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Paris, January 2003

Dear Members

The positive response to the postal mailing announcing a renewal of the activity of the International Aviation English Association after a dormant period was very encouraging. Almost everyone who had ever attended our events replied. Much of the credit for this initiative must go to Bozena Slawinska whose belief in the desirability, necessity even, of our meetings has been unwavering.

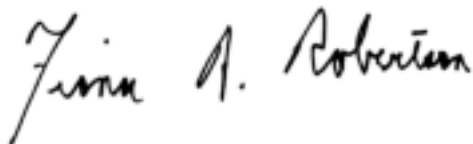
All those concerned with English language training for air traffic controllers and pilots recognise the importance of the proposed changes in the ICAO texts on English standards. The change in status from recommendation to regulation is considerable and it is important that the language trainers, managers and their trainees, the users of English, the controllers and pilots themselves understand all the ensuing implications, and that they are ready to embrace the new standards when they come into force. The year 2008 will come very quickly. We were very lucky to be able to have the ICAO PRICESG chairman, Brian Day, and the linguistic adviser to PRICESG, Elizabeth Mathews, come to the Warsaw seminar to explain in person the evolution of the proposals and the hopes for their future effects. Our discussions were also enhanced by the presence of many other PRICESG committee members.

The hospitality offered by the Polish Airports Authority was exemplary - a superbly equipped and comfortable conference room and delicious meals and snacks with coffee breaks. We cannot thank you enough, Bozena and your team, for a wonderful event in such a setting. However, in the final analysis, credit must go to the speakers and all the participants. We provided the infrastructure, but you created the content.

Credit for the following published proceedings goes to Philip Shawcross who has made an excellent job of editing.

Thank you to everyone who made it possible.
Hoping to see you again the next time.

Yours sincerely

A handwritten signature in black ink that reads "Jim A. Robertson". The signature is written in a cursive, slightly slanted style.

President

8th International Aviation English Association Seminar

“The effects of the conclusions of the ICAO Proficiency Requirements in Common English Study Group (PRICESG)”

**hosted in Warsaw on 26th and 27th September 2002
by The Polish Airports State Enterprise**

Seminar programme

Thursday

- 9.00- 9.30** Opening
- 9.30- 10.30** *Who we are, where we are, and what we want to do?* Brian Day, Chairman PRICESG Committee
- 11.00-12.00** *The proposals, in bits and pieces* Elizabeth Mathews, Linguistic Adviser, PRICESG Committee
- 12.00-13.00** *Training implications* Jeremy Mell, ENAC, France
- 14.30-15.30** *Testing implications* Elizabeth Mathews
- 15.30-16.30** Posters and coffee
- 16.30-17.30** *Training materials and resources* Mike McGrath, Lingua Franca, Scotland
- 19.30** Dinner at the Airport Hotel “Okêcie”, courtesy of PPL/iAEA

Friday

- 9.00- 9.30** *PELA – a test to meet international proficiency requirements* Adrian Enright, Eurocontrol
- 9.30-10.15** *What will the new regulations change for the pilot, the controller and the aviation English teacher?* Round table, chair Philip Shawcross, English for Aircraft
- 10.45-11.30** *Round table part 2*
- 11.30-12.00** *Pilot training and testing in China*, Ma Tao, Civil Aviation Authority of China
- 12.00-13.00** *Closing session: questions from the floor*, chair Brian Day
- 13.00-14.30** Lunch for the participants staying for the afternoon, courtesy of PPL
- 14.30-17.00** *Future directions for the association - discussion*

Saturday

- 9.30-14.00** Guided sightseeing tour of Warsaw

List of Participants

Ms	Maria	ACS NAGY	Language Teacher	HUNGARY	Hungaro Control Hungarian ATS	
Ms	Véronique	AMAND	Head of Lang Dept	BELGIUM	Forem Belgium	
Ms	Denisa	BEHALKOVA	English Language Instructor	CZECH REPUBLIC	Czech Airline Training Centre	
Mme	Joan	BELLEC	Teacher	FRANCE	CLA, Université de Franche Comté	
Mr	Marisol	BERMUDEZ	Head of Lang Dept. Technical Crew	SPAIN	IBERIA	
Mr	Oleksandr	BOGOMAZYUK	Training and Testing Project manager	UKRAINE	Ukranian State Air Traffic Service Enterprise	
Ms	Marija	BRAIKOVA	Language Teacher	BULGARIA	ATS Bulgaria	
Dr	Maja	BRATANIC	Professor	CROATIA	Faculty of Transport and Traffic Engineering	
Mr	Marian	BUJNOWSKI	Senior Inspector	POLAND	General Inspectorate of Civil Aviation	
Ms	Ioana	CALIMAN	English Language Instructor	ROMANIA	Romanian Civil Aeronautic Authority	
Mr	Robert	CHATHAM	Chief Spec. Curriculum Branch	USA	Defense Language Institute	
Mrs	Ilona	CYWIŃSKA- RUTKOWSKA	EFL teacher	POLAND	Polish Airports State Enterprise	
Mr	Brian	DAY	Chairman PRICESG Committee	AUSTRALIA	ICAO	
Ms	Odile	DEPERNET	English Language Trainer	FRANCE	Air France Language Academy	
Ms	Tatiana	DOBRUNOVA	Dean of Faculty	RUSSIA	Civil Aviation Academy St Petersburg	
Mr	Andria	DRAGIĆ	ATCO	POLAND	Polish Airports State Enterprise	
Ms	Francoise	DUFOUR	Language Trainer	BELGIUM	Forem Belgium	
Mr	Gradimir	DUNCIC	Head of Ground Studies	SERBIA AND MONTENEGRO	JAT Flight Academy	
Mr	Graham	ELLIOTT	HR consultant/lang. specialist	USA		
Mr	Adrian	ENRIGHT	Training Development and Harmonisation	LUXEMBURG	Eurocontrol Institute of Air Navigation Services	
Mme	Michèle	FLOOD	Training Standards Division	FRANCE	SEFA	
Mr	Thomas	FUDAKOWSKI	Chief ATS Safety and Security	CANADA	Transport Canada	
Dr	Christian	FURNWEGER	Head of Austro Control Academy	AUSTRIA	Austro Control	
Mme	Carmel	GODMET	English Teacher and Coordinator for SO France	FRANCE	DAC/SO	
Mr	Mirosław	GWARDIAK	ATM Personnel Training Programmes Manager	POLAND	Polish Airports State Enterprise	
Mr	Jussi	HAILA		FINLAND	Accident Investigation Board	
Mr	Shin Yul	HUR	Assistant to Exec VP- Operations	SOUTH KOREA	Korean Air	
Mr	Arkadiusz	JAWORSKI	English Teacher	ELS	POLAND	ELS-Bell School of English
Mr	Erkki	KANTOLA		FINLAND	Accident Investigation Board	
Mr	Michael	KAY	Centre for English lang.	AUSTRALIA	RMIT Training Pty Ltd	
Mr	Paweł	KOBRYŃ	ATCO	POLAND	Polish Airports State Enterprise	

	Natalia	Korableva	English Course Manager	LATVIA	ANS Training Centre
Mr	Slawomir	KOZAK	ATCO	POLAND	Polish Airports State Enterprise
Mrs	Dorota	KOZUBOWSKA	EFL teacher	POLAND	Polish Airports State Enterprise
Mme	Alenka, Helena	KUKOVEC	Lecturer of English ,Faculty of Mechanical Engineering	SLOVENIA	University of Ljubljana
Mr	Luis	LABAIG	Pilot	SPAIN	IBERIA
Mme	Donna	L'HOTE	English Teacher	FRANCE	CLA
Ms	Andrea	LUCAS	Recruitment manager	HONG KONG	Cathay Pacific
Mr		MA TAO	Deputy Director General	CHINA	Flight Standards Dept., CAAC
Mrs	Jadranka	MAJIC	English Language Consultant	CROATIA	Croatia Control Ltd.
Mrs	Mirna	MARINCIC	Head of Staff Planning and Training	CROATIA	Croatia Control Ltd
Ms	Elizabeth	MATHEWS	Linguistic Adviser	USA	ICAO
Ms	Linda	MAZAL	Teacher	FRANCE	ENAC
Mr	Guy	McCLURKAN	Vice Pres. Affiliate Ops.	USA	Embry-Riddle Aeronautical University
Mr	Mike	McGRATH	Teacher and materials writer	GREAT BRITAIN	Lingua Franca
Dr	Jeremy	MELL	Assistant Head of Languages.	FRANCE	ENAC
Ms	Christine	MERTENS	Engineer	BELGIUM	Technifutur
Ms	T.	MITRYUSHKINA	Director	RUSSIE	Volga-Dnepor Training Center
Ms	Fiona	MOFFATT	Teacher	FRANCE	ENAC
Ms	Malgorzata	MROKOWSKA		POLAND	LOT
Ms	Ljiljana	NESKOVIC	Senior Adviser in English Language	YUGOSLAVIA	FATCA
Ms	Christy	PARRIS	General Manager	FRANCE	Air France Language Academy
Mme	Juraté	PATASIUTE	RT Instructor	LITHUANIA	Rodunios kelias 2
Mr	Freddy	PRIEM	Head Teacher	BELGIUM	KHBO Katholike Hogeschool Brugge-ostende
Ms	Fiona	ROBERTSON	Teacher	FRANCE	CLA, Université de Franche Comté
Mrs	Mara	ROMELE	Personnel Manager	LATVIA	Latvian Air Navigation Service Enterprise
Capt.	Herbert	SCHWARZ	Pilot training manager	AUSTRIA	LAUDAAIR
Mr	Philip	SHAWCROSS	Teacher	FRANCE	English for Aircraft
Ms	Bożena	SŁAWIŃSKA	EFL teacher	POLAND	Polish Airports State Enterprise
Mr	Andrew	STEBBINS	Language Trainer	HONG KONG	Cathay Pacific
Ms	Aleksandra	SUCHECKA	ATCO	POLAND	POLATCA
Mr	Paweł	SZCZĘSNOWICZ		POLAND	LOT
Mr	Bob	TROTT		ENGLAND	IFATCA
Ms	Tatjana	TRZIN	English Instructor	YUGOSLAVIA	Yugoslav Airlines
Mr	Wu	TUXING	English instructor	CHINA	China Civil Aviation Flight College
Capt.	Rick	VALDES	Airline captain	USA	IFALPA
Ms	Magdalena	ZALEWSKA	EFL teacher	POLAND	Polish Airports State Enterprise

OPENING ADDRESS

Mr. Robert Michalak, Chief of ATC Training of the Polish Airports State Enterprise, welcomed the delegates to Warsaw and reminded them that during the first Warsaw seminar held in 1994, the PPL had proposed hosting another event for the Association once its new premises were completed. Today, they were keeping that promise.

Ms Fiona Robertson, President of the International English Association, expressed her gratitude for this hospitality and the support given to the Association by the PPL. Subsequently, she chaired the various presentations and discussions.

PROPOSED ICAO PROFICIENCY REQUIREMENTS IN COMMON ENGLISH

PART I: THE NEED FOR ENGLISH LANGUAGE PROFICIENCY REQUIREMENTS AND THE ROLE OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

Brian DAY, Chairman of the ICAO PRICESG (Proficiency Requirements in Common English Study Group)

Brian Day is a Technical Officer in the Air Traffic Management Section of the International Civil Aviation Organisation (ICAO) in their headquarters in Montreal. He has a background in Air Traffic Control and aviation search and rescue. He finished his career with the Australian ATS provider as the National Manager of Search and Rescue. He then worked with the Australian Aviation Regulator setting standards for the private provision of Air Traffic Control. Over the last twelve years he has worked intermittently on field projects for the ICAO Technical Co-operation Bureau on civil aviation institutional projects in Africa, Asia and across the Pacific.

