INTERNATIONAL AVIATION ENGLISH ASSOCIATION

NEWSLETTER

Editor: Philip Shawcross

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EDITORIAL

adiotelephony, the language of Air Traffic Control, is the most obviously essential use of language in the whole aviation world. Without it, planes would not fly. Get it wrong, and there is a serious risk they will fall out of the air. Perhaps in the future air-to-ground communication will be in mode-S and it will be the written word which flashes onto screens in the glass cockpits and control rooms. However, in the meantime, it is the spoken word that is the main concern of controllers, pilots and their instructors and this was the theme of the seminar in Bournemouth reported in this issue.

The degree of professional responsibility shown by everyone involved in training at grass roots level in this area is always impressively high, and this occasion was no exception. At this third seminar of the Association we were pleased to see old friends and make new ones. Everyone is very conscious of how vital the R/T link is and how important it is to maintain and improve the standard of communication. Nevertheless, there is sometimes a tendency for pilots to belittle the importance of linguistic competence in the cockpit, to be satisfied with simply getting by. Could this be because the pilot's radiotelephony qualification is valid for life, that once s/he has passed early in their career they will never again have to put their R/T abilities on the line? This also means that airlines do not feel the same obligation to do recurrent training in R/T for pilots as they do for other flying skills.

Using English for R/T is like flying, if you do not do it regularly, you forget, if

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EMERGENCY CALLS - MESSAGES OUT OF THE BLUE

Jeremy Mell, Ecole Nationale de l'Aviation Civile, Toulouse, France

Introduction

he first obvious quality of emergency calls by pilots via radiotelephony is that they come to the air traffic controller - literally and metaphorically - "out of the blue".

Such calls are made in safety-critical situations where, due to unforeseen events, a pilot requires to depart from his original flight plan. He may, in addition, require to do this quickly and with some form of assistance from the air traffic controller. Typical unforeseen events are technical failures or medical problems on board the aircraft, extreme meteorological conditions, pilot disorientation, etc. Assistance may be requested in the form of information on alternative options available, ATC guidance, priority clearances, Search and Rescue, or arrangements for special ground services on landing.

In all cases, the correct understanding of the initial call made by the pilot to air traffic control services is of crucial importance for the successful outcome of the incident. Any failures or errors in understanding will lead, at best,

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you do not have retraining, you get into bad habits, and if you do not have training for non-routine situations regularly you will not be able to handle one when it does crop up. In these hard times when those who manage training budgets try to economise, we do hope they consider the implications carefully before cutting back on professional English language training.

Thanks

We wish to express our warmest thanks to our hosts, the Civil Aviation Authority, United Kingdom, in particular to Mr John Penwarne, General Manager of the College of Air Traffic Control who provided the very pleasant venue and made us feel more than welcome. One of the highlights of the seminar was the session spent in the simulator room at the college where the English language trainers could discover for themselves what it really feels like to be at the end of a mike with a headset speaking to you.

Once more, we have to thank Mr Tony Roome, Head of International Training at the CAA, who took care of all the organisation, and thank you to Mr Freddy Herring, Director of the Anglo-Continental Group, Bournemouth who joined the CAA in extending hospitality in the form of a delicious dinner in delightful surroundings. Last but not least we wish to thank the speakers who gave of their time and expertise thus making the seminar a very stimulating and interesting occasion.

NOTE

In our account of Mr. Peter TRENKNER's address to the Helsinki seminar last June there was a slight misunderstanding. We had understood that the German Federal Ministry of Transport would publish the report on an international maritime language. This is in fact not the case. This part of the project is funded by the Ministry of Transport but will be published from 1996 by the International Maritime Organization. The editor offers his apologies to anyone who may have been vexed by this unintentional confusion.

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to time-consuming attempts at clarification (with consequent delays in assistance, distraction of the pilot from urgent tasks in the cockpit, and possibly loss of confidence in the air traffic controller in an already uncomfortable situation) or, at worst, to the provision of inappropriate assistance or no assistance at all.

The aim of this article is to examine the characteristics of initial emergency calls with a view to identifying the difficulties they may present to air traffic controllers. I will conclude by recommending a number of strategies for improving the quality of air-ground communications in such cases.

Routine calls by pilots

Despite the frequently low acoustic quality on VHF or HF frequencies, routine air-ground communications are typically smooth and effortless. Misunderstandings are infrequent and, in general, they are easily resolved. Most "communications-related" incidents are in fact a consequence of technical deficiencies (bad reception, stuck microphone, etc.) or of cognitive errors (callsign confusion, wrong hearback, etc.). The comparative rarity of purely linguistic problems is due to a number of well-known factors:

- a) the use of an internationally recognised phraseology, from which most potential ambiguities have been ironed out over several decades of operational practice and through periodic revisions at ICAO level, and
- b) a restricted number of topics (domains of reference) associated with a restricted terminology.

