, as an author of two, I acknowledge they do with varying degrees of success!) As discussed elsewhere<sup>1</sup>, the ICAO Language Proficiency Requirements have stolen the limelight over the years in terms of research agendas, conference themes and the development of training and assessment products with the consequence that until recently, ab-initio flight training remained largely neglected. Fortunately, this situation is changing for the better<sup>2</sup>, but there remains a gap between what language teachers need to do for their learners and the resources they have at their disposal. The choice for the teacher becomes 'utilise existing but inappropriate content, or develop my own'. Writing and producing good language teaching content is not only a skilled craft, but it is extremely time consuming. Very often, teachers are tasked with not only teaching a course, but writing the syllabus and materials too, often in short order and on a shoestring.

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<sup>1</sup> See <https://www.latitude-aes.aero/blog/what-is-aviation-english>

<sup>2</sup> More recent publications include:

- Friginal, E., Mathews, E. and Roberts, J. (2019) *English in Global Aviation: Context, Research, and Pedagogy* (Bloomsbury).
- Bieswanger, M., Prado, M. and Roberts, J. (2020) *Pilot training and English as a lingua franca: some implications for the design of Aviation English for ab initio flight training courses* *The Specialist*, 41-4.
- Orr, A. and Roberts, J. (2020) *Language education for ab initio flight training: A plan going forward* in Kearns, S. et. al. (Eds) *Engaging the Next Generation of Aviation Professionals* (Routledge).

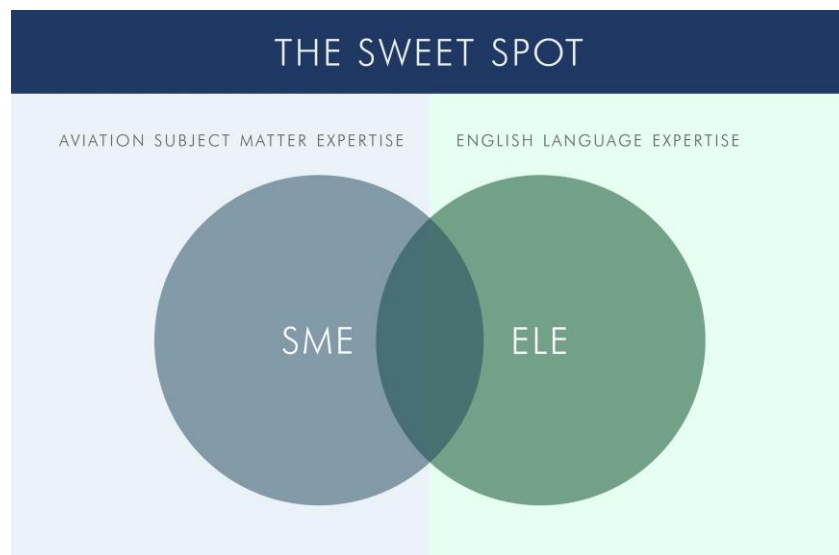
## Challenge #2: The construct

Venturing down the path of syllabus design and content creation, we are then faced with a multitude of questions for which, today, there are no hard-and-fast answers. What aviation English skills and knowledge do students need? What is the 'must-have' lexicon of flight training, without which students will struggle? What are the characteristics of the expository discourse that students will read and listen to, and what aspects of this are crucial to unlocking meaning in the technical aviation classroom? What importance do we assign to the development and integration of reading, listening and speaking skills? What is the role of fluency in a training environment where short, technically precise exchanges predominate? How do we train the strategic competence required to identify error, check, confirm and clarify? There are so many considerations for syllabus design that the task can feel overwhelming.

Allied with the above is our need to account for the fact that student pilots typically don't know anything about aviation at all and yet, justifiably, expect to see some 'aviation' in an aviation English course. True, they are often technically-minded individuals with good background education in maths and physics, but we have to assume a blank canvas of zero flight hours and zero knowledge of aviation. Aspiring pilots cannot be expected to understand a METAR or a NOTAM, to interpret a VFR aeronautical chart or to know the difference between height, altitude and flight level. Learning these things is the preserve of flight training. How, then, do we select meaningful topics, carrier content and language-driven activities that will engage and motivate aspiring pilots to acquire language and to perceive an aviation English course as an essential part of their flight training pathway while leaving the treatment of the underlying subject matter to the flight instructors? The appropriate selection and exploitation of carrier content is extremely delicate with student pilots - far more so than when working with seasoned professionals whom we can confidently rely upon for domain expertise.