The role of communication in aviation safety has been highlighted in a number of accident investigations. Increasing concern has been expressed in many industry quarters, not only about an insufficiency of language skills in radiotelephony and, by inference, the insufficiency of ICAO provisions, but the degree of non-compliance with the existing provisions. Some safety experts contend that the most vulnerable link in the airspace system is information transfer between air traffic controllers and pilots. A review of 28,000 reports in the Aviation Safety Reporting System reveals that over 70% of the problems cited were in information transfer.

The 32nd ICAO Assembly (Montreal, 1998) adopted a Resolution (A32-16) that called for “steps to ensure that air traffic controllers and flight crews involved in flight operations in airspace where the use of the English language is required, are proficient in conducting and comprehending radiotelephony communications in the English language.” The Assembly urged that the matter be considered with a high level of priority; to progress the task, the ICAO Air Navigation Commission established an ICAO Study Group comprised of representatives from ICAO Member States and International Organisations.

To understand the process through which ICAO Standards and Recommended Practices (SARPS) are developed, it is useful to emphasise that ICAO is a representative body,

representing equally the interests of all 188 Contracting States. ICAO was established in 1944 on the basis of the “Chicago Convention” by fifty-five allied and neutral nations and charged with the administration of principles directed toward the following objectives:

- Ensure the safe and orderly growth of international civil aviation throughout the world;
- Encourage the arts of aircraft design and operation for peaceful purposes;
- Meet the needs of the peoples of the world for safe, regular, efficient and economical air transport;
- Ensure that the rights of Contracting States are fully respected and that every Contracting State has a fair opportunity to operate international airlines;
- Avoid discrimination between Contracting States; and
- Promote the safety of flight in international air navigation.

ICAO’s one hundred and eighty-seven Contracting States agree, as far as possible, to adhere to ICAO Standards and Recommended Practices contained in the eighteen Annexes to the Convention on International Civil Aviation signed in Chicago on December 7, 1944, although Annex 1 of the Chicago Convention makes it clear that every State has complete and exclusive sovereignty over the airspace above its territory.

Proposals for amendments to the ICAO Annexes containing the SARPS originate with a Member State either through meetings of the Assembly, Council, Air Navigation Commission (ANC), or through a Panel or Study Group. The Secretariat develops the proposals and presents them to the ANC at a preliminary hearing where they are debated and, as necessary, refined. They are then notified to all Contracting States and relevant international organisations for their consideration. The States’ comments are summarised, and the amended proposals presented to the ANC for final review, at which point the ANC may decide to present the proposals to the ICAO Council or not. If the recommendation is made to present the proposals to the ICAO Council, the Secretariat drafts a third Working Paper for the Council session. The Council may adopt the proposals, and if not disapproved by a majority of States, the amendments incorporating the SARPS will become applicable on a designated date.

The Proficiency Requirements in Common English Study Group, or PRICESG, is comprised of aviation and linguistic experts from Argentina, Canada, China, France, Russia, Ukraine, the United Kingdom, the United States, the European Organisation for the Safety of Air Navigation (EUROCONTROL), the International Air Transport Association (IATA), the International Federation of Air Traffic Controllers Associations (IFATCA), the International Federation of Airline Pilots Associations (IFALPA), and the International Civil Aviation Organisation (ICAO.)

PRICESG presented the Secretariat with a set of recommendations developed to satisfy the requirements of the task set by the ANC, to the extent that current State resources, national considerations, and political, social, and economic circumstances will allow. In essence, the group recommended that the provision for the use of the language of the station on the ground, and English, be elevated from a Recommended Practice to a Standard. Further, the group established a required minimum level of proficiency and certain testing requirements. The group also recommended that responsibility be vested in operators and ATS providers for ensuring that their operational staff meet the required level of language proficiency.

The case for *English* as the language of international civil aviation is much less political than it is pragmatic. As a United Nation's specialised agency, ICAO takes extraordinary measures to respect and protect linguistic and cultural diversity, pursuing the adoption of English in aviation only so far as it relates to improved safety and efficiency of air operations. Because language is so closely tied to our sense of national and cultural identity, humans are very naturally sensitive to issues of language use and policy. In the case of international aviation, however, perhaps more than in any other arena, English sheds all connection to political agendas, real or perceived, and becomes simply another tool for increased safety and efficiency of aviation operations. In this regard, its use is similar to many other initiatives aimed at increasing safety. In no other arena does the English language "belong" less to traditional English-speaking countries than it does to the many users of the language who have adopted it for their use. That English is a widely used international language does not, however, mitigate the complex nature of the implementation of ICAO language proficiency standards, nor the requirement for sensitive articulation of the need for such standards.

Based on the recommendations of the PRICESG, the Secretariat presented proposed amendments to the ANC in November 2001. The ANC agreed to their transmission to ICAO Member States. A review of the comments from Member States will be presented to the ANC in a final review in November 2002.

While the PRICESG is satisfied that it had responded to the task set by the ANC, which in turn was based on the Assembly Resolution A32-16, the group is insistent that the effort has just begun. The improvement of radiotelephony communications to a higher level of safety is no small matter and requires widespread co-operation and continuing, concerted effort, particularly from practising controllers and flight crew. In particular, it is vital that native speakers conform more closely with existing provisions, particularly the ICAO standardised phraseology so carefully and painstakingly developed over the last fifty years.

In considering the risk posed by careless communication and the resources required to mitigate that risk, it is apparent that this is one of the few opportunities still remaining for making a significant positive impact on the safety agenda at an affordable price, with manageable effort and in reasonable time. The optimum strategy is not to prescribe, coerce or threaten, (although the proposed new provisions would provide a robust platform for improvement); it is to appeal to the innate responsibility of every controller and pilot using domestic and international airspace. ICAO is seeking the co-operation of airlines and State authorities in meeting the need for both non-native and native English speakers to be given an understanding of some basic linguistic principles. In conjunction with the SARPS under development, in co-operation with States, operators and service providers and, not least, in a combined effort with line pilots and controllers, both native and non-native speakers, ICAO is confident that we can, over the next few years, make a difference in improving international aviation English—indeed, the use of all international aviation languages—to the end that the world will fly safer.

PART II: THE PROPOSED ICAO LANGUAGE PROFICIENCY REQUIREMENTS

Elizabeth Mathews, Linguistic Adviser on the ICAO PRICE Study Group

Elizabeth Mathews facilitates the work of the Proficiency Requirements in Common English Study Group (PRICESG) in its work to review ICAO provisions for the use of English in International Radiotelephony communications. Prior to joining ICAO, Ms Mathew was Director of the Aviation and Academic English program at Embry Riddle Aeronautical University in Florida. She has a Masters degree in teaching English as a second language and has eighteen years experience in English language training and education. For six years prior to joining ICAO, she focused on the development, management and marketing of Aviation English training and testing programmes at Embry Riddle. She developed the curriculum and managed English language training programmes for Air Traffic Controllers and for both ab initio and experienced pilots. She was leader of a team that developed the Test of English for Commercial Airline Pilots.

English has long held unofficial status as the lingua franca of the aviation world; indeed, many are surprised to learn that English is not, in fact, the officially required language of international air traffic control. There are currently, within several regulatory organisations, multiple efforts being made to examine the need to assign to English official status for international aviation communication, and the consequential requirement to set proficiency standards and establish testing instruments. As the representative United Nations Specialised Agency charged with regulating the safe and orderly conduct of international air transport, ICAO is at the centre of the most far-reaching effort to improve aviation safety through the establishment of language standards.

Current provisions for the use of language are contained in Annex 1 — *Personnel Licensing* and Annex 10 — *Aeronautical Telecommunications, Volume II — Communication Procedures including those with PANS status*. Annex 10 recommends, in general, the use of the language of the station on the ground and also recommends that English be made available on request whenever an aircraft station is unable to make use of the language on the ground (Chapter 5.2.1.2.1). The historic embodiment of the provision as a Recommended Practice is noteworthy, as ICAO Recommended Practices have less binding value than do ICAO Standards. In Annex 1, the Standards addressing licensing requirements for air traffic controllers and aeronautical station operators simply require the ability to speak the language nationally designated for use in radiotelephony communications “without accent or impediment.”

In order to consider proposed amendments to strengthen ICAO provisions guiding the use of English for radiotelephony, it is helpful to understand why they do not fully suffice as they stand. Firstly and most importantly, 5.2.1.2.2, recommending the use of English when a pilot does not speak the language of the station on the ground, does not specify a level of proficiency for either the pilot or the controller using English. Essentially, recommending the use of a language without defining a proficiency level renders implementation difficult at best and enforcement impossible. Simply put, it is akin to establishing a requirement that “pilots must be skilful,” without specifying what ‘skilful’ means.

Secondly, the embodiment of provisions guiding the use of English as a Recommended Practice, following a recommendation to, in general, use the language of the station on the ground, combined with the lack of a specified level of proficiency, belies the safety critical role of communication. Finally, the Standard in Annex 1 to speak “without

accent or impediment,” is vague and imprecise and applies only to controllers; there are currently no communication requirements directed specifically at pilots.

Before continuing a review of the proposed amendments, it is useful to note that there are three fundamental applications of language in aviation radiotelephony that have a significant safety impact:

- The use of ICAO standardised phraseologies;
- The level of proficiency in "common" or plain language whenever standardised phraseologies do not suffice; and
- The use of two languages in a single radiotelephony environment.

The proposed amendments to ICAO Standards and Recommended Practices stand to have an unprecedented positive impact on safe radiotelephony communications by addressing the first two of these three aviation-related language issues, as will become clear in the discussion below. The indirect positive impact of the proposals on the third aspect of language use will be addressed separately.

The proposed amendments strengthen the provision for English to be made available from a Recommended Practice to a Standard, while not disallowing the use of another nationally designated language, usually the language spoken by the station on the ground. The provisions also spell out clearly and simply, by way of a comprehensive proficiency scale expressed in behavioural terms, various levels of language proficiency and, in particular, a level identified as being the minimum required for controllers and pilots in the conduct of international flight operations. They also establish a schedule for recurrent proficiency testing. In addition, proposed amendments to Annexes 6 and 11 impose a responsibility on airline operators and air traffic service providers for ensuring the language proficiency of their operational personnel.

The introduction of proposed amendments concerning language proficiency for radiotelephony communications raises a number of issues which warrant clarification:

- a) The distinction between phraseologies and “plain” language;
- b) The applicability of the proposed language proficiency requirement to native and non-native speakers;
- c) The applicability of the proposed language proficiency requirement to all languages used for radiotelephony communications; and
- d) The rationale for a proposed testing schedule.

Standardised ICAO phraseologies have been developed to cover many, many circumstances, particularly routine and usual events, but also including predictable emergency or non-routine events. However, because human activity is infinite and ever variable, no set of standardised phraseologies can fully cover all possible circumstances. There exists now and there will continue to be a need to use language which falls outside the narrow subset of phraseologies. Conducting and comprehending radiotelephony communications requires competence with standard phraseology as well as general proficiency in the language used for radiotelephony communications.

What should be used when phraseologies do not apply is referred to variously as “plain language” or “subsidiary phraseologies,” and is not elaborated upon in any ICAO document, although it is mentioned most plainly in the Forward to the Manual of Radiotelephony.

The proposed amendments, therefore, strengthen the provisions for the use of ICAO phraseologies and provide improved guidance on the use of plain language when phraseologies do not suffice.