Another major factor contributing to this success is the predictable and repetitive nature of the communications, whereby the strategies used by participants to understand one another are largely conditioned by what they **are used to** hearing.

Pilots initiate roughly half of all conversations with air traffic controllers¹. These involve, principally, initial calls on a new frequency, position reports and requests for a further clearance. The following transcript of an initial call to an en-route service will serve as an example of routine messages:

Paris. Good afternoon. Jetset 762. Level 370.

On course Deauville.

The controller, who is already in possession of the flight plan details of this aircraft, is expecting the call. In addition, the call follows a well-established "script" for such messages - that is to say, a greeting, followed by the current flight parameters (flight level and route). Each individual message turns up in a predetermined slot at a point in the sequence when the controller is expecting to hear it. In addition, sentences are extremely short (and correspondingly easy to process), while the words used belong to a very limited lexical set jointly determined by prescribed phraseology and operational practice.

¹ cf MELL (1992) "Etude des communications verbales entre pilote et contrôleur en situation standard et non-standard"; doctoral thesis published by the Ecole Nationale de l'Aviation Civile.

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A less obvious, but equally important, feature of routine messages clustered in this way is that each individual message is independent and of equal importance to the others. This can be verified when one sees that each of the three messages (greeting, flight level information and route information) gives rise to a separate response from the controller (a greeting, a level instruction and a route instruction). This "lack of depth" in the message structure is an important factor in facilitating understanding, as the controller supposes in advance that (s)he will not be required to assign secondary or primary importance to messages as they occur. Each message is equally important. The significance of this feature will become apparent when we examine the case of emergency calls below.

Emergency calls: theory and practice

In Annex 10 (Aeronautical Telecommunications) to the ICAO Convention of International Aviation, two degrees of emergency are defined: "distress" and "urgency" The recommendations for each degree state that:

- a) the message should be prefixed by a distress signal (MAYDAY or PAN, PAN), preferably spoken three times,
- b) the message should be composed of a number of specific elements, namely, in the case of MAYDAY messages:
 - · the name of the station addressed,
 - · the identification of the aircraft,
 - · the nature of the distress condition,
 - · the intention of the person in command
 - · present position, level and heading
- c) the elements of the message should appear in the predefined order given above.

Such recommendations, obviously derived from the well-proven principles of routine phraseology, aim to make emergency calls both informative and understandable. Practising controllers know full well, however, that calls of this nature can be very difficult to handle, particularly if the pilot is not a professional or if (s)he is not using the controller's native language.

An example of an actual emergency call will serve at this point to highlight the linguistic sources of these difficulties. The following is a call made by an English-speaking VFR pilot on a training flight in French airspace. It is his first contact with an area radar controller:

I've got an emergency.
Short on fuel
and I'm steering to the beacon on 112.3,
and I've been told to tune on to the IFR to get me
into an airfield.
I have less than 15 minutes fuel supply, sir.

Two facts reveal that this message, as it was actually uttered, was difficult to understand. First, the ensuing conversation with the French controller consisted of several requests for repetition and clarification. Furthermore, this difficulty is confirmed by the results of an informal experiment conducted with some French cadet controllers nearing the end of their English language training course at the Ecole Nationale de l'Aviation Civile.

In this experiment, eleven cadets, members of the top level English group of their recruitment, were presented with the same emergency call in four consecutive stages.

Stage 1: the original sound recording of the radio call was played twice over a loudspeaker;

Stage 2: the text of the radio call was read aloud clearly by a native English-speaker;

Stage 3: the radio call was presented as a continuous written text flashed onto a projection screen for 20 seconds;

Stage 4: the radio call was presented as a written text broken into separate elements (one element per line, as above) and flashed onto a projection screen for 10 seconds.

After each stage, the cadets were asked to write the closest possible approximation to the message. This enabled the subsequent checking of the cumulative understanding of the message for each individual after each stage.

The recognition rate of the **request for assistance** (*I've been told to tune on to the IFR to get me into an airfield*) is particularly revealing. No cadets were able to recognise this message at stage 1. At stage 2, only four cadets recognised the request, a further four at stage 3 and the remaining three only at the final stage. Moreover, in some cases, before accurate understanding was achieved, the message was variously misconstrued, giving rise to such incorrect glosses as, "*I've been told to tune into an airfield*" or "*I will have the airfield in sight in 15 minutes*."

Linguistic sources of difficulty

Why then is such a short message so difficult to understand? The tools of linguistic analysis provide a number of valuable insights into what is going on here.

First to strike the eye (or the ear) is the nature of the language used by the pilot. Instead of the concise, highly elliptical forms of phraseology (where, for example, