Wider considerations in teaching speaking of English in the context of aeronautical communications.

Neil Bullock, University of Birmingham (UK),

Postgraduate MA Student (Applied Linguistics).

englishplus@bluewin.ch

Abstract

This paper focuses on the skill of speaking, based on the context of teaching English in aeronautical communications. The paper firstly outlines the recent change of focus in this domain and then goes on to discuss the current methodologies and techniques that can be employed. Thereafter, new techniques are analysed with reference to how they are suitable for teaching in this context.

Keywords:
Aviation English, language proficiency, teaching, phraseology, aeronautical communications.

1 Introduction

The past few years has seen a growing importance of teaching English in the aviation world since the introduction, in 2008, of mandatory plain language proficiency testing for most of the world's commercial pilots and air traffic controllers (ATCOs). Guidelines were established by the International Civil Aviation Organisation (ICAO) to set minimum standards for 'plain language' to support standard radiotelephony phraseology. The *de facto* adoption of English as a *lingua franca* by the aviation world has meant that the teaching of English language skills for pilots and ATCOs has recently adopted a much greater significance than previously.

2 Towards a communicative approach in a specific purposes context.

Because spoken communications are the essential way of pilots and ATCOs exchanging information, ICAO (2009) explicitly states that teaching in aviation English must 'focus on speaking, listening, and interactive skills'. Although as seen by Wang (2008) as an English for Specific Purposes (ESP), teaching aviation English is not simply a way of enabling learners to absorb 'subject matter focussed' material (Richards and Rogers, 2001, p. 25). According to Dusenbury and Bjerke (2013), the operational specificities of pilot/ATCO communication mean that it is not sufficient either to simply offer lists of aviation specific vocabulary to complement a learner's current language. Furthermore, a teacher in this domain must be aware, not only of the learner's need for oral language proficiency, but the ability to produce, receive and process language in a 'highly technical and safety specific context' (Uplinger, 1997, p. 1).

To ensure therefore that these skills were targeted in the teaching of aviation English, ICAO (2009) mandated that a communicative approach must be adopted. The idea of the approach is seen by Anthony (cited in Richards and Rogers, 2001, p. 19) as the 'subject matter to be taught', but such an explanation overlooks the fact that teachers of aviation English need to help learners develop 'communicative strategies that draw on a range of language resources' (Read & Knoch, 2009, p. 21.7), whilst Hedge (2000, p. 261) suggests that 'communicative ability' means use of language features in 'purposeful communication'. Clark et al (cited in Hedge, 2000, p. 45) maintain that a communicative approach should offer learning that resembles real-life communication enabling learners of aviation English to 'operate effectively in the real world' (Abbs and Freebairn, cited in

Hedge, 2000, p. 45). Paramasivam (2013, p. 104) further suggests aviation English teaching adopts a genre based approach as it has to 'mirror as accurately as possible critical features of the target language situation', a basic teaching theory also supported by Harmer (2007).

Because of the specific nature of aviation communications, it is also important to consider certain linguistic features to help a teacher of aviation English identify a suitable methodology and techniques for this approach. Uplinger (1997) notes that Pilot/ATCO communications lack the paralinguistic features of face-to-face interaction, such as body language or facial-cues, and so paraphrasing and clarification techniques are vital to effect meaning. This view is broadened by Khosravany et al (2014, p. 62) who outline that communication without visual cues is 'more challenging and requires higher levels of proficiency'.

Phillips (in Breul, 2013, p. 75) suggests that such language in aviation has a 'structural sub-grammar' giving a very specific meaning working together with 'referential values common to its domain and the speech community within' that must be understood by the communicators. This has the paradoxal cause of creating elliptical language, where it may appear more explicit meaning is necessary. When a pilot says to a controller: '*ABC123, going around*', the elliptical predicator – the action *going*, does not need the finite *am* – and lexical reference here is sufficient for the controller to know that the pilot has decided to: i) cancel his landing, ii) fly over the runway, and iii) will shortly give further information to the controller on his intentions. Both pilot and controller should understand the communication with no need for further explanation.

ICAO (2010) has defined the areas of communication into language functions, events & domains and tasks but real & concrete examples of how these are used in aeronautical communications to help prepare material are not given. There are technical manuals, theory course books and dedicated aviation English books commercially available, but these often lack appropriate materials to focus on the tasks required to meet the student's objective. One example appropriate for further research is that of the private pilot. Since the implementation of European Union regulations requiring any pilot who contacts Air Traffic Control (ATC) to demonstrate operational Level 4 in the language used for communication, little material seems to have been forthcoming to help maintain proficiency skills for private pilots. It is conceivable that with such a group of pilots, where communication is not practiced on a regular basis, more in the way of pedagogical support and linguistic awareness would be needed than, say, for commercial pilots who use the language in their daily tasks. This lack of foresight is also demonstrated in the ICAO Rating Scale descriptors which talk about "work-related topics", referring clearly to professional pilots and ATCOs when a more useful (to all pilots) *aviation*, *aeronautical*, or *operational*-related topics would have been more helpful.

The lack of specific material is not helped either by the somewhat random and ambiguous use of terms to define the language to be used with standard radiotelephony phraseology (RTF). Read and Knoch (2009) voiced uncertainty over what ICAO ambiguously refers to as plain language and whether all elements of the communicative process are included

in teaching and training material. A specific concern for Moder and Halleck (cited in Read and Knoch, 2009, p. 21.8) was how to define the often-cited domain of aviation English, in order to help support selection of test tasks and content. When Breul (2013, p. 74) suggested that this specific style and form of language communication 'has only played a very modest role' in specific language purpose research it would seem to show that a more specific understanding of the language itself would be of benefit to both teachers and learners. It is thus not fanciful to wonder how communications can be improved if teachers and trainers do not have a clear picture of what they are supposed to teach. Alderson (2009, p. 172) widened these concerns when he questioned the 'quality and empirical basis' of ICAO's rating scale and again (2010, P. 51) when he commented that there was a 'low awareness' in this domain.

A further prominent area of confusion seemed to come from ICAO's assumption that we are dealing with a lingua franca in the strict sense of the phrase. Seen by Wardhaugh (2010) as a language commonly used by a multi-lingual group of people in order to aid communication, it is clearly attributed with what Crystal (1997, p. 3) calls a 'global status' in that it is 'recognised in every country'. Whilst such descriptions are arguably valid, what is clear is that we are dealing with people of different first languages attempting communication, but this does little to improve rather generalist theories for such a technically specific domain as aviation.

Whilst it would seem logical to attribute such status to a language used worldwide, it is also equally clear that the specificity of this domain is far from the socio-cultural fabric, observed by Graddol (2006). Read & Knoch (2009) even go as far to say that cultural references should be avoided to accommodate weaker L2 speakers, while Wang (2008) suggests that ESP in aeronautical communications exists regardless of cultural backgrounds. ICAO (2010, p. 2.6) themselves rather naively suggest that English is emerging as an 'international language (EIL) or lingua franca' and that it 'sets its own standards of proficiency'. I would argue that English as used in this context actually emerged many years ago, and that it would be more appropriate today to say that a more thorough understanding and greater clarification of the language as a practical communicative tool with a common aim – safety – is needed. I would also advocate that as educators in this domain, we have a duty to help set those standards ourselves. It should be less about cultural identity and emergence than about a structure and form which are already present and which can be nurtured to be used by speakers of all languages in effecting efficient, accurate and safe communication. It represents, as Harding (2014) suggests, 'a shift away from more traditional models of communicative competence' where 'focus turns to communicative strategies' and where we need to look for 'purpose-built' assessment tasks'.

3 Defining the specifics

In trying to define the language of such a communicative process for learners, test takers and most importantly, for use in everyday operational situations, Kim and Elder (2009) suggest plain language to be used at times when phraseology does not cover the appropriate needs in radiotelephony communication. Given that we are dealing with an ESP context, it still fails to clearly address the subjectivity of such an expression. What it

does show, however, is that we are dealing with a communicative process operating on more than one language level. Further evidence demonstrates that the language of communication in an aeronautical context is not simply a harmonised two-tier lexicography, one coded and restricted, one not. Its interaction comes from the interplay of three quintessential language elements as shown in Figure 1.
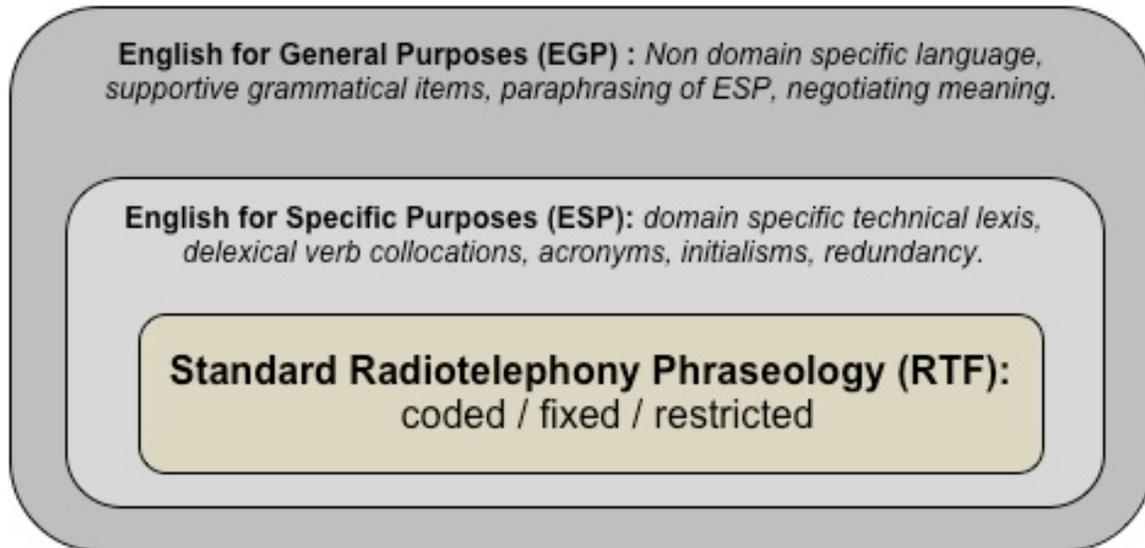

Fig 1   The levels of language in aeronautical communication

During routine operational situations Alderson (2009) states that the core of this communication tool used by all pilots and ATCOs is RTF. Breul (2013, p. 71) defines it as a 'semi-artificial English-based sub-language' while Falzon (2009, p. 3) sees it as a way to 'formulate directives ... consistently and unambiguously'. To this end a good start for any teacher is familiarisation with the ICAO's own RTF manual - *Doc 9432 Manual of Radiotelephony* (ICAO 2007) - together with defined phrases that must be used in all situations. An example of typical RTF is:

> ATCO   *'Sunair123 Runway 06 Cleared For Take-Off'*
> Pilot   *'Runway 06 Cleared For Take-Off Sunair123'*

Simple forms give the pilot minimum detail and imperative instruction which is read back verbatim. This aims to show the pilot has understood the instruction. Alderson (2009) further shows that redundancy and elliptical language, due to situational awareness, eliminate the need for verbosity. Removal of other natural speech conventions such as pleasantries, fillers, and hedging should also keep communication time to a minimum. As Rubenbauer (2009) highlights, turns of speech are clearly marked by the beginning and end of a speech group. Use of the microphone also makes speech overlapping technically impossible.

Even quite complex exchanges can fit quite easily into this pattern of discourse such as in this next example:

> ATCO   *'Sunair123 landed time 38 taxi and vacate at the end of the runway and taxi holding point G4'*
>
> Pilot   *'Roger taxi to the end and vacate and taxi holding point G4 Sunair123'*

The second layer of communicative language is when this coded RTF is combined with domain specific non-coded English, essentially an ESP. This can be seen as language inherent and vital in such a highly technical socio-professional domain in operational discourse during both routine and non-routine situations as shown in Fig. 4.

> ATCO   *'Sunair123 for planning purposes confirm returning to stand or taxiing round for departure?'*
>
> Pilot   *'Stand by on that. We might need to do some drills when we clear the runway and then we'll advise if we have to go back to stand Sunair123.'*

Finally, as noted by Kukovec (2008) and Wang (2008), there is an obligation to use unrestricted English for General Purposes (EGP), combined with ESP, to effect communication at times when standard RTF will not suffice. Even in Fig 4, the ESP used needs to be supported with certain modality expressions (might need and have to) from EGP to give referential meaning to the ATCO. In Fig 5 when the ATCO wants to know if the crew need any assistance following a rejected take-off, almost no RTF is suitable, just a combination of pseudo-colloquial and referential ESP supported by EGP to effect the discourse.

> ATCO   *'Sunair123 do you require any assistance or do you need me to make any phone calls to people on the ground?'*
>
> Pilot   *'At the moment no. We're fine as we are. We're just talking to our operations people to try 'n' find how to reset the FMS and then hopefully if it reboots they'll get us a new slot, Sunair 123.'*

Learning the components of the language is one thing but the utilisation of it must also be taken into account. Breul (2013) states that pragmatic inferencing must be conveyed so learners need as much pragmatic language as possible not only for speaking but also for listening. Cushing (1995) similarly points out that uncertain references should be avoided and highlighted the case of one military aircraft flying in formation with a second referring to "we" (the two aircraft) a term often used by one aircraft (we = the crew = 2 people). Breul (2013) also suggests a high level of proficiency in natural English in addition to mastery of the coded RTF is key to optimising safety. Furthermore, the ability to make successful transitions from known to unknown information necessitates proficient discourse organisation (Qionglan, 2008). Kukovec (2008) advocates more specifically the need for grammar structures to deal with the known difficulties in

communicative language use while Rubenbauer (2009) suggest greater linguistic awareness in general can help reduce the number of miscommunications, through focussing on shorter less complex utterances and ensuring the flow of information is efficient.

The value of analysing transcripts from aeronautical communication in this way can help teachers to better understand learners' needs and aid preparation of valid and appropriate learning tasks, particularly in the voice-only communicative tasks that learners will eventually need to use in operational situations.

It also allows teachers to see such comments as Alderson's (2009, p. 169) that 'the English of international aviation is not EGP' as misleading. It overlooks the fact that almost all learners probably learn a general language first before any technically specific or sub-version of the same language. Thus, without naturally formed EGP, to support the essential items of ESP, discourse would be difficult, if not impossible to enact. A more systematic approach might have been to say that the domain specific lexis of ESP which supports RTF is itself referenced and supported by the inherently neutral grammatical forms of EGP. Furthermore, it is essential to highlight the need for general English lexis as a way for a speaker to paraphrase, ideally when lacking ESP items in unexpected and non-routine situations. This thus forms the background for the requirement of an *Operational* level (4) of language proficiency (ICAO, 2010) and is, arguably, one key difference between safe and unsafe communications.

4 Practical competence

What is clear, as Rubenbauer (2009) states, is that learners should practice with materials that give a clear understanding of which parts of linguistics are actually relevant and appropriate. Harding (2014) takes the idea further stating that for this type of communication teaching and testing need to be 'interactive and goal-oriented' while eliciting 'negotiation of both form and meaning'. If students in this domain are to learn how to communicate in unexpected situations, then breakdowns in communication must be 'anticipated and complications built-in' (Harding, 2014). If we return to the inherent reason for setting up such a system of testing language proficiency, then such theories of teaching would appear to correspond very well with the system's objectives, but they must be exploited fully.

Knowing the functions of communication in aviation English can further help the teacher identify linguistic components useful when deciding which techniques will support the chosen methodology. Sarmento (2011) indicates that once you know the language requirements in ESP, you can define the methodology to teach it. Dusenbury and Bjerke (2013, p.13) partially characterise the language requirements of ESP by pointing out that students must have a solid basic understanding of English so they can apply it to a 'technically dense' domain specific vocabulary in context, whereas Kukovec (2008) maintains that, although students may have suitable grammatical proficiency, using it in an operational context may prove difficult. Additionally, Uplinger (1997) points out that competence in radiotelephony alone is not sufficient to achieve proficiency of plain language in functional situations.

Collectively, this evidence underlines the importance of combining all the elements of aeronautical communications in adopting a communicative approach for the teacher of aviation English. Real life situations, communicative competence rather than reliance on form, pragmatic contextual content and ability to effect appropriate communication are crucial in this area of language teaching.

Harmer (2007, p. 343) characterises communication as 'speaking events' from which aviation English can be seen as transactional (exchange of services) and interactive (pilot/ATCO), as well as both planned (normal flight) and unplanned (unexpected events, e.g.: weather change, technical malfunction, sickness, etc.). A broader perspective is proposed by Hedge (2000, p. 47) who divides the idea of communicative competence into 'linguistic', 'pragmatic', and 'strategic competence'. This would appear to fit nicely into the aeronautical language context.

Linguistic competence requires that the learner has 'linguistic' skills in order to develop 'communicative' skills (Hedge, 2000, p. 47). Both EGP and ESP would be key components here.

Pragmatic competence relates to a learner knowing not only the language but also the significance of its use in a given context. Qionglan (2008) demonstrates that short quasi-elliptical dialogues in aviation communication and their metaphoric lexis would not be immediately obvious without any contextual information. Thus ESP and RTF link up to form the pragmatics of the communicative role.

Strategic competence is also an important facet of the communicative approach (Hedge, 2000). The ability to paraphrase and negotiate meaning is a requirement for evaluating vocabulary at Level 4 (ICAO, 2010). This offers more evidence that ESP underpinned by EGP supports linguistic competence when RTF is insufficient or inappropriate.

The next stage considers Richards and Rogers' (2001) consideration of three specific areas from which to define language – structural, functional and interactional. The most appropriate area for aviation English would therefore be functional as it emphasises a specific communicative dimension and meaning taking into account a learner's exact communicative needs. As the contexts, forms, and functions are established it is now possible to develop the methodology.

5 Establishing an Analysis of Student Needs

If the communicative approach is at the heart of teaching aviation English, then central to the methodology of such teaching is knowing what the learner needs. Unlike certain other more formulaic approaches, such as those which include pre-determined drills (Audio Lingual) or where 'mental discipline' is the supporting theory (Grammar Translation) (Knight, 2001), the communicative approach is not underpinned solely by a strict and 'conscious understanding of the rules' (Knight, 2001, p. 155). This necessitates a more focussed and flexible approach based on the objectives and needs of the learners rather than a disciplined pre-written script. In order therefore to define the objectives and needs

of a learner, a step-by-step approach would be a practical option. Hedge (2000) suggests that an analysis of student needs is the first stage for an ESP teacher, followed by consideration of the context, with the third step of laying down clear objectives.

As part of the needs analysis a qualified assessment of students' current levels according to the ICAO scale is crucial. A diagnostic test for language proficiency in speaking and listening should evaluate the linguistic requirements of ICAO's Holistic Descriptors and the six required language components of the ICAO rating scale – pronunciation, fluency, vocabulary, structure, comprehension and interactions (ICAO, 2009). Teachers must also consider the inclusion of radiotelephony in both the speaking and listening parts of any diagnostic test in order to support how the plain language can be used and, ultimately, tested. It may also be necessary, in order to assess a learner's ability to demonstrate full proficiency in English, i.e. without an aviation bias that may have been gained from theoretical training, to know the level of general English. Construct of Diagnostic tests must mirror that of the ultimate test that the student will pass and, as with any valid and reliable test development, the assistance of domain or subject matter experts is critical (Kim, 2013; Hutha, 2009; Read & Knoch, 2009). Course content should be carefully constructed on the basis of the learner's objectives, not just to avoid teaching to the test, but to look further beyond the test into the real-life communicative situations a test taker is likely to encounter.