But it will be noted that the proposed amendments do not disallow the use of language of the station on the ground. Although many pilots, controllers and safety experts believe that a single language for radiotelephony communications ensures optimal situational awareness - and the Secretariat is sympathetic to that position - there are significant organisational, national, cultural, and economic barriers. First of all, it is important to remember the role of ICAO as a representative body of collective member States. ICAO does not and cannot nominate unilaterally; ICAO acts upon what the Member States and Organisations ask for. Secondly, ICAO cannot set policy for or interfere with matters of domestic aviation. Thirdly, it is fundamental that our sense of national and cultural identity is closely linked with language, making language issues deserving of sensitive handling. Nonetheless, even without proposing an “Only English” environment, the proposed language proficiency requirements represent significant safety progress.

The proficiency requirement and scale were developed with both native and non-native speakers in mind and are applicable to both groups, for any language used for radiotelephony communications. Additionally, proposed amendments to Annex 1 specify recurrent testing in order to ensure that language skills do not diminish. Except at the very highest levels, language proficiency can diminish when an individual does not have sufficient opportunity to use the language. The proposed schedule for recurrent language testing reflects that stronger language skills require less frequent testing, with no recurrent testing required for those individuals at the highest levels of language proficiency.

The language proficiency requirement and its related rating scale were developed with the assistance of the aviation language specialists in the Proficiency Requirements In Common English Study Group. With backgrounds in Applied Linguistics and experience in aviation communications, the group drew on research and years of practical experience in training and testing controllers and pilots to appropriate levels of language proficiency for efficient and safe radiotelephony communications. In essence, the proposed amendments only elaborate and improve upon existing provisions. As it is, the requirement is that controllers speak without accent or impediment; the proposed amendments merely extend that requirement to cover pilots and elaborate on what it means to speak without accent or impediment. Current provisions stipulate that English *should* be made available; proposed amendments strengthen that Recommended Practice, stipulating that English *shall* be made available, (while allowing for the use of the language of the station on the ground), and specify the level required. In other words, the new provisions make more sense of those already existing.

Language policies are best implemented on the basis of positive and supportive initiatives rather than through the top-down imposition of rigid policy. The proposed ICAO language proficiency requirements stand to have unprecedented positive impact on global aviation safety.

Questions/issues raised after the presentation:

In reference to Annex 10, Attachment B, it was suggested that radiotelephony *speech* be replaced with radiotelephony *communication* to reflect the fact that meaning is not only conveyed by speech.

The point was raised that Air to Ground communication is not appropriate as this term is too limiting.

It was suggested that the term *General Language* was preferable to *Plain English*.

The issue of the 2008 requirements “killing” small aviation was raised where VFR pilots only operate in localised areas, or even hot air balloonists. The question was raised as to whether ICAO was making the provisions applicable to smaller aviation English users?

Elizabeth Mathews replied by saying the provision allows for communication in mother tongue in one’s own state.

Brian Day went on to make the point that ICAO is only concerned with international standards (not categorised as VFR/IFR or recreational aviation), that ICAO is only guided by international civil aviation matters and that the extent the provisions are applied to regional or domestic operations depends on individual state’s adoption and application of the provisions. Brian clarified this by stating that VFR/recreational aviation personnel may use the language of the ground station and this is still provided for in the ICAO provisions. He went on to say that the issue will be cleared up and addressed by the commission in due course.

TRAINING IMPLICATIONS OF THE ICAO PROFICIENCY REQUIREMENTS IN COMMON ENGLISH

Dr Jeremy Mell, Assistant Head of Languages, Ecole Nationale de l’Aviation Civile, Toulouse, France

Jeremy Mell was born and bred in Great Britain and trained in language teaching and linguistics. Since 1980, Dr Mell has taught at the ENAC. He is Language Training Co-ordinator for ATC training courses. He is involved in national and international working groups on phraseology, language testing, syllabus design and PRICE.

Jeremy Mell who focuses on ATC ab initio rather than recurrent training was assisted by Ms Carmel Godmet a DAC training co-ordinator at Bordeaux in South Western France and Ms Michèle Flood specialised in pilot training at the SEFA.

The proposed amendments to ICAO annexes can be expected to have a profound impact on the conduct of language training within the aviation community. More specifically these are:

- annex 10 (Communication Procedures) and annex 11 (Air Traffic Services): :
 - statement of the articulation between standardised ICAO phraseology and plain language
 - reinforcement of English as the common language for radiotelephony communications and communications between ATC units;
- annex 1 (Personnel Licensing):
 - imposition of proficiency requirements for any language used in radiotelephony;
 - statement of language performance descriptors;
 - recommendation of periods of validity for a demonstrated level of proficiency,
- annex 6 (Operation of Aircraft) and annex 11 (Air Traffic Services):
 - responsibility for ensuring that proficiency requirements are met.

If these proposals receive the ultimate approval of ICAO member states, we will have the historic privilege of taking part in a common effort to achieve a worldwide objective for language training. However, while it might be tempting for teachers and training managers to raise their hopes for the "Aviation English Course" to see the light of day, my purpose in this talk will be to point out the variety of routes that each training institution will need to consider before plotting the course for their students to reach and maintain "proficient speaker" status. I will be speaking from the standpoint of extensive experience with a state authority, the French DGAC (Direction Générale de l'Aviation Civile), which has been implementing performance language requirements for ATC personnel for the past 10 years.

The principal phases of training to be examined separately are (i) recruitment, (ii) ab initio training, and (iii) maintenance (or recurrent) training. Training policy for each phase will be governed by factors that relate to specific national, institutional or professional features.

(i) recruitment

Enhanced standards of proficiency will naturally affect recruitment criteria, but the entry levels required will depend on the resources that are allocated. In some countries, standards in the national education system have been raised. Proper monitoring of students requires extensive testing but oral testing is extremely costly in terms of human resources.

(ii) ab initio training

The ENAC has already been involved in applying proficiency requirements in France since the early 1990s which have been inspirational for PRICESG. Consequently, at the ENAC there is some experience of what this phase of transition might be.

The training carried out depends on the recruitment levels. The need for specific language training is also affected by whether the students are national or foreign and whether the technical training is performed in English or the local language. France is fortunate and exceptional in having a three year training period.

Trainees demand training that reflects the exit testing. Testing procedures will affect training.

(iii) Recurrent training

The amount of English that is used by controllers on a daily basis, in other words the amount of practice they have, depends on the towns where they work. Furthermore, their availability depends on the policy of training, in work or free time, and age impacts on the ability to improve language proficiency. Training strategies need to integrate all these specific conditions.

Motivation is mainly internal. Between 10 and 20% of any population has a high level of motivation. These are the people who request training and need it least.

When you introduce proficiency obligations, you encounter resistance, resentment and lack of motivation. You will have to manage failure.

Training courses will then need to be specified in terms of 4 principal features - objectives, content, resources and structure. **Training objectives** will need to comply closely with ICAO specifications for standard phraseology and plain language, as well as focusing on learner skills to facilitate a career-long effort to maintain that compliance. Plain language skills will have to meet the Level 4 descriptors in the six language skills specified.

Special emphasis will need to be placed on:

- voice only communication without the body language component;
- appropriate tempo and fluency;
- immediate / appropriate responses to be tried out and exercised;
- effectiveness of communication is more vital than academic correctness;
- common, concrete and work-related topics rather than irrelevant subjects;
- accuracy and clarity in speech production;
- responding to unexpected turns of events;
- communicative strategies, resolving misunderstandings, paraphrasing etc.

Training content, will in turn relate to the objectives: detailed syllabus checklists will be available in the form of ICAO Guidance Material, while appropriate methodologies must focus on oral fluency and accuracy and require the greatest possible authenticity; frequent progress checks with feedback to learners will also be a significant feature.

The syllabus needs to highlight:

- accent and dialect;
- communicative functions (distinguishing questions and statements etc.);
- the nexus of relevant lexical domains (aviation, medical, geographical, transport etc.);
- modes of interaction: voice only, bad sound quality, hear back feature etc.);
- focus on communicative skills only prepared by classroom work.

Training methodologies should feature:

- emphasis on oral skills;
- enhancement of interactive communication;
- authenticity of situations;
- bilingual activities as controllers quite often have to deal with such situations;
- regular progress checking with respect to requirements. This involves considerable testing.

General language awareness needs to be enhanced so as to be able to make informed decisions about how to go about communicating. Teachers, human factors specialists and psychologists should come together on this issue.

The volume of learning that will be generated by the requirements will require an improvement in learner skills: improving language without teachers, career-long effort by individuals, learner autonomy etc.

Training resources will demand a degree of investment; training materials will need to be as authentic as possible and these must be regularly renewed to cater for recurrent training and to keep pace with advances in technology. Often, the lack of sufficient specific listening materials means that general materials also have to be used. Finally course planners will need to consider structural options such as intensive/extensive training or classroom/self-study.

Trainers will need both proven language teaching skills and a good grounding in the professional field of ATC and piloting. They will require:

- a good command of spoken English;
- a flexible and innovative approach to method;
- strong familiarity with the professional context.

An inadequate number of teachers combining these skills may make co-ordinated team work indispensable.

Truly effective language training will challenge us to go beyond off-the-peg solutions. Certain "old habits" will need to be broken, such as school-learning (rote-based learning, pure language knowledge) and preference given to real-life communicative competence, as opposed to merely "doing some English".

A lot of bridge-building will become vital, notably between the different phases of training (see above), the different populations (such as pilot/ATCO or language trainer/aviation instructor, native-speakers/non-native speakers of English), the different areas of training expertise (English language, phraseology, human factors) and the different disciplines of ELT (general, special purpose). The Association's seminal networking role in this field is particularly inspirational.

Maintaining learner motivation in a career-long perspective will require the training process to address issues such as failure in high-stakes testing or gradual erosion of proficiency through lack of regular practice. There is a challenge to avoid such occurrences as much as possible.

Finally we can expect a number of spin-offs to have an impact on our activity. The introduction of a language proficiency culture may spill over into other aviation professions (cabin crew, maintenance staff, etc). Local demands may arise for similar training in other languages used in radiotelephony communications. Meanwhile, the training effort will stimulate academic research into fields which will feed back into training practice – for example the phonology of dialects, terminology studies and the general debate of English as a world language.

In the **discussion** that followed the presentation, it was pointed out how the ICAO requirements were similar to the scale used in France by the ENAC, although the school used a more differentiated scale with scores such as 3.5 to assess progress. 3.5, for instance, is the intake level.

From a French point of view, the five year time scale between now and January 2008 would seem reasonable. Ab initio training, however, will be much easier to handle than recurrent training of more senior controllers.

In France, 30% of the 80% of controllers tested had not attained Level 4, but there was no information about their age. Some will have reached retirement by 2008.

Transposing the situation to flight crew, it was observed that 'stepping stones' would often be necessary as all the pilots below Level 4 would not be retired by 2008.

Reference was made to Jennifer Jenkins' book: *The Phonology of English as an International Language*. (Oxford University Press. ISBN: 0 19 4421643)

TRAINING MATERIALS AND RESOURCES

Mike McGrath, Teacher, consultant and materials writer at Lingua Franca, Perth, Scotland

Mike McGrath

Mike Mc Grath, graduate of Trinity College Dublin, began his teaching career as a teacher of French before moving to the English EFL Research unit at CIAVER in St Ghislain Belgium. He then worked in Spain as director of studies in two language academies before arriving in Perth, Scotland in 1978 to work as a language instructor at Air Service Training, a major aeronautical training establishment. He decided to go freelance in 1992 and has since worked as a consultant with several organisations in particular British Aerospace Flight Training and Sefa. Has devoted a fair amount of time in recent years to creating a CD ROM based course for entry level students of aviation. He presently divides his time between lecturing in EFL at Perth College in Scotland and teaching intensive pre-sessional ESP courses to aviation students intending to train at British Aerospace Flight Training, Jerez, Spain

The talk examined the availability of suitable classroom materials for the teacher of English for Specific Purposes (English for Aviation).

A few years ago I set up a web site to reveal my position of English for Aviation trainer and consultant. As a result of this, I have received a large number of enquiries from people enquiring about the possibility of obtaining material for teaching English to aviators or other members of the aviation community.

The following (verbatim) is one of the more harrowing of those enquiries:

Dear Mr Mc Grath,

I am a language teacher at the Civil Aviation Training Centre in (.....).

From November I should teach R/T language (unusual and emergency situations) for controllers.

My problem is that I have never done it before and cannot find any materials. Is there a course available till that time? Or can you offer materials for teaching?

(.....name and address

This, and others in similar vein, has prompted me to name this talk, inspired by the Tom Seegar song

Where Have all the Aviation English Titles Gone?

I'll begin by showing a list (not an exhaustive list) of the titles which were mentioned in the standard ESP catalogues in 1980, shortly after I entered the field of English for Aviation.

Titles available in 1980

Regents

Flying and Air Traffic Control

Ground Services

The Air Force in English

Collier- Macmillan (Career English Series)

Aviation Maintenance

The Jet Engine

Air Travel

Prentice Hall

AirSpeak (Fiona Robertson)

Thank You for Flying with Us (John Beech)

Stanley Thornes

SkyTalk L. Leveson

BBC

The Language of Aviation

Ladybird

The Aeroplane

The Airman

The Story of Flight

The situation today is vastly different. Many of the publishers mentioned in 1980 list are no longer in existence and (officially) **NONE** of the published works is still in print.

1980 Titles still in print in 2002

(unofficially)

Airspeak by Fiona Robertson

(limited numbers of copies are available)

SkyTalk by L.Leveson

(plans are mooted that it may be republished)

There are several titles which have appeared in the interim.

New Titles not Available in 1980

Books:

'English for Aircraft 1&2': by P.Shawcross (Editions Belin)

'A Dictionary of Aeronautical English': by D.Croker (P.Collins)

Ready for Take-off: (Media Training)

Manuel de Radiotelephonie pour Navigants Professionnels de Vol 1&2: Yves Rengade (Editions Cepadues)

Manuel d'Anglais Parlé du Pilote de Ligne: Yves Rengade

CD Roms:

'docWise' by P. Shawcross et al (docWise Training Ltd)

'Plane Talking' <http://www.realenglish.tm.fr/>

'Aviation English on CD ROM' IALPA and others

'Airline Talk in English' (supposed to be available early2002) www.airline-talk.com/engmain/info_eng/info_eng.htm

Aviation English - Flying by Alenka Kukovec ISBN 961-90967-0-3

This seems to be an exhaustive list and to cover the field well.

So what is the problem?

Of the 7 books mentioned above, 6 are not contained in any international ESP catalogues, e.g, Bournemouth English Book Centre (BEBC) or Oxford Book Centre and require insider knowledge or extreme patience to obtain them.

The Yves Rengade books are designed for French speakers and contain extensive rubric in French. They are unsuitable for international use, in my opinion. The book by Alenka Kuovec, is extremely useful, in spite of slight cultural ties to her home nation of Slovenia. The Exception is Dave Croker's Aeronautical Dictionary which appears in several catalogues and is readily available. However it is a dictionary, not a course book.

The CD ROMS are similarly split according to narrow specialised disciplines and are not readily available through normal publishing outlets.

It will be obvious that the supply of readily available teaching materials for the majority of practitioners is well below 1980 levels in terms of scope and availability while, I believe, the demand has continued to rise.

Why has happened?

Who, if anybody, is responsible?
What can we do about it?

The POSSIBLE Suspects

1. Publishers?

They have allowed aviation English titles to lapse and they have failed to commission new titles.

2. Users?

If users are responsible, do we blame

Aviation Training Organisations who have in many cases continued to recruit non-specialist teachers, given them little preparation and sent them into the classroom with inadequate materials.

or

Individual Teachers who have continued to request materials, in particular materials at entry level (at least according to my internet mail inbox) but have been left in the lurch by both publishers and some training organisation (there are egregious exceptions).

The Publisher's Case

Publishers may plead in their defence that there has been an unprecedented consolidation in the publishing industry leading to a re-assessment of titles.

The User's Case

Overall, there has probably been a net increase in potential user numbers (purely a subjective opinion). But I do not believe that users (especially classroom teachers) have any significant case to answer.

Demand for Aviation ESP materials should have been on the INCREASE both on the part of teachers and those who employ them.

Factors beyond anyone's control

In Aviation

These are turbulent times in aviation. there has been recession and instability in the industry leading to:

- lack of financial resources
- lowered training budgets throughout the industry
- low priority given to English Language Competence (all leading to lower sales of published materials and not a few spectacular accidents/incidents)

In Publishing

The growth of multi-media and other formats, combined with unprecedented merger activity has led to:

- uncertainty in the publishing trade and a wait-and-see attitude.

But we all understand that publishing houses are not charities.

The Gap between Demand and Supply

This gap has been obvious to me since my web site has been up and running and I have started to receive calls for help from around the world.

How have we coped?

- by photo-copying precious copies to maintain supplies
- by using non-specific materials such as magazine articles or aviation titles designed for lay people. (This approach is particularly necessary to those who are coming into the field for the first time in institutions which do not have aviation English resources.)
- by 'growing our own' materials.

Growing your own is exciting and rewarding for those working in a dedicated, aviation training establishment with good industry support and experienced colleagues to call on for advice and assistance. The same is true when you have experience in the aviation context, have English mother tongue, have access to good resources, have good reproductive facilities (computer with good DTP program and a copying machine) and have a materials training budget. For the solitary 'tyro' teacher (a deepender) in a less established context with less supportive management and low overheads strategy (exactly the sort which will be undercutting the established schools in order to get the aviation English training contracts) the position is not so rosy. The opposite of a rosy situation is stressful for the teacher and the learner and leads to a poor training environment and poor results. As the costs of training have to be borne by the industry, the extra profits generated for the unregulated cowboys will ultimately have to come out of the pockets of aviation companies, they will pass the costs on to the customer, flights will cost more, fewer people will fly, etc.

Reasons to 'grow your own' in any case

Those of us who have been fortunate enough to have benefited from the better of the two scenarios outlined above have often done it for the following reasons:

- to avoid the high cost of bought-in materials
- because off-the-shelf materials are frequently too inflexible
- because bought-in materials are pedagogically unsuitable in terms of level, content or style

Now, we and our uninitiated colleagues do it because of the near impossibility of accessing suitable off-the-shelf material.

It is worth drawing attention to the vast store of general aviation and more specialist aviation materials which must exist in scores of English-for-Aviation training centres around the world. Very few centres seem to offer such texts for commercial sale. An exception is Oxford Air Training in Britain which has launched a series of reasonably priced texts and CD ROMs for general sale. PSC in Bournemouth, England, specialises in writing excellent training materials for sale to ground schools worldwide.

Embry-Riddle, in contrast, and to take just one example, has no training materials on offer in its catalogue.

The Way Forward? a multiple-choice question

should we (assuming that the texts available today do not exactly reflect our needs)

- a. accept that we must produce and use our own materials as a matter of course, whatever our skills or experience?
- b. exhort mainstream publishers to commission new aviation English titles with wide training appeal or at least republish updated older ones?
- c. persuade the aviation community to take an industry-wide initiative towards ensuring a base of high quality, generally available, aviation English training manuals?
- d. give up?

What do we need most?

We need to bring into existence a widely-available, cheap, dependable supply of teaching materials suitable for 'tyro' and more experienced practitioners through:

- a. identification and codification of the standard training objectives for Aviation English (not just a series of language outcome descriptors)
- b. an agreed standardised syllabus and example-rich descriptors of the language skills required by a representative range of posts within the aviation field (pilot, controller, ground crew, cabin crew, technician) identified in terms of grammar areas, functional areas, essential idiomatic and controlled language (including simplified English and ATC phraseology) as appropriate.
- c. A range of certified training and testing materials based on these criteria
- e. a blueprint for a teacher minimum accreditation in aviation English teaching and minimum recruitment and equipment criteria for any establishment wishing to be considered for aviation English training contracts.

How do we get it?

- a. Persuade the aviation community (maintenance, commercial aviation, general aviation, air traffic control, ground handling) to participate in the research into, elaboration of and eventual publication of standards and syllabi.

(The Price SG is an example of a model which is likely to fulfil this role. However, its connection with ICAO may hinder its ability to function with the necessary rapidity to make a difference in the short term. Its inability to become hands-on in direct training initiatives will be similarly restrictive.)

- b. Persuade the aviation community to take charge of the promulgation of standards, syllabi, detailed curricula, end user and trainer assessment criteria, possibly under the auspices of ICAO or other respected, industry-wide bodies.

c. Bring about an agreement that such standards, assessments and criteria will inform the curriculum within language training organisations (who may themselves be subject to aviation oriented scrutiny) and influence recruitment criteria within aviation organisations.

In the meantime.....

Support the authors of published materials by using their work when it suits your purpose. Otherwise, write our own materials or adapt from wherever possible.

a. Make use of authentic general aviation training texts such as basic instructional material for mechanics or pilots. Rewrite the material where necessary to make your own language training texts.

- b. Subscribe to dedicated aviation magazines such as:

Flying (US) www.flyingmag.com/index.asp

Pilot (UK) www.pilotweb.co.uk/

Flyer (UK) www.flyer.co.uk/

and adapt their articles for language use or use them as authoritative source material for our own texts.

Obtain the catalogue from a good general aviation kit supplier:

Transair (UK) (www.transair.co.uk)

Sporty's (US) (www.sportys.com/shoppilot/)

Pilot Warehouse (UK) (www.pilotwarehouse.co.uk)

The Flying Shop (UK) (www.flyingshop.co.uk)

The Flight Store (UK) (www.flightstore.co.uk)
'The Aviation Training Portal' (UK) (www.softtrain.co.uk/shopping/)
ITVV (Aeronautical Videos and DVDs) (www.itvv.co.uk/)
Get on their mailing list!

These catalogues reveal hundreds of titles on aviation subjects from 'aerodynamics' to the 'history of aviation'. Many are designed as informative texts for non-professionals and, as such, provide excellent preparation material for those teachers entering the field of ESP aviation. They can also be edited and graded to provide ideal classroom texts. Titles of books that will almost certainly serve this purpose, culled from the pages of aviation supplies catalogues are:

'The Air Pilot's Glossary and Reference Guide'
'The Anatomy of the Aeroplane'
'Aviation Mechanic Handbook'
'Mechanics of Flight'

You will also find the latest Video titles on all aspects of aviation from in-the-cockpit training tapes for PPLs to full transatlantic flights on the flight deck of a 747. These can form the basis of excellent language training aids or be used as supplementary material. In addition, many titles are now being converted to run on DVD and contain loads of extra material such as charts and relevant extracts from aircraft manuals.

The following is a list of published material for non-professional aviation enthusiasts which I have found particularly useful in recent times:

'Flying the Big Jets' by Stanley Stewart (published by Airlife Publishing)
'Air Traffic Control' by Graham Duke (Ian Allen ABC publications)
The 'On the Flight Deck' Series [3 Titles] (Ian Allen Publishing)

'Airport Operations' by R D Palmer (Ian Allen Publishing)
'Boeing 777' by Bruce Campion-Smith (Ian Allen Publishing)
'Flying for the Private Pilot Licence' R D Campbell (Granada Publishing)
'The VOR and ADF' by Martin Cass (Airlife Publishing)
Dictionary of Aeronautical Terms Dale Crane (ASA Inc.)

Other sources to Try:

Manufacturer's Sales Brochures

These are glossy brochures intended for potential purchasers of aircraft (in my case for the Bae 146 and Bae ATP). They are very professionally produced and provide very useful authentic but less challenging descriptions of the aircraft, its performance and its characteristics than the flight manual.

Discarded Aircraft Technical Manuals

(out-of-date manuals are good for diagrams and text samples and are quite easy to obtain) e.g. DC 10 aircraft manual

Many FAA publications such as 'The Airplane' are aimed at novices in the aviation field and as such are very useful for language trainees.

Oxford Air Training
(VFR and IFR Radio Telephony training on CD ROM)
(Jeppesen JAA ATPL Manuals) <http://www.oxfordaviation.net/shop/>

Conclusions

AVIATION ENGLISH language training materials are no longer considered as viable by MAINSTREAM PUBLISHERS.

The DEMAND for high quality text based materials is high and growing.

While the demand / supply equation remains unhelpful, making your own materials is often the only way round the problem.

The question of aviation English training is TOO IMPORTANT to be left to market forces and the whims of publishers and fly-by-night schools. Responsible bodies must take the initiative.

PELA: A TEST TO MEET INTERNATIONAL LANGUAGE PROFICIENCY REQUIREMENTS

Adrian Enright, EUROCONTROL, Training Development and Harmonisation, the Institute of Air Navigation Services Luxembourg

Adrian Enright originally trained as an Air Traffic Controller in the United Kingdom and moved to Eurocontrol Upper Airspace Centre in Maastrich in 1972. In 1975, he moved to the Institute of Air Navigation Services in Luxembourg as an instructor in ATC, management studies and instructional techniques. During this time he was playing an active role in the International Federation of Air Traffic Control Associations, first preparing ATC training policy then as regional Vice President. He became increasingly aware of the communication problems experienced by European Air Traffic Controllers and pilots. He has been actively involved in Aviation English since June 1988 when Eurocontrol hosted the first English language workshop. This initiative gave rise to the PELA test. Today, PELA is being used in more than twenty European states to determine the proficiency level in English of student Air Traffic Controllers. The PELA test is currently undergoing a review to produce more versions and improve the efficiency of test administration. Mr Enright is the Eurocontrol representative to ICAO's PRICESG and a member of the linguistic subgroup. As a member of the Training Development and harmonisation Unit of the Institute, he is also involved in a European Commission project on a tool for training designers. He also assists in the Institute's Quality Management programme.

INTRODUCTION

Communication is a powerful tool that can be considerably weakened when used inter-culturally. Adherence to procedures and rules can lessen misunderstanding.

Communication in aviation, based on a common language, should be our goal but political and economic forces prevail. In the meantime, as we encourage others to improve their English let us not forget that we, the native speakers, have an obligation to ensure that we also speak correctly and coherently. Safety has no place for jargon, delivered at a fast pace and disguised by an incomprehensible accent. Tests must be designed to encourage safe practice and to eliminate bad habits.

BACKGROUND

In the 1980s European air traffic controllers became more and more concerned that the proficiency of the English language used in aeronautical communication between pilots and controllers was far from ideal and varied quite considerably from State to State. In particular, three highly publicised accidents in which language was a contributory factor, raised public concerns about safety. EUROCONTROL took the initiative and in June 1988 organised the first English language workshop held at the Institute of Air Navigation Services in Luxembourg. The workshop concluded that air traffic controllers should demonstrate a predetermined level of knowledge and skills in the English language, especially in listening, pronunciation and comprehension, to enable them to carry out their tasks in such a manner as to contribute positively to the safety of air traffic.

A project supervision team comprising members from eleven European States was established in 1990 to monitor and guide test development. The British Council was contracted, in January 1992, to design a suitable test. Development was completed in December 1994 followed by a period of successful evaluation with the participation of more than 300 student controllers.

THE PELA TEST

PELA – Proficiency in English Language for Air Traffic Control - is designed to reflect a range of tasks undertaken by air traffic controllers but with the specific focus on language rather than operational procedures. To meet this requirement a level of proficiency in general English, equivalent for example to Cambridge First Certificate (UK), is necessary prior to commencing the specialised ATC English training. The test is also specifically constructed to be administered to student controllers just prior to the completion of institutionalised training.

To achieve effective communication a strict adherence to published ICAO radiotelephony phraseology is required and in addition students have to display the ability to produce messages in natural language in both usual and unusual situations that necessitate departure from ICAO phraseology. The appropriate linguistic response must be made to a message transmitted by a pilot. It is important to resolve misunderstandings in communication that may be due to limited language competency, noise and/or distortion, or to a stress-induced situation.

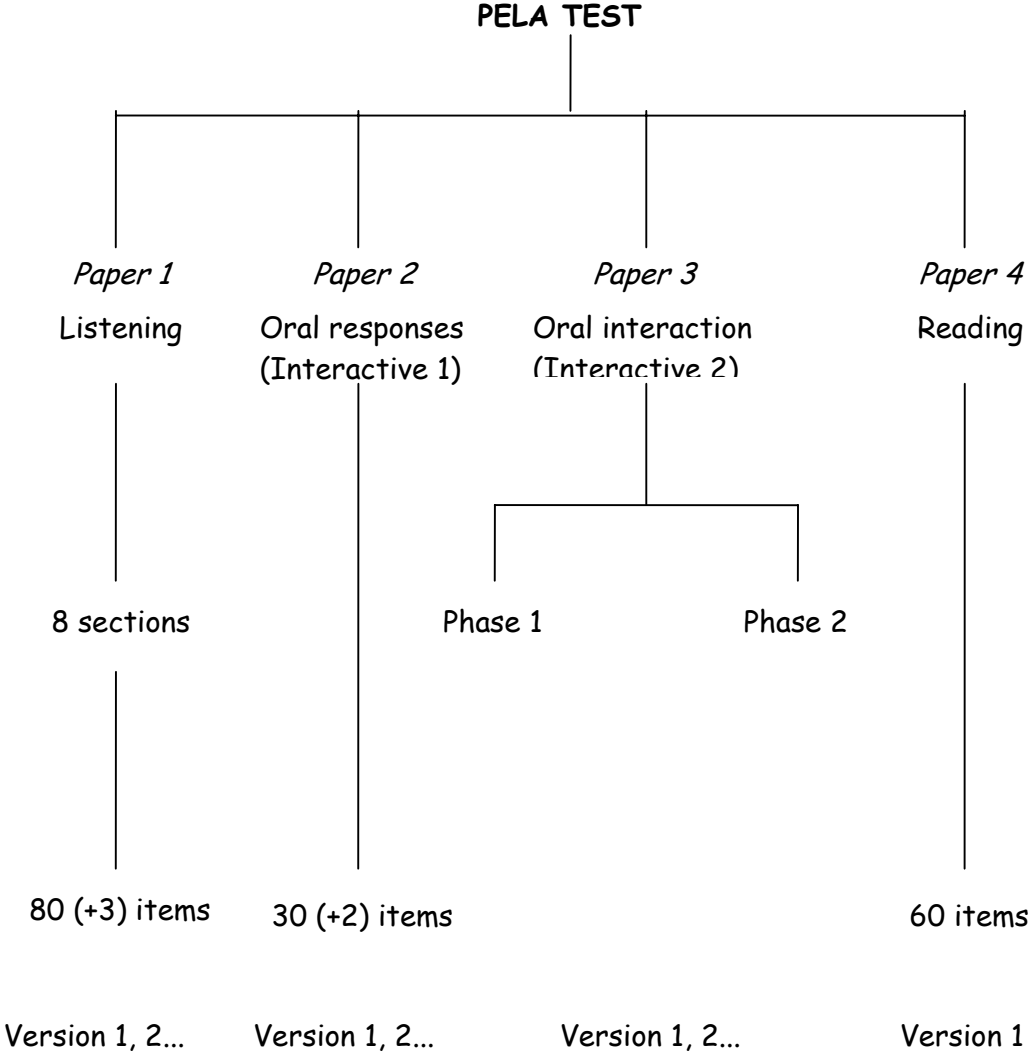
The PELA Test is currently being reviewed and re-named to bring it in line with testing terminology. There are three compulsory papers and one optional paper. A pass is required in each of the compulsory papers.

For both Paper 2 and Paper 3 of the PELA Test descriptive language rating scales, aligned to the ICAO language proficiency standard level 4, are used to determine a candidate's level of English language proficiency.

Paper 1 : Listening comprises 8 sections (80 test items + the three first items which are not rated) in booklet form. The candidate listens to recorded pilot messages and writes the required information (short text responses) in the space provided. It is not a test of written

English and the candidate is not penalised for grammatical errors. Some sections are played twice. Test duration is approximately 40 minutes.

STRUCTURE OF THE PELA TEST



Paper 2 : Oral Responses presents the candidate with a series of 32 charts (the first two are not rated) depicting aerodrome, approach radar or en-route radar environments. The positions of aircraft on each chart are indicated by appropriate symbols. The aircraft in communication with the controller (candidate) is highlighted. For each chart the candidate listens to a recorded pilot message and then makes an appropriate response which is recorded (for later analysis). A trained rater scores the candidate's responses for language performance AND for the appropriateness of the response. Appropriateness is safety-related. The recording is played once. Test duration is about 20 minutes.

Paper 3 : Oral Interaction is presented in two phases on a one to one basis between the candidate and a trained interlocutor. Communication is not visual, with the candidate being seated behind a screen, or ideally in another room. In phase 1, the interlocutor plays the role of a pilot experiencing a developing unusual situation. The candidate is the controller who must ascertain and understand the problem being experienced by the pilot. In phase 2, the candidate is required to brief the ATC supervisor (the interlocutor) about the unusual situation and may be asked to confirm and clarify information.

The scenarios in Paper 2 do not require the candidate to provide separation between aircraft nor to have knowledge of local ATC procedures. The candidate is rated on his/her ability to understand and clarify a problem communicated to them by a pilot. Test duration is approximately 15 minutes.

Paper 4 : Reading is an optional paper containing 60 items of typical text which controllers would come across in their work.

PELA and PRICE

The ICAO Study Group PRICE has developed a standard of language proficiency for aeronautical communication. This standard (at level 4), shortly to be introduced into ICAO annexes pertaining to communication and licensing, applies equally to all languages, designated by a State, for use in aeronautical communications by ground and air stations.

ICAO sets a standard for language proficiency. PELA is a test (for ATC) which meets the that standard.

RATING SCALES

The revised rating scales applicable to Paper 2 and Paper 3 of PELA have evolved from a comparison of the currently valid PELA rating scales with the ICAO proposal for an international Standard of language proficiency for pilots and controllers (level 4 on the ICAO rating scale). The proposed ICAO scale, and the associated Standard, are currently undergoing ICAO procedures for acceptance. It is desirable that the PELA test be available as an evaluation tool to validate English language proficiency levels in conformity with ICAO requirements.

1. PELA requirement for pronunciation remains slightly above ICAO.
2. Terminological consistency of descriptors is ensured e.g.
 - Plain language (ICAO)
 - Intelligible/intelligibility (ICAO).

3. Descriptors referring to specific features of the PELA oral sections are retained:

- Phraseology
- Formulaic phraseology
- Impact of appropriacy on safety.