## Challenge #3: The SME-ELE partnership

For English Language Experts (ELEs), aviation can seem complex and impenetrable. As airline passengers, we can imagine the safety-critical nature of aviation communications, but few of us get anything more than a glimpse of the flight deck, and fewer still have flown in a light aircraft, or observed a flight instructor taking a student through a pre-flight briefing. Clearly, knowledge of aviation and flight training is important for those teaching English to student pilots, but this is even more the case for those tasked with course development. If the students' first encounter with aviation content is in a preparatory aviation English course, it is essential that the content is both learner appropriate and technically accurate. While ELEs may know their way around language and may be competent writers, the involvement of Subject Matter Experts (SMEs) in content selection and the drafting, reviewing and editing of language activities is crucial. The most beneficial writing partnership is one of SMEs who are 'language familiar' and ELEs who are 'aviation familiar' so there is a knowledge overlap, what we at Latitude call the 'sweet spot'.



This SME-ELE relationship is one of mutual respect, a willingness to learn and a shared understanding of learning objectives. Effective and efficient writing requires clear specification of lesson aims and target language on one hand, and a clear aviation context and knowledge of the learner on the other. The process is inevitably iterative, and demands commitment, patience and humility on both sides. As an ELE who has worked in aviation English for 18 years, I know how easy it is to get it wrong, and in the process of content writing at Latitude, our SME colleagues constantly take us ELEs to the limits of our knowledge, a process which is humbling and frequently reminds me of the gap which can only be filled by the invaluable contributions of experts with first-hand experience of pilot training and flight deck operations.

#### **Challenge #4: Teacher knowledge**

In teaching aviation English to student pilots, there is a strong case for Content and Language Integrated Learning (CLIL) which 'refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content and the simultaneous learning of a foreign language'<sup>3</sup>. Indeed, some have found that in the aviation training context, 'CLIL classes enhance students' attention which leads them to better learning and understanding of the content matter and English language at the same time'<sup>4</sup>. However, for all its advantages, there is plenty of legitimate criticism of CLIL, and one that is particularly relevant in aviation English is the shortage of teachers who have both language teaching skills and aviation subject knowledge. The alternative is teaching in SME-ELE teams, which is not only expensive, but more complicated than it sounds. For

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<sup>3</sup> Marsh, D (2002) *LIL/EMILE – The European Dimension: Actions, trends and foresight potential* Public services Contract EG EAC. Strasbourg: European Commission.

<sup>4</sup> Karimi, P., Lotfi, A. R. and Biria, R. (2017) *Efficacy of content and language integrated learning (CLIL) pedagogical techniques in improving aviation students' engagement in attaining specific learning outcomes* The Journal of Teaching English for Specific and Academic Purposes, Vol. 5, No 4, 2017, pp. 781-791.

many reasons, the majority of aviation English courses for student pilots are delivered by language professionals with varying degrees of aviation familiarity, many of whom may not have formal training or experience in aviation. As ICAO states:

The aviation English trainer needs to bring to the class a combination of specific language teaching skills and an understanding of the practical operational environment. The balance between these two areas will obviously vary from one person to the next.<sup>5</sup>

Varying degrees of subject matter knowledge on the part of the teacher coupled with zero subject matter knowledge on the part of the learner places even greater demands on teaching content. Not only does it need to be accessible and appropriate for the learner, but it needs to be teachable for the teacher. Activities need to be pedagogically sound and engage language which is relevant and useful for future flight training. But they also need to be meaningful to the teacher both in terms of the underlying subject matter and the language elicited in productive language activities. Without clarity in learning objectives and target language and without clarity and accuracy in carrier content, it is easy to teach badly, resulting in problems for flight instructors down the line. It is important to keep in mind that as language professionals, our mission in a preparatory aviation English course is to equip learners with the language skills they need for effective flight training. If learners acquire some aviation knowledge along the way, that is a bonus, but not the objective.