6 Consideration of an appropriate methodology

As explained earlier, language in aviation communication has many complex and unnatural functions and forms and so establishing a methodology to teach this should be carefully principled. To help define which principles to utilise for teaching aviation English, I will discuss 3 of the twelve research based principles for classroom practice suggested by Brown (2002). Those chosen are:

> Principle 2:   Meaningful learning
> Principle 4:   Intrinsic motivation
> Principle 12:   Communicative competence

Meaningful learning implies learning centred on content which has contextual meaning – a key element of aviation English. Teachers should also look to prepare material on relevant topics and meaning focussed activity that also promote learning (Knight, 2001). Intrinsic motivation, which is driven from within the learner, has the potential to be self-rewarding. As there is a high level of personal and professional investment for learners here, intrinsic motivation is also likely to be high. Communicative competence is gained through more targeted activities that highlight use, fluency and authentic language from the real world that the learners communicate in. This does not just facilitate expression but 'survival' and 'repair' strategies (Harmer, 2007, p. 344).

It is also important to understand that considerations that are used to define the methodology for teaching aviation English are supported by ideas from the communicative teaching approach. Knight (2001) shows that meaningful tasks using language promote learning, whilst Thornbury (2008, p. 112) states that teaching speaking

is not simply 'teaching oral production of grammar and vocabulary items', it should also target the skills to be taught. Kukovec (2008, p. 131) suggests a 'job specific approach' where teaching focuses on 'lexical domains', 'language functions' and communication in 'non-routine' situations. It is also likely that students will benefit more from learning and acquiring language in smaller more manageable amounts as it can consolidate and improve the language they already have before attempting any real-life communicative tasks. Hedge (2000) maintains that learners need more controlled forms of practice whereas Qionglan (2008) suggests that contextualised material should include linguistic, situational and cultural context. In the next section I will discuss the techniques I use to support such methodology.

7 Defining effective techniques to support the methodology

If we start with the 'core' of Radiotelephony to communications, teachers should resource the contents of ICAO Doc9432 the Radiotelephony manual (ICAO 2007) or the official document of the national authority of the country in which they are teaching, if one is produced. Utilising SMEs is also vital to help teachers create real life task-based learning material which can then be adapted for unexpected routine situations. Furthermore, the chance to further learn and practice standard radiotelephony is an important opportunity for all learners in this domain in maintaining and improving standards in communication.

Interactive activities should be non-visual. Simulator equipment for both pilots and ATCOs with headsets involving a real life task environment would arguably be the best scenario. If this is not available, then using room dividers or separate rooms, would suffice. Teachers without the relevant RTF experience, or who do not feel comfortable role-playing a pilot or ATCO, should call on SMEs to participate in their place. This additionally offers the teacher who has never formally worked in an operational role the opportunity to observe and learn from such communicative activities. Such activities are motivating, interactive, and give learners the chance to actually participate in real life task based learning.

The second area for consideration is the language of ESP. ICAO documentation, as well as the many operations and training manuals refer to specific lexis for this ESP context, as well as often giving extended descriptions of certain lexis, making it ideal for practicing paraphrasing. What is lacking here is the extended collocations that foreground any such use of domain specific lexis. However, teachers should make use of the many free to access incident and accident reports, as well as technical and industry journals to source valuable examples of how EGP and ESP fusion to form domain specific language. Other web-based sources include the excellent Eurocontrol *Skybrary* web site: www.skybrary.aero

7.1 Vocabulary

Speaking activities that I employ aim to consolidate and increase students' range and accuracy (ICAO, 2010), are essentially material aided (Shumin, 2002), and based on standard ESP English course book layouts that adopt the communicative approach. Material is based around 4-page units with each unit having an overall domain such as

weather and then subdivided into events – thunderstorms, turbulence, etc. Warmer discussion questions start the unit to create interest and motivation, and help maintain interaction (Thornbury, 1996) whilst pictures are used as referencing for extended discussion in technical areas. Parts of the unit also include reading texts to expose learners to a 'meaning-focussed input' (Paramasivam, 2013, p. 105). Such activities also go a long way to helping learners deal with paraphrasing and using EGP when having difficulty in finding required ESP lexis. The double benefit of such exercises is linguistic referencing which aids vocabulary acquisition and retention in the long term.

Aviation, like a large number of technical domains, has many compounds nouns (Precision approach path indicator; Aerodrome traffic circuit) and context specific collocations (snow clearance in progress; to make a fly-past of the Tower). Vocabulary cards and interactive games enable the student to use the language less explicitly, giving learners declarative knowledge – knowing what the word looks and sounds like, but more critically the procedural knowledge or the pragmatic competence – knowing how to use it (Hedge, 2000). These techniques enhance language learning through visually re-enforced input such as reading texts (Uplinger, 1997). Such language can then be built into short role-play exercises where learners must respond to and initiate non-routine situations using the language learned.

7.2 Structure
Proficiency in the use of basic grammatical forms and syntactical competence is required for operational level 4 (ICAO, 2010). To contextualise the material exercises are easily adapted from typical activity books such as Games for Grammar Practice Extra and Timesaver Grammar Activities. They work well, particularly as an explicit way of revising and improving proficiency in grammar forms required for aviation safety, whilst in a contextually appropriate situation for aviation English in line with communicative methodology (Brown, 2007; Shumin, 2002). Again such linguistic competence is enhanced by the use in task-based role-play classroom activities using RTF.