1. PELA Paper 2 Oral Responses (Interactive 1) is rated for:

- Appropriacy of response (safety related)
- Language performance features:
 - Overall
 - Fluency
 - Pronunciation
 - Vocabulary
 - Phraseology

1. PELA Paper 3 Oral Interactive (Interactive 2) is rated for:

- Overall
- Comprehension
- Interaction
- Fluency
- Pronunciation
- Vocabulary
- Grammar structure
- Phraseology

Why PELA?

1. A test (for air traffic controllers) will be required to satisfy the Standards currently proposed for ICAO Annex 1 (Personnel Licensing), Annex 10 (Aeronautical Telecommunications Voll II), Annex 11 (Air Traffic Services) and Doc 4444 PANS – ATM.

NOTE: ANNEX 6 (OPERATION OF AIRCRAFT) PUTS THE ONUS ON AIRCRAFT OPERATORS TO ENSURE THAT AIRCREW COMPLY WITH THE LANGUAGE PROFICIENCY STANDARD.

2. Language proficiency will have to satisfy the requirements proposed for the « Common European Personnel Licence – Air Traffic Control » and ESARR 5 (Eurocontrol Safety Regulatory Requirement for ATM Services Personnel)
3. PELA is a test (in English for air traffic controllers) that satisfies the requirements for language proficiency determined by ICAO.
4. PELA rating scales are aligned to the linguistic requirements of ICAO level 4 with additional emphasis being placed on pronunciation and fluency.
5. PELA requires strict adherence to published ICAO phraseology.
6. PELA has been evaluated and today, personnel in more than 20 European States are accredited to administer and rate the test.

What is the relationship between ICAO proficiency standard and PELA?

	ICAO - PRICE	PELA
Status	A language proficiency standard	A test
Language	Any, that is designated by the State for aeronautical communication	English
Scope	Pilots & Controllers	Controllers only
Minimum Standard	Yes – level 4	Yes (level 4+)
Rating scale	Yes	Yes – aligned to PRICE +
Test	No	Yes - pass in 3 papers
Phraseology	No - plain language	Yes (ICAO Standard, in English)

SUMMARY

1. ICAO are strengthening the provisions to Standards and Recommended Practices (SARPS) relating to aeronautical communication.
2. A standard of language proficiency has been developed.
3. Air traffic controllers and pilots will soon have to demonstrate that they fulfil these requirements.
4. Suitable tests will be needed.
5. For air traffic controllers a suitable test exists, and is being used, in Europe.
6. The PELA Test (for ATC) could be « customised » to suit the airspace environment of other global regions.

CONCLUSION

The PELA Test is well placed to serve the ATC community in meeting the language proficiency requirements for aeronautical communications in designated international airspace.

ROUND TABLE DISCUSSION: “What will the new regulations change for the pilot, the controller and the teacher?”

Chaired by Philip Shawcross, Vice President of the International Aviation English Association

The members of the panel were:

Dr Jurate Patasiute, TR instructor at the Lithuanian State Enterprise Air Navigation, Vilnius, Lithuania.

Jurate Patasiute studied Germanic philology and English language and literature at Vilnius University before doing a post graduate course and a doctorate in general, comparative and historical linguistics at Lomonosov University, Moscow. She has worked in civil aviation for

14 years. At the beginning of her career, she took a course in RT at the Moscow Sheremetyevo Training centre and at British Aerospace Ltd. in Prestwick.

*Bozena Slawinska, EFL teacher at Polish Airports State Enterprise
Bozena Slawinska graduated from the Faculty of English Philology in Poznan University. She has worked for the Polish Air Traffic Agency since 1979 as a general aviation English teacher, a PELA administrator involved in updating the test and an examiner on the State Aviation Examination Board.*

*Captain Rick Valdes, United Airlines pilot and IFATCA representative
Captain Valdes is currently a Boeing 767 pilot with United Airlines. He is the International Federation of Airline Pilots Association (IFALPA) representative to PRICESG. Captain Valdes served in the United States Marine Corps from 1966-1971 and is a Viet-Nam veteran. He graduated from Barry University in Miami, Florida with a Bachelor of Science degree. He is a former FAA air carrier inspector. Captain Valdes has over 27 years of flying experience, including 15 years of international flying in the Far East, Latin America and Europe. He has clocked up over 17,000 flight hours and is rated as a Captain on Boeing 727, 737, 747-400, 757, 767 and 777.*

*Captain Herbert Schwarz, Lauda Air / Austrian Airlines pilot.
Captain Schwarz is deputy Director Flight Training and Emergency Training and Director of e-learning at Lauda Air. He is rated on Dash 8, Boeing 767 and Canadair Jet. He has a degree in Engineering and a Masters of Science in Air Transport Management from London University.*

*Andrew Stebbins, language trainer at Cathay Pacific.
Andy Stebbins has a B.A. in Sociology and Psychology and teaching and an M.A. in ESL. He taught ESL for four years at the Harbin Institute of technology in Harbin, China and for one year in Perth, Australia. For over three years, he has been teaching language and culture at Cathay Pacific Airways in Hong Kong.*

*Pawel Kobryn, ATCO in Warsaw, Poland.
Pawel Kobryn has been in the aviation business since the late seventies, first as a glider pilot and then in Air Traffic Control at Warsaw Airport from 1983. He has been involved in organising air shows and in search and rescue. For five years, he was an instructor in the Training department teaching phraseology and the organisation of airport services. He is presently an on-job-training specialist working at the Warsaw tower.*

*Andria Dragic, ATCO in Warsaw, Poland.
Andria Dragic has twelve years experience as an Air Traffic controller at the Okecie Tower in Warsaw and also holds an ATC licence for three other aerodromes in Poland. He has four years experience as an on-job-training instructor and is also working as a tower supervisor. He holds a glider and commercial pilot's licence.*

The discussion got underway with a comment from Capt. Rick Valdes who pointed out that language proficiency was being seriously questioned now based on the history of aircraft accidents over the past 30 years. It is generally accepted nowadays that accidents are never due to one cause but to a whole chain of events and language is of course a key link in that chain. ICAO's current concern with standards of English proficiency is motivated by one thing: safety.

These comments were taken up by Herbert Schwarz. He also emphasised the need to break the chain of errors and more particularly to concentrate on the language link. For him the way to do this would be by selling the importance of communication. If this could be done without increasing the cost of training, standards could begin to be reached.

Pawel Kobryn explained to the floor how the English language level has greatly improved amongst Polish aviators in the last ten years since the Polish have come to realise the importance of English as opposed to Russian. However the big language problem that remains for Polish ATC lies in non routine situations. Fortunately there are now language refresher courses available to these people in English-speaking countries.

The importance of also enforcing language levels on VFR pilots was mentioned.

Jurate Patasiute took up the point of situational awareness and the need for proficiency in what she called “plain” language. For the most part non routine, unexpected situations were the ones that posed the biggest language problems. These skills are being tested in the PELA tests.

Jeremy Mell emphasised the importance of being able to correctly check, clarify and confirm. The two steps involved in this are 1) the ability to pick up on questions (the human factors element) and 2) the linguistic ability to do that, (language trainers). Here there is certainly terrain for both to work together.

It was clearly pointed out by speakers from the floor that it was unfortunate that ICAO lacked the “power” to make language proficiency obligatory. The only ones with such power are the regulatory authorities. They are in fact the ones who govern our safety and are they willing to pay the cost? Nowhere is it suggested by the ICAO that the regulatory authorities should pay.

Capt. Rick Valdes pointed out through examples that States could and did pay out for safety, but very often in the aftermath of accidents. States receive dues from airlines overflying their territory but often this income is not devoted to aviation. In one South American country, a ground radar was left inoperative for years until an accident occurred. Then the funds were found. It should become obligatory for them to invest fully in the training of ATC and the airlines for the training of pilots.

Brian Day explained how indeed there was no mandate on States concerning training. It was up to each State to decide on their own procedures. However States do generally ensure systematic checks of the controllers and the pilots as they are subject to an audit by ICAO. Undoubtedly gaps remain.

Andrew Stebbins: Language is a multifaceted element of Cathay pilot communications. Accent is an issue for their pilots when addressing operational difficulties. Basic communications necessitate frequent callbacks and checks, often with a native speaker pilot and a Chinese first officer. Hesitancy to address or question senior officers is an issue.

Graham Elliott: Does the panel view the new proficiency requirements, not as a series of events, but as a continuing process, where all stakeholders, management, unions, civil and commercial entities, pilots and controllers must be included?

Rick Valdes: The IFALPA position is clear: English shall be the language in use at all international airports. PRICE SG has set a standard for that language use. IFALPA endorses that, and while taking no position on any program to address training to meet the standards, sees that there should be a universal standard applied in all locations.

Jurate Patasiute: ATC associations in Lithuania have set a salary bar to enhance controller adherence to language performance that meets the PELA test.

Bozena Slawinksa: In Poland we should be convincing controllers that it's a personal responsibility to increase language knowledge.

Herbert Schwarz: It is doubtful that there will be resistance in Austria, where there is a high level of general English proficiency. The need is seen in the same light as recurrent health checks. However, the nature of the work of pilots and controllers is not the same: possibly there will be some resistance to change if the assessment is unrealistic (non-authentic), but this can be countered by better information and communication (on the value of the proficiency standards).

Rick Valdes: What are we seeking to achieve? As an example of the targets to be met, he related a story of the inability of a non-native speaker controller to warn of a tethered balloon illegally located in a flight path.

Maja Bratanic: While language and flight training specialists are familiar with what is needed to achieve compliance, only if the call for conformity to these safety standards comes from EuroControl and ICAO will management pay heed.

Philip Shawcross: What needs to change with pilot/ATC communications?

Andrew Stebbins: Budgets need to embrace ties between flight operations and language teaching.

Jurate Patasiute: Money and time will help: we need a new language lab, new teaching materials to achieve compliance by 2008.

Bozena Slawinksa: Do we need to teach differently? We need to see ourselves in a system that is responsive to and addresses manpower and planning needs. Self-access, and distance learning techniques both need to support classroom practices, possibly with native speaker teachers, and inclusion of ATC practitioners, and a set of (good) tests.

Philip Shawcross brought the panel discussion to a close with admiration and thanks to the Polish Civil Air Authorities for its exemplary hosting of the seminar.

PILOT TESTING AND TRAINING IN CHINA

Mr. Ma Tao, Chief Manager for Flight Crew Initiatives, CAAC

Mr. Ma Tao started to work at the CAAC (the Chinese Civil Aviation Administration) in 1983. He holds a private pilot licence, is Manager of Flight Crew Initiatives at the CAAC and represents China on the PRICESG and is currently responsible for Chinese flight crew licensing and aviation medicine.

The fact that one person in every six in the world is Chinese was a salutary reminder of the scale of the issues that the CAAC has to face in regulating the growing civil aviation industry in their country.

Background

The importance of proficiency in the English language is fivefold:

1. Inadequate communication has been a contributing factor in several aircraft accidents and incidents within China.
2. The electronic ('glass') cockpit provides an English interface for the pilots.
3. Technical documentation on modern aircraft is in English.
4. Pilots receive their type qualification training in English.
5. English is the language of international radiotelephony communications.

1. Incidents and Accidents

There have been a large number of accidents and incidents over the last twenty years and some of these involved the use of the English language. Most of the aircraft operated in China today are Western-built.

- In one instance, the oral glide slope 'Pull up' warning was not understood by the crew following an incorrect pressure altitude setting. Twelve people died.
- In San Francisco in March 1999, a Chinese crew failed to understand the Ground Control's instructions to hold short of runway 01 L and monitor the frequency. The aircraft failed to stop and crossed the runway. Fortunately, there were no repercussions.
- On August 7, 2002, a Chinese-made aircraft performed a belly landing during a training flight after an audio warning was disregarded twelve times.

