

## English for Aviation Safety: a content-based, blended learning approach to operational language proficiency

Philip Shawcross, AES

*“Content-based language instruction is appropriate to aviation professionals because the language becomes the vehicle for learning meaningful and appropriate content; language learning is not seen as an auxiliary to other aviation training, but as integrated with aviation training.”*

### ICAO Doc. 9835 paragraph 4.4.1.1

Content-based language learning is a well-researched methodology that combines language learning with the delivery of important informational content; language learning occurs while a student is focusing on learning some content.

#### ***Are not all Aviation English courses content-based?***

It is important to consider the specific needs of the target audience when we design language lesson content. Typically, the traditional aviation English lesson has incorporated a range of aviation content into the language lessons. As an example, consider two common themes of aviation English lessons:

- The 4 forces of flight; and
- ICAO phraseology.

These subjects can be meaningful topics for *ab initio* trainees, but are probably less relevant for the *professional* pilot or air traffic controller; nor do they address the plain language in an operational context targeted by the ICAO requirements (See ICAO Document 9835).

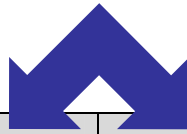
Nor is content just about subject matter and vocabulary. To be relevant, the wide-ranging lexical fields of Aviation English need to be implemented in situations which bring out the essential communicative functions of radiotelephonic English, such as confirming, requesting, clarifying, paraphrasing, managing exchanges etc.

#### ***What is the rationale for a safety focus in Aviation English courseware?***

The rationale for a content-based safety-focus in Aviation English training is strong:

- Much safety content is published in English, but is often at ICAO “Expert Level 6”;
- Adapting safety publications and videos for an aviation English program makes safety information accessible;
- Safety awareness focuses increasingly on effective communication;
- Improving safety awareness and improving and maintaining language proficiency are a seamless on-going process;
- Content-based, safety-focus improves language learning efficiency.

## Initial Placement Assessment



ICAO Level 2	ICAO Level 3
<p>Each module comprises:</p> <ul style="list-style-type: none"> <li>➤ 24 to 36 hours distance learning</li> <li>➤ 16 hours classroom learning</li> </ul> <p>A total potential of 240 to 320 hrs / level</p>	<p>Each module comprises:</p> <ul style="list-style-type: none"> <li>➤ 24 to 36 hours distance learning</li> <li>➤ 16 hours classroom learning</li> </ul> <p>A total potential of 240 to 320 hrs / level</p>
<b>Module 1: "The Golden Rules"</b>	<b>Module 1: "Operational and Environmental Threats"</b>
<b>Module 2: "The Right Stuff"</b>	<b>Module 2: "Runway Incursion"</b>
<b>Module 3: "Aeronautical Decision Making"</b>	<b>Module 3: "Controlled Flight Into Terrain"</b>
<b>Module 4: "Aerodrome Operations"</b>	<b>Module 4: "Crew Resource Management"</b>
<b>Module 5: "Approach and Landing Accident Reduction"</b>	<b>Module 5: "Threat and Error Management"</b>
<b>Module 6: "Review" and assessment for access to Level 3</b>	<b>Module 6: "Review" and assessment for access to Level 4</b>



**ICAO Level 4 Licensing Test**

### ***What are the benefits of safety-focused content-based aviation English?***

Pilots and controllers who need to comply with ICAO Operational Level 4 may require between 200 and 400 hours in aviation English training. Providing content-based, safety-focused English training in an operational context has a number of benefits for pilots, controllers, their organizations, and the aviation industry:

- It doubles the value of required language learning time by pairing language lessons with important safety content;
- It increases safety awareness;
- It increases learner motivation; people naturally pay more attention to topics in which they have an inherent interest.
- It reduces learning time and enhances learner commitment and memorization.

Simply put, content-based, safety-focused English training is *logical*; it makes sense. A safety-focused, content-based program can enhance an organization's overall training effectiveness by delivering English training through important safety content from an operational perspective.

### ***How can you check if English training is content-based and safety-focused?***

The following checklist is a simple device for use in planning program development or program evaluation.

- ✓ **Content:** Is the content of the lessons relevant and interesting for the learner? Can you identify true value in the content besides the language focus?
- ✓ **Cohesive:** Does one unit relate thematically to the next unit? Are topics presented randomly or is there cohesion of topic choice in each language lesson?
- ✓ **Rational:** What is the unifying theme of a curriculum, in addition to the language learning? What holds the lessons together?
- ✓ **Context:** Do the lessons address the requirements of operational communicative functions encountered by pilots and controllers?

### ***How and why a blended learning approach?***

A blended approach to language learning, whereby various media, individual or peer-group study on conventional or computer-based materials and teacher-led classroom sessions are combined within a single curriculum, is nothing new. The complexity and extended time scale of language acquisition, as well as the varying learning styles and paces of language learners, make it a natural option to pursue. In the Aviation industry, where pilots' and controllers' time is at a premium, where rosters and shifts are forever changing and where there are operational imperatives, the case is even stronger.

In addition, consideration of the six specific language skills of the ICAO Rating Scale suggests a natural progression from the so-called passive foundation skills of vocabulary, structure (grammar and syntax), listening comprehension and pronunciation to the more integrated speech production skills of fluency and interaction. A blended approach, therefore, reflects both these learning patterns and the imperative to restrict classroom time, i.e. downtime, to a minimum.











Distance learning, whether web or computer-based, can be used effectively and flexibly to allow students to:

- Acquire the foundation skills at their own pace;
- Be fully prepared and familiar with the relevant subject mater and skills when they enter the classroom;
- Focus 100% on communicative speech production activities during classroom time; and
- Have at their disposal 24/7 a tool for both personalized remedial and recurrent training.

The inter-relation between distance and classroom learning (called “Intensive Speaking Seminars” by AES) is complementary and cyclical.

### **TRAINING - Structure**

*AES Aviation English Training programme is modular to provide flexibility in delivery*

ON LINE 144 hours						
	Module 1 <b>24 Hours</b>	Module 2 <b>24 Hours</b>	Module 3 <b>24 Hours</b>	Module 4 <b>24 Hours</b>	Module 5 <b>24 Hours</b>	Module 6 <b>24 Hours</b>
CLASSROOM 96 hours						
	Module 1 <b>16 Hours</b>	Module 2 <b>16 Hours</b>	Module 3 <b>16 Hours</b>	Module 4 <b>16 Hours</b>	Module 5 <b>16 Hours</b>	Module 6 <b>16 Hours</b>

The foundation and requisite “passive” skills are addressed in the eight activities accessed from the upper navigation bar on the screen below: VIDEO 1, VOCABULARY, STRUCTURE, YOUR VOICE, AUDIO COMPREHENSION, READING (for vocabulary and structure practice), VIDEO 2 and RESPONDING.

Features such as the GLOSSARY, HELP (for linguistic support) and DATA (for additional safety and operation information in the form of documents and articles) support learners and enable them to extend their quest for additional input almost indefinitely.

VIDEO 1 VOCAB STRUCTURE YOUR VOICE AUDIO COMP READING COMP VIDEO 2 RESPONDING

MENU **Module 2: Runway Incursions - Phase 9: Situational Awareness** LOGBOOK

INSTRUCTIONS

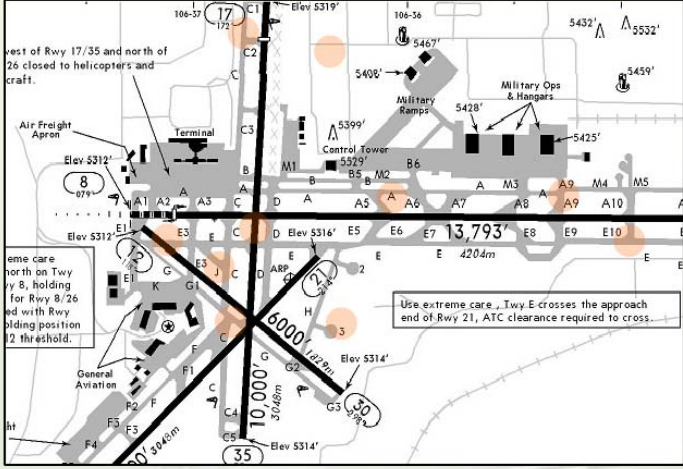
Click **START** to begin the exercise. Then listen to the recording. Click the area of the image that corresponds to each recording. Click **NEXT** to continue.

INTRODUCTION EXERCISE HELP DATA

**INFORMATION**

In this exercise you will practice gaining **situational awareness** at a basic level, by listening to example **NOTAMS** (notices to airmen) and **taxi instructions**, then clicking on the corresponding location.

If the audio is a NOTAM, click on the location described by the NOTAM. If the audio is a taxi instruction, click on the location where you would arrive if you followed the instruction.



Use extreme care... Twy E crosses the approach end of Rwy 21, ATC clearance required to cross...

10,000 3048m

6000 1828m

13,793'

4204m

50 VOLUME

START SCORE: 0 / 10 EXERCISE: 1 | 2 RESET

GLOSSARY SCRATCH PAD USER ID: developer\_2 EXIT

Once in a classroom environment in the Intensive Speaking Seminars, learners can focus on using their interactive skills to the full.



**ACTIVITY 3.1.1.4: Challenge / Response (20')**

**RESOURCES: CD**

**GROUPING: All**

*Play the pre-recorded cues and ask students to respond appropriately. Comment and ask to respond again. The recording can be recycled several times giving different students different cues. Responses should be improvised. Affirm / Negative responses not acceptable. Pay particular attention to fluency.*

1. How far does the cold front extend?
2. What ceiling is expected?
3. Do the tops look smooth?
4. What sort of turbulence did you encounter?
5. Say flight conditions.
6. What is the freezing level in the Stanford area?
7. How much ice build-up have you got?

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**Student page A1**

**ACTIVITY 3.1.2.3: Pair work information exchange on approach charts**

**SET A**

*You have a terminal chart of SEATTLE, WASH ILS or LOC Rwy 16C. Your partner has another terminal chart.*

*Ask your partner for the information you need to complete the table below about his/her terminal chart.*

Airport name		Obstacles	
ICAO identifier		ILS minima	
Airport elevation		ILS RVR	
Final approach course		NDB RVR	
ILS location		Circling minima	
ILS frequency		Location of MM	
Transition altitude / height		Tower frequency	

Student page A2

ACTIVITY 3.1.2.3: Pair work information exchange on approach charts