7.3 Fluency
Fluency (cited by Fearch, Haastrup and Phillipson, in Hedge 2000, p. 57) refers to the flow of a language and the facility to link units of speech together 'without undue strain'. Students are thus made aware of the importance of discourse markers and how to use them in fluent discourse (McGrath, 2011) as well as increased awareness of reducing fillers and hesitation. Fluency may also acquire more importance than accuracy in order to keep learners meaningfully engaged in language use (Brown, 2007) and, as Paramasivam (2013) suggests, certain learners, even though they have a core grammar and vocabulary may still have problems establishing and maintaining fluency.

Techniques to improve Fluency include guessing games, where a learner has to describe something on a picture and another has to guess what it is, as well as thinking strategy exercises where students discuss and try to resolve problems. Simulated communication in authentic situations, such as role-play activities, is also purposeful for aviation English as they help to improve oral fluency (Harmer, 2007).

7.4 Interactions

Techniques to practice interactions are based on simulated real-life tasks of ATCO/pilot communications and, whilst incorporating all the linguistic features of the language areas mentioned above, they include practice of clarification techniques, particularly in unexpected situations, and ensure that students have the opportunity to initiate and maintain dialogue. Authenticity and personalising interactions can also be achieved by eliciting personal experiences from students. This contextualises the language which helps to aid storage for later retrieval (Kukovec, 2008).

This section has summarised the methodology and techniques that I currently use for my teaching. In the next section I will go on to consider additional techniques that may be considered useful for teaching in aviation English.

8 The importance of new techniques

As was mentioned earlier, the communicative approach demands a more focussed and flexible approach based on the objectives and needs of the learner, rather than a disciplined pre-written script. These new communicative teaching techniques should therefore be made apparent, as it is important to not simply analyse and consider such techniques, but to show how they can be used. What follows is a review of how further techniques are useful in teaching and whether such techniques would be suitable for learners of aviation English.

Language Level

Whilst the key objective for many learners is based on attaining and maintaining the operational level 4, the idea of Hedge (2000, p. 11) to set 'language ... just above that of the student', rather than at their current level, is very useful as it could offer more probability of matching the student's objective. However, whilst it may be seen as suitable, the material shouldn't be too challenging to be de-motivating (Brown, 2007).

Learning Strategies

The rationale for placement tests seems to assume intuitively that everyone may learn the same things in the same way, even when an assessment may show similar levels among learners. However, Hedge (2000) suggests that students may well have different learning strategies and by knowing this it is possible to target lesson activities more to their way of learning rather than simple reliance on a placement test result. Thornbury (2008), gives good guidance on this whilst Brown (2007) cites a very useful tool in Rubin's fourteen characteristics of a good language learner. The addition of appropriate questions on a needs analysis questionnaire could make this a suitable pre-course 'learning technique analysis' for each learner.

Error Correction and Feedback

Hedge (2000) discusses the use of global errors to determine where linguistic errors cause communication to break down. Any error that does not cause a communication breakdown is categorised as *local*. As success in communication is the key to language proficiency in aviation English this practice is already used in assessing structure and could also be very useful in assessing errors in other linguistic areas, such as vocabulary

or pronunciation. While any error correction should be handled sensitively and discretely, as proposed by Hedge (2000), immediate intervention by the teacher could be a suitable strategy to make the learner aware of how *global* errors can cause communication breakdown. Such correction techniques could be:

- an intentional direct request for clarification: '*Sorry*?'
- explicit clarification: '*What do you mean by* immatriculation?'
- implicit clarification: '*Are you sure?*' '*Confirm ...*'.
- requested repetition in RTF: '*Say again*'

Local errors could be handled in a five to ten minute session at the end of a lesson and students guided to search for examples and to learn the words in context for self-study.

Activities
In order to include the objectives of the needs analysis Hedge (2000) suggests that, when organising a teaching programme, activities should be as varied as possible. For lessons of aviation English it may also be useful to list how lesson activities focus on the specific requirements of the ICAO language functions, domains and events. Hedge's idea would allow a syllabus to be more clearly targeted towards the needs analysis for students and, as such, could be considered as suitable for aviation English.

Analysing Speech Acts for Oral Production
Hedge (2000) considers analysing listening texts by discussion and investigation of language areas used under guidance and highlights 6 points for the student to investigate. Whilst the importance of language functions in aviation communications is a key point in learning, one of the limitations, as McGrath (2011) states, is that when analysing transcripts 'rarely are whole sentences ... observed'. This makes the analysis of specific elements more difficult. A lot of redundancy and ellipsis may also seem confusing for the student and be difficult for the teacher to explain. So whilst potentially a useful tool for higher level students with greater exposure to more complex language functions, Uplinger (1997) advises that this idea would only be suitable for lower level students in a controlled and guided context probably with considerable input from the teacher

Code Switching
A pilot or ATCO could study and understand standard R/T phraseology but have insufficient competence in plain language, hence the recent introduction of language proficiency testing in aviation. Hedge (2000) and Breul (2013) however, point out that students should be given activities where they can identify plain language expressions in restricted codes. This may therefore be a useful tool for learners of aviation English to facilitate a link between the restricted code of phraseology and how it can be supported by that of unrestricted plain language ESP and EGP.

Gap Fill Activities
Such activities are typically advocated (Thornbury, 2008; Hedge, 2000; Khosravany et al, 2014) in the communicative approach and are well covered in most course books (Paramasivam, 2013). These can easily be adapted into an aviation context, making this technique very useful in tasks such as: discussing a flight, where, for example, each

student must exchange information in order to organise a flight. In the course of normal language functions in aeronautical communications pilots and ATCOs must have communicative strategies to fill gaps in the dialogue and so, in order to increase proficiency in this area, it would be both useful and suitable for teachers to introduce more such gap fill activities into simulated role plays for non-routine situations, particularly where there is no visual contact.

Functional Language

The need for better understanding of plain language functions in aviation English is highlighted by the information given in the ICAO documentation, despite the lack of concrete examples. Hedge (2000) suggests a better awareness of social language by listing expressions under functions and so if functions are taken from the ICAO documentation and the specific language added it could be a very useful tool for preparing activities. The suitability of this activity is that it adds context to material which can help increase a student's functional output. The role of SMEs here is again very important in ensuring accurate and appropriate technical language.

Materials Preparation

Based on my own experience, consideration must be given by the teacher to preparing a lot of material themselves to ensure it is meaningful and contextually authentic in order to be more motivating & purposeful for the student. Teachers without any operational background or uncertain as to the technical accuracy of such material should work with Subject Matter Experts (SMEs) to ensure students receive useful and valid ESP language learning material. Learners, likewise, should ensure that teachers or schools offering such teaching or training have the relevant aeronautical ESP experience.

In preparing appropriate and meaningful tasks for aviation English learning adaptability of readily available materials for communicative tasks is often required. This allows flexibility towards the students' needs and can increase motivation of students because of its varied and contextual content. Paramasivam (2013), however, highlights the importance of principled criteria towards material writing and suggested Troncoso's checklist guidelines for such tasks. Simple who, what and how principles may well be a useful way of improving and facilitating materials for speaking activities in the future and would almost certainly be suitable for learners in this context.

Speaking Tasks

Although speech acts and language functions in aviation English are relatively well defined by ICAO, the means of teaching students how to use them often relies heavily on a teacher's operational experience and intuition. The criteria checklist for speaking tasks by Thornbury (2008), however, on six specific areas: Purpose, Productivity, Interactivity, Challenge, Safety, Authenticity, provides a useful and clearer guide on how best to match techniques with activities. As this is adaptable to any teaching domain it would appear to be suitable for use in an aviation English context.

9 Conclusion

This paper set out to look at the teaching of speaking skills in an ESP context – aviation English and, in particular, the techniques used and how these could be supplemented with further research. It has shown that the teaching of aviation English has a recommended communicative approach reflecting the task and language specific events and domains of the communication between pilots and ATCOs. The paper has provided an important opportunity for the aviation English teacher to analyse more the approach in order to better understand the methodology. This, along with the fact that certain linguistic content and functional language of such communications are also defined, enables the teacher to more clearly determine the techniques.

Furthermore, this paper has demonstrated that the communicative approach, by its need to be flexible and adaptable, allows appraisal and input of new techniques to suit learners and teachers alike allowing a clearer understanding of teaching methodology and practice, which, in turn, underpins the contextual knowledge in teaching an ESP such as aviation English.

Reference list

Alderson, C. J. (2009). Air safety, language assessment policy, and policy implementation: The case of aviation English. *Annual Review of Applied Linguistics*, 29, 168–187.

Alderson, C. J. (2010) A survey of aviation English tests. *Language Testing*, 27(1) 51-72.

Breul, K. (2013). Language in aviation: The relevance of linguistics and relevance theory, *LSP Journal*, 4 (1), 71–86.

Brown, H. D. (2002). English language teaching in the post method era – Towards better diagnosis, treatment and assessment. In J. Richards & W. Renandya (eds.), *Methodology in Language Teaching*. (pp. 9–18) Cambridge: Cambridge University Press.

Brown, H. D. (2007). *Principles of language learning and teaching*. White Plains, MY: Prentice Hall.

Crystal, D. (1997). *English as a global language*. Cambridge: Cambridge University Press.

Cushing, S. (1995). Pilot-Air Traffic Control Communications: It's not (only) what you say, it's how you say it. *Flight Safety Digest*, 14(7) 1-10.

Dusenbury, M. & Bjerke, E. (2013). Predictive power of English testing: Training international flight students. *The Journal of Aviation/Aerospace Education & Research,* 23(1), 12–22.

Falzon, P. A. (2009). Discourse segmentation and the management of multiple tasks in single episodes of air traffic controller pilot spoken radio communication. *Discourse On-line 4,* retrieved 10th October 2014 from http://discours.revues.org/7241.