Inadequate English can lead to failures in situational awareness which in turn can have catastrophic results.

2. New generation cockpits

The latest generation of aircraft cockpits requires flight crew to have a good grasp of English. All the displays are in English. On earlier generations of aircraft, the warning lights were also in English but it was possible to memorise the significance of the warnings by their position. Computerisation has brought centralisation and greater reliance on textual information. Synthetic voice warnings, GPWS, TCAS are all heavily dependent on English. Direct voice recognition control is a possibility in the future.

3. Technical Documentation

All the crew's flight manuals, charts, navigation and regulatory documents are in English. Often the operating manuals have been translated into English but the fact that the translators do not understand the technology involved has sometimes resulted in very poor translations.

4. Training

Pilots receive their ground school, type qualification and simulator training in English. Technical English is a prerequisite.

5. Radiotelephony

All international air/ground communications take place in English. Chinese carriers fly all over the world. Both in flight and on the ground during turnaround the pilots need to communicate with controllers, authorities, third party airlines etc. Once on the ground, the crews need English when dealing with hotel and restaurant staff, drivers etc.

Regulations

The regulations issued and reinforced by the Authorities are the best way of ensuring that pilots' English improves. In 1998, the CAAC issued the regulations regarding English requirements. In Article 25, it is stipulated that pilots born after January 1, 1960 must hold both English certificates (radio and basic English). Otherwise, there will be restrictions on their licence preventing them from taking transition training to larger aircraft (B 737 or MD 80 capacity) and operating international routes and routes to Hong Kong and Macau. Pilots born before January 1, 1960 are only required to have a certificate of radiotelephony.

Our requirements stipulate that pilots be proficient in airborne radio communication, in reading different types of manuals in English, in using English during ground and flight training, in filling in forms and log books and in general communication.

Pilots have to have their English certificate on them at all times in case they are checked by the FAA, for instance.

The CAAC require all the carriers to organise English training courses for the flight crew.

English Training and Testing

In 1993, research was started on the flight crew English language programme. Text books, cassettes and computer-based training courseware were developed as a result in both radiotelephony and aviation-related English. Two computerised test banks were also developed with an automatic and confidential marking system.

All Chinese carriers submit their English training programme and facilities to the CAAC.

Obtaining the English certificate is a very powerful incentive in the pilots' career.

English training is provided both in house and also abroad in English-speaking countries. Two hundred China Northern Airlines captains were sent to the RMIT in Melbourne, Australia for six months training.

The programme was initiated in 1995 and currently 90% of pilots have passed the test. As it is an automatic test, pilots can take the test until they pass. However, the current pass level of the CAAC English test probably corresponds to Level 2 or 2+ on the ICAO scale.

Conclusions

Civil aviation has grown very fast in China and in 2001 1.4 billion seat kilometres were flown in China ranking China sixth world wide. With Hong Kong and Macau, China ranks number 2.

The need for qualified pilots is very great. Both trainee and ex-military pilots must obtain the English certificate before they can join an airline as airline pilots.

The CAAC's concern is now to improve standards from the present ICAO Level 2/2+ level and bring the standard of proficiency in line with ICAO Level 4 with new training materials and tests written by native English speakers by 2008. The basic air transport pilot licence training materials will also be in English in the future.

In order to foster the good practice of English, there are plans to create several 'English-only' international Chinese airports.

The CAAC is aware of the need for co-operation from English-speaking countries in order to attain the standards it is setting for the future.

CLOSING SESSION – QUESTIONS FROM THE FLOOR

Chaired by Mr. Brian DAY

Thanks were given to Mr. Ma Tao for his presentation and acknowledgement was made of his request for native speaker assistance in the China training programme. The Chairman expressed his admiration for the determination and sense of vision behind the Chinese Authority's Project.

Liliana Neskovic made the point that there was a lack of resources for English trainers in ATC courses and that ICAO should produce a standardised course book. She added that about 80% of her cadets achieved the 80% pass level to pass into ab initio training. These had progressed to advanced level by the end of the training course.

Carmel Godmet described an initiative which had been taken by ATC English trainers in South-West France since 1992. Approximately 10 teachers meet and exchange plans in a co-operative effort.

This has now been expanded to a national effort with about 25-30 teachers.

Each of the participants presents a lesson plan and a compilation is taken away by attendees. The result is a lot of relevant material for the teachers.

Materials can include recordings obtained with the compliance of local controllers dealing with English speaking pilots.

A level of trust has been built up between the trainers and the controllers to allow these recordings to be used.

Brian Day was excited at the possibility of the sharing of materials in this way. He stated that there were, however, issues to be resolved such as costs and copyright (intellectual property).

Bozena Slawinska stated her approval of this type of scheme and asked for comments.

Jurate Patasuite pointed out that (in Lithuania) there would be problems with such a scheme over questions of security and confidentiality. There might even be technical difficulties in producing readable tapes. Official permission would have to be gained and in any case export would be illegal.

Mirna Marincic suggested that it would be pedagogically inappropriate to use authentic tapes at entry level. They should only be used at an advanced level. A web site for the association could be the centre for the exchange and sale of such materials.

Brian Day referred to the help needed from English native speakers by non-native speaking States. Some training had already been offered to China by US airline companies. He invited Bob Chatham to comment.

Bob Chatham expressed his approval for some of the logical ideas, especially the web site. A web site as a clearing house for a centralised bank of materials would be a good thing, in his opinion. On the question of native speaker support he stated that PRICESG had discussed this and that the FAA were fully in agreement with this in principle and actively looking at the implications.

As ever, he went on, the question of funding had surfaced as a problem. The events of September 11 have since intervened to divert attention from the FAA initiative which is now focussed more on security matters and, accordingly, money for language proficiency initiatives may now be less readily available. The idea is not dead but less aggressive pursuit of it in the immediate future is to be expected.

Bob stated that his centre (The Defense Language Institute) does not allow its materials to be offered for sale. However it is prepared to send a curriculum / design plan showing a guidance for those developing a programme. Bob also referred to the guidance material package being prepared by Elizabeth Mathews.

Elizabeth Mathews then came into the discussion to point out that although the guidance materials might be helpful in regard to the preparation of materials, they did not constitute a curriculum. She went on to suggest that the Association might be the best forum for that. She stated that she understood the need for materials to exist but that the guidance materials would not satisfy that demand except in the role of defining functions and other language tasks.

Brian Day then intervened to say that the Council of ICAO would be the place to move this forward and that he would be presenting the views of the seminar to the council. He pointed in particular to the inequality between English speaking and non-English speaking countries (when it comes to preparing adequate materials) and hopes that it may be possible, in view of this inequality, to push an initiative through the ICAO council.

Michael Kay from RMIT asked if there was not a need for an external body to which the standards being proposed could be referred and which would oversee the application of standards by individual states.

Elizabeth Mathews questioned whether this would be an ICAO office or something detached. Michael Kay replied that he envisioned this organism as managing budgets, for example.

Elizabeth Matthews referred to the chicken and egg scenario in which development required money to kick start it. She advanced the opinion that the new drive for training would help to spark off new financial injections.

Rick Valdez referred to the situation in Latin America and the Middle East and that there are countries which definitely need help in coming on board. The web site would, in his opinion help in bringing as many as possible into the venture. He also pleaded that, in English language training, pilots and air traffic controllers should not be separated but taught, as far as possible, in mixed groups. Others added that this should be true for mechanics and cabin crew.

Thomas Fudakowski cautioned that authentic R/T when used in teaching situations could have a negative effect as authentic material often contained irregularities. He recommended the use of 'authentic' but not 'live' R/T. He also asked the seminar to consider the implications of a future data link. Comprehension by both ends of the communication link was important. The notion that people can create a clear mental model is not straightforward. He gave the example of a diverted aircraft during the Sept 11 emergency in which the pilot's setting of the wrong transponder code by mistake caused the aircraft to be forced to land by a military fighter. Guaranteed comprehension was the key to solving such problems.

Philip Shawcross talked about the plans by the Association to set up a list serv and a web site as an exchange mechanism. He promised to have a list serv address up within a few weeks.

Brian Day summed up by referring to the education and awareness nature of the seminar and that it had served to enlighten and bring awareness so that the knowledge could be forwarded to the decision makers. He went on to say that it had been a privilege to attend and that he had been overwhelmed by the support offered by PPL (The Polish Airports Authority) and was pleased that ICAO and iAEA had finally come together.

Bozena Slawinska replied that the 'renewal of hope' was one of the most important aspects of the seminar.

There was then some discussion of the availability of a mailing list of attendees and the chair declared that this could be arranged quickly.

POSTER DESCRIPTIONS

1. On the Chinese Pilot English Project And Impact of ICAO New Regulations

Wu Tuxing, Civil Aviation Flight College of China

Abstract:

Launched by CAAC in the year 1995, the English Project for Chinese Civil Aviation pilot has achieved great progress both in popularising English among Chinese pilots and in standardising the RTF communication in flight.

This paper surveys the background of this project and explains the project system including how to compile the training material, how to organise the pilot English training and the set up of the national pilot English test, the computer based test bank is also explored in some detail. The paper presents the CAAC English certified pilot status. Finally the impact of ICAO standard on Chinese pilot is discussed and the approaches to meet the ICAO needs are explored.

2. Technical Knowledge for the Aviation English Teacher

Alenka Kukovec, Lecturer of English, Faculty of Mechanical Engineering, University of Ljubljana, Slovenia

To satisfy the needs of rapidly developing aviation technology and professional requirements for pilots every effort is required for the teachers of aviation English to make their teaching realistic, motivated and efficient. The teacher faces the task of fulfilling the future professional needs of the aviation students in respect to specialised materials and of challenging them to communicate and elaborate their expertise in the subject matter. Inevitably, the teacher must have a working knowledge of the subject matter of the aviation materials. The linguist may gain technical knowledge from subject specialists, students, specialised materials, attending lectures on specialised subjects in English or in the native language, visiting authentic environments where communication is performed. Some linguists have the advantage of being aviation experts, e.g. private pilots, or of possessing previous experience in the field of aviation.

My years of experience have convinced me that the aviation English teacher can best encourage communicative competence and multiple language skills by stressing accuracy of language, maintaining an enthusiastic attitude toward the subject matter, co-operating with subject matter specialists, and exploiting multiple sources of learning, especially authentic materials and exercises.

3. Aviation English in a Lexicographical Perspective

**Maja Bratanic, Professor, Faculty of Transport and Traffic Engineering
University of Zagreb**

SUMMARY

Dictionaries of languages for special purposes are intended to meet various needs. Dictionaries of Aviation English, therefore, address the general public, various categories of aviation professionals, translators, English language teachers, students of aeronautical departments (i.e. future pilots and air traffic controllers), etc. Their respective needs and interests can clearly not be catered to by one single dictionary type. The existing ESP dictionaries of this area and their main features are therefore briefly analyzed. The author examines what dictionary types best meet the actual needs, and how they can most efficiently be used for teaching purposes. Furthermore, an attempt is made at establishing what needs have not been taken care of by the available dictionaries and glossaries. A suggestion for a specific type of aviation English glossary is put forward with the hope that it might turn into a joint project of several interested individuals or institutions attending this seminar.

4. Leonardo de Vinci Project – TAE Technical Aviation English

Freddy Priem, Head Teacher, Katholieke Hogeschool, Brugge-Ostende, Belgium

Summary

Personnel (engineers and other staff in charge of aircraft maintenance) with both the required technical knowledge and skills in English has become increasingly rare. Hence the necessity to provide training within the company and schools of aviation engineering.