### Challenge #5: Level and hours

In an ideal world, multi-level aviation English courses for student pilots would exist so that we could introduce aviation English at an elementary level and take it from there. But we do not live in an ideal world. Given the scarcity of language training for the target population, if we invest considerable time and energy in course development, what level of aviation English language proficiency is best addressed? What level of language do students need for success at flight school? Through research activities conducted at Latitude some years ago<sup>6</sup>, we identified B2 (Vantage or upper intermediate) on the Common European Framework of Reference (CEFR) as the target for listening, reading and speaking skills, the same level identified as the target for many undergraduate university courses around the world.

With this target in mind, the next consideration is the number of guided learning hours that students require to reach CEFR B2. This is dependent on a number of factors, the most important of which is the level of the learner at the point they enrol on a preparatory aviation English course. ICAO guidance suggests that 'between 100 and 200

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<sup>5</sup> ICAO Circular 323 *Guidelines for Aviation English Training Programs* Section 3.3.

<sup>6</sup> Emery, H. (2016) *Aviation English for the Next Generation* available [here](#).

hours of language learning activities are required for any measurable improvement in ability'<sup>7</sup>. In terms of the CEFR, as a rough guide, 'it takes approximately 200 guided learning hours for a language learner to progress from one level of the CEFR to the next'<sup>8</sup>. Thus, if learners enter at B1 on the CEFR, for example, they will likely need in the region of 200 hours of guided language training before beginning flight training. This is a significant learning requirement which places demands not only on the learners and their sponsors, but on the language teachers tasked with programme development and delivery. Even with intensive language learning, which we would suggest is best limited to a maximum of 5 hours per day, this would result in a full-time aviation English course of 8 weeks. For learners entering with a lower level of proficiency, the guided learning hours required could be considerably longer.

### Challenge #6: How do you reach students before they go to flight school?

Our mantra at Latitude is 'Language learning is not **a part of** flight training; it is **a requirement for** flight training'. That is not to say that language learning should not be aviation-specific and targeted to the needs of learners. Indeed, a well-developed aviation English course is so content-rich and relevant to flight training that it can and should be perceived as the first step on the flight training pathway. What we mean by this mantra is that if flight training is delivered in the medium of English, English should not be treated as another flight training subject to be delivered, for example, alongside meteorology or air law, once flight training has commenced. Ground school lessons on air masses and airspace categorisation will mean very little to a student with weak English! Instead, we advocate for aviation English language training to be delivered in advance of flight training. Ideally, if students are travelling abroad for flight training, language training will be delivered to students in their home country to avoid the additional living and accommodation expense.

We would always advocate for live classroom instruction where the real-time interaction between learners and the teacher is optimised for best results. However, this is not always possible, and we may need to deliver online by distance, especially if learners are in different locations. Indeed, our current climate has meant that face-to-face training is not possible at all. COVID-19 has certainly had a massive impact on the way training and education is provided, and we may see some permanence to the rapid shift to online delivery brought about at the onset of the pandemic.

Online delivery, however, is not straightforward. It is simply not possible to take a classroom course and simply 'do it online'. In our experience, writing and delivering language training by distance presents its own challenges, not least of which is the considerable resources required to produce effective digital learning content. For a deeper

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<sup>7</sup> ICAO Document 9835 *Manual on the implementation of Language Proficiency Requirements* section 7.8.3.

<sup>8</sup> A useful reference on language learning hours is Knight, B. (2018) *How Long Does It Take To Learn A Foreign Language?* (Cambridge University Press) available [here](#).

discussion of these challenges, you can watch a webinar delivered by myself and colleagues at Latitude as part of the International Civil Aviation English Association webinar series<sup>9</sup>.

That brings me to the end of this article. Thanks for sticking with me! I hope the discussion has resonated with you, and has provoked thought. We would love to hear your views and experience in teaching English to aspiring pilots, either as a language teacher or a training manager. Please email us: [info@latitude-aes.aero](mailto:info@latitude-aes.aero).

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<sup>9</sup> <https://www.latitude-aes.aero/about-us/aviation-english/papers-and-presentations>.