Graddol, D. (2006). *English next - Why global English may mean the end of 'English as a foreign language'*. The British Council.

Harding, L. (2014) *Adaptability and ELF communication - Next steps for communicative language testing*, Powerpoint slides from plenary speech at IATEFL TEA SIG

conference, Grenada, Spain, October 25 2014.

Harmer, J. (2007). *The practice of English language teaching.* Harlow: Pearson Longman.

Hedge, T. (2000). *Teaching and learning in the language classroom.* Oxford: Oxford University Press.

Huhta, A. (2009). An analysis of the quality of English testing for aviation purposes in Finland, *Australian Review Of Applied Linguistics*, 32 (3), 26.1–26.14.

International Civil Aviation Organisation. (2009). *Cir 323 Guidelines for aviation English training programmes*, Montreal: ICAO.

International Civil Aviation Organisation. (2010). *Doc 9835 Manual on the implementation of ICAO language proficiency requirements*. Montreal: ICAO.

International Civil Aviation Organisation. (2007). *Doc 9432 Manual of radiotelephony*. Montreal: ICAO.

Khosravany Fard, H., Khosravany Fard, A, & Baghi, B. A. (2014). An analytical evaluation of aviation English textbook. *International Journal of Research Studies in Language Learning,* 4 (1), 61–70.

Kim, H. (2013). Exploring the construct of radiotelephony communication: A critique of the ICAO English testing policy from the perspective of Korean aviation experts. *Papers in Language Testing and Assessment,* 2 (2), 103–110.

Kim, H., & Elder, C. (2009). Understanding aviation English as a lingua franca - perceptions of Korean aviation personnel, *Australian Review Of Applied Linguistics*, 32 (3) 23.1–23.17.

Knight, P. (2001). The Development of EFL methodology' in Candlin, C. N., & Mercer, N (eds.), *English language teaching in its social context*. London: Routledge, 147–166.

Kukovec, A. (2008). Teaching aviation English and radiotelephony communication in line with the newly established ICAO language proficiency requirements for pilots. *Inter Alia*, 1, 127–137. Retrieved June 22 2014 from http://www.sdutsj.edus.si/InterAlia/2008/Kukovec

McGrath, M. (2011). Defining a grammar of radiotelephony and emergencies. *Aviation in Focus,* 2 (1), 30–49.

Paramasivam, S. (2013). Materials development for speaking skills in aviation English for Malaysian air traffic controllers: Theory and practice. *Journal of Teaching English for Specific and Academic Purposes,* 1 (2), 97–122.

Qionglan, G. (2008). Systemic functional linguistics in aviation English course book construction. In N. Nørgaard (Ed.). *Systemic Functional Linguistics in Use: Odense Working Papers in Language and Communication, 29*. Retrieved June 22 2014 from http://static.sdu.dk/mediafiles/Files/Om_SDU/Institutter/ISK/Forskningspublikationer/OWPLC/Nr29/Gong%20Qionglan.pdf

Read, J., & Knoch, U. (2009). Clearing the air: Applied linguistic perspectives on aviation communication. *Australian Review of Applied Linguistics,* 32 (3), 21.1–21.11.

Richards, J., & Rodgers, T. (2001). *Approaches and methods in language teaching.* Cambridge: Cambridge University Press.

Rubenbauer, F. (2009). *Aspects of oral communication in aviation*. Aachen: Shaker Verlag.

Sarmento, S. (2011). What makes a good aviation English teacher'. *Aviation in Focus*, 2 (2), 3–5.

Shumin, K. (2002). Factors to consider: Developing adult students' speaking abilities in EFL. In J. Richards and W. Renandya (ed.). *Methodology in Language Teaching: An anthology of current practice*. Cambridge: Cambridge University Press. 204–211.

Thornbury, S. (2008). *How to Teach Speaking*. Harlow: Pearson Longman.

Uplinger, S. (1997). English language training for air traffic controllers must go beyond basic ATC vocabulary. *Flight Safety Foundation: Airport Operations*, 23(5), 1–5.

Wang, A. (2008). Reassessing the position of aviation English: From a special language to English for specific purposes. *Iberica*, 15, 151–164.

Wardhaugh, R. (2010). *An Introduction to Sociolinguistics*. Oxford: Blackwell.

Biography

Neil Bullock worked for over 20 years in Air Traffic Control and Airside Operations training in the UK. Based near Lausanne in Switzerland, he now works as an independent English Teacher and test development specialist in the aviation world. With a 2nd MA (with Merit), in Applied Linguistics, recently completed, Neil is also involved in rater training, test development and exam administration on behalf of the Swiss Federal Office of Civil Aviation as well as an aviation English teacher and ELPAC examiner for the air traffic control organisation, Skyguide. He is currently TEASIG co-ordinator for the English Teachers Association of Switzerland, as well as a committee member of IATEFL TEASIG (responsible for webinars) ALTE, IATEFL (ESP SIG) and the International Civil Aviation English Association.