This is the aim of the Leonardo Project “**Technical Aviation English**” undertaken by CLA (Besançon/ France), KHBO (Ostend/Belgium), FOREM (Liège/Belgium), VDAB (Brussels/Belgium), Question Mark Computing (United Kingdom), and co-ordinated by Sabena/Sabena Technics (Brussels/Belgium).

The resulting test consists of three sections to test general knowledge of structure/lexis (60 exercises), reading comprehension (30 exercises) and listening comprehension (35 exercises). The last section is optional, since it doesn't correspond to language needs of the whole workforce. Within each section there are three difficulty levels (easy, medium, advanced). Question sequence is arranged so that even though questions can be drawn at random from a library, easy questions are drawn first and more difficult ones at the end of each section. Sections are timed to ensure candidates are equally exposed to each one.

It was decided to vary the question formats between sections and sometimes between difficulty levels of a section.

The test has been pre-tested on a population of both Dutch and French speaking students in aviation engineering in Belgium and France. It was then presented to some 200 staff of Sabena.

The outcomes of the Leonardo Project are now ready-to-use on the application server of the project partners.

5. PELA Test Implementation in Lithuania

Jurate Patasiute, RT Instructor, Oro Navigacija State Enterprise, Lithuania

6. Computer-Assisted Aviation English Test for Pilots

Joan Bellec, Centre de Linguistique Appliquée, Université de Franche Comté, France

Designed by : Joan Bellec and Fiona Robertson

Software: Question Mark Authoring programme and the Reporter Evaluation Analysis programme.

The conception of the test and the choice of test items are the result of more than twenty years experience analysing the language used in aviation contexts, designing course materials and training programmes, and evaluating professional pilots and flight instructors, both in Europe and South East Asia, China and Vietnam.

We are convinced that there is a need amongst airlines to have a reliable computer based language test, easy to administer with instant access to candidates' results. Such a test can be used not only to assess new recruits but also to assess pilots' proficiency in English regularly throughout their careers.

The authoring programme enables us to incorporate test items into a fairly simple multiple choice question frame, thus giving cohesion and simplicity to the test for the candidates. A simple adaptive procedure can modify both the length and the difficulty of the test by selecting test items from the large data base that we have created. The accompanying software programme gives the testers the choice of deferring or immediately visualising the candidates' results. An analysis of each individual item assures the validity of the test structure and confirms the reliability of the test by comparing individual and group scores.

The pronunciation and listening part of the test is based on the assumption that pilots must be able to attain an adequate level of understanding during radio communications. For this, accurate recognition of phonemes as well as correct identification of tonic accent in individual words are useful indicators of the level of the candidates performance. Moreover, "live traffic" is incorporated in the listening part to evaluate the candidates oral perception of specific flight information such as; flight level, heading, departure runway, and flight operational instructions.

The grammatical and lexical part of the test evaluates the candidate's ability to recognise and choose correct sentence structures in English, to use verbs and tenses appropriately and to know and select accurately a wide range of aeronautical terms used throughout flight and ground operations by the cockpit crew.

7. Aviation English Foundation Course on CD ROM

Mike McGrath, Lingua Franca, Great Britain

Mike McGrath presented samples from the CD ROM, beginners course that he has created. Called 'Foundation Aviation', it is an entry level, English language course which aims to improve basic language skills and instil

aviation culture and key vocabulary. The syllabus is theme-based and progressive both in terms of subject and graded language content. It can be used as a personal study aid or can form the basis of class-based instruction. It can be used as an aviation primer in conjunction with a standard EFL course for those intending to pursue an aviation training course.

The course is unique in that it is able to run on any PC equipped with Microsoft Internet Explorer. It uses special text-to-speech technology to allow students to listen to, as well as read the presentation texts in whole or in part. This facility also extends to the question and answer sections of each unit so that students can listen to questions and hear sample answers in traditional drill mode before attempting to write model answers which are checked for accuracy by the computer.

A variety of instant feedback methods are used to ensure that key vocabulary for each lesson is well assimilated.

By demonstrating this course Mike intends that this course should serve as a model of how teachers without advanced IT knowledge can, using basic HTML language, prepare quite sophisticated teaching materials for use on a standard computer.

FUTURE DIRECTIONS FOR THE ASSOCIATION - DISCUSSION

An open discussion was held on the Friday afternoon to talk about developments in the Association and the members' expectations.

Fiona Robertson related the beginnings of the Association in 1991 that stemmed from the initiatives that she and Joan Bellec as teachers from the University of Besançon-Franche Comté took to gather English other teachers working within Aviation in France to forums held in Paris. From a one-day event for forty people based in France, these became three-day events for over one hundred people from around the world.

March 1984	<i>What is Aviation English ?</i>
March 1985	<i>Teaching and Technical Expertise</i>
March 1987	<i>Language Standardisation in Aviation</i>
November 1991	<i>Aviation English Standards</i>
March 1994	<i>People, Flying Machines and English</i>
April 1997	<i>New Technology, Better Aviation English Training and Communication ?</i>

SEMINARS

One of the principal activities of the Association is to organise seminars which are centred round a single theme and hosted by organisations in venues other than Paris.

Prague, Czech Republic, May 1993, hosted by CSA Airlines
English Requirements and Technical Training

Helsinki, Finland, June 1993, hosted by Finnair
Simplified English

Bournemouth, UK, October 1993, hosted by CAA (UK) and the Anglo-Continental Educational Group
Radiotelephony

Warsaw, Poland, September 1994, hosted by Polish Airports State Enterprise and the Polish Air Traffic Agency
Lexicography and Teaching Aviation English Terminology

Toulouse, France, February 1995, hosted by Airbus Industrie
Cockpit Resource Management

Luxemburg, May 1996, hosted by Eurocontrol
Recurrent Training in English for Radiotelephony

Riga, Latvia, September 1996, hosted by Latvian State enterprise of Air Space Utilization and Air Traffic Organization
Initial Training in English for Radiotelephony

Warsaw, Poland, September 2002, hosted by Polish Airports State Enterprise
The Effects of the Conclusions of the ICAO Proficiency Requirements in Common English Study Group (PRICESG)

The fact that each time the seminar topics are well defined has been one of the conditions of their success and usefulness.

The Association was formed under the French law of 1901 governing non-profit making organisations. As a result, the members of the Board can not receive any remuneration. The Association has an agreement of principle with the University of Franche Comté to share information on Aviation English teaching and research.

The Association's aims were defined in 1991 and still remain relevant today:

- 1 To **bring together** people and organisations concerned by or interested in the use of English in the aviation and aeronautical world.
- 2 To **promote** the exchange of information as regards English, English training, standards, qualifications, translation, documents etc, between people working within aviation in different countries.
- 3 To **centralise** information useful to the Airlines, Authorities, Air Traffic Services, manufacturers, pilots, engineers, universities, research institutes, training centres and

teachers.

- 4 To **enhance** the circulation of this information through a Newsletter and one-day seminars and periodic forums.
- 5 Finally, to **generate** concern about the quality of English in the aviation world.

The Association has no commercial interests.

The budget for the Warsaw seminar was presented. The registration fees from 47 paying delegates generated an income of 5,460 euros. The expenses amounted to approximately 4,000 leaving a positive balance of 1,460 euros which will go towards organising future events.

Topics that were raised :

1. The status of the association

The status of an association governed by a 1901 French law which provides a framework for non profit making organisations is one which provides sufficient liberty but also legal structure to justify its maintenance for the immediate future. An agreement with the Université de Franche-Comté provides the academic backing necessary.

Changing the acronym of the name of the association would seem to alleviate the problems of confusion with other organisations.

2. Membership fees

The question of membership fee generated discussion. It was stated that for now there will be no membership fee other than the fee people pay to attend an event organised by the association. To justify a further fee, the Association would have to provide services in return. For the moment, there were none. The Newsletter which was the main justification for paying membership would soon be metamorphosed into the content of the projected web site.

3. The makeup of the governing body

The Association proposed to expand its organising body and offered three new vice-presidentships to Elisabeth Mathews, Jeremy Mell and Bozena Slawinska. [Editor's note: Since that time both Elisabeth Mathews and Bozena Slawinska have been kind enough to accept. Jeremy Mell was unable to do so, due to pressure of work.]

4. Operational weaknesses and budgetary implications

It was pointed out how the activity of the Association rested on the shoulders of two individuals who, because of their status as president and vice-president of the association, could not be paid for their work. Two people were now too few for the scope of the association. The Association needed the means to grow – a budget that would cover the costs of secretarial services (organisation of seminars and maintenance of contacts and eventually the maintenance of a website.) The global budget would not seem to be very large, but sponsorship seemed to be necessary.

It was agreed to seek institutional sponsorship on both sides of the Atlantic.

5. Publicity and Public Relations

It was mentioned that it would be very beneficial for articles on the Association's work to appear in pilot magazines and industry publications. The Association required more exposure in order to broaden its scope and scale. There was a need for advertising and public relations to draw people in.

Elizabeth Mathews agreed that networking was a really important function of the Association.

6. Possible activities and evolution for the future

Discussion revolved around issues concerning quality control, establishing a bibliography and publishing papers concerning aviation topics. The creation of a list serve and the need for a website were spoken about.

Several people expressed their interest in the organisation of Aviation English teacher training to help non-native speaking teachers work more efficiently.

Elizabeth Mathews mentioned that she was aware that companies sometimes found themselves with sub-standard suppliers and raised the idea of an Aviation English consortium independent of the Association itself and made up of voluntary members to which organisations would have to demonstrate compliance with whatever set of standards the consortium established. The hope would be to develop the stamp of approval into a mark of quality. She realised that there was so much that was new and exciting going on and that this was just one of many ideas.

Mr. Brian Day said that just as the Association was on the verge of a new phase, so were the world's Aviation Regulators because of the standards that were hopefully going to be prescribed. In ICAO, for the first time, English language was becoming an up-front, examinable, licensing factor. The whole question of administration and quality control had to come to the fore. Representations were being made for a permanent English Language Office in ICAO, but the only way that that would actually happen was if China and other States agitated for a budgetary provision to be made for it to be set up.

The hope was expressed to organise two more events similar in scope to the one in Warsaw . The association was looking for hosts.

It has always been association policy to choose the theme of the meeting in function of the hosting body. Possible topics are :

- Competencies
- One aspect of e-learning
- Testing
- How to evaluate materials
- Repercussions of JAR66 – JAR OPS
- Cabin crews
- Data link
- Ground passenger services

Prior to closing the discussion, a summary was given of the proposals and decisions made :

- The office holders would assume the task of evaluating budgetary needs.
- A list serve would be set up awaiting the launching of a web site.
- A matrix for harmonising content in the set-up of a bibliography on Aviation English was to be proposed.
- Maja Bratanic accepted to be the liaison person to manage setting up the bibliography. Fiona Robertson will bring her up to date on what has previously been done.
- The next seminar topic(s) will be chosen in function of the hosts who come forth.

[Editor's note: As the proceedings go to press in February 2003, the following developments have materialised:

- It has been decided to rename the Association "International Civil Aviation English Association" or "ICAEA" without any intention to restrict membership to non-military bodies.
- The Association web site will very soon be launched thanks to the generous hosting, technical expertise and creativity of PATA the Polish Air Traffic Agency. It will replace the list serv which has been in use since the Autumn
- A seminar on Testing held at Eurocontrol Institute of Air Navigation Services in Luxembourg will take place on September 4th and 5th of this year..]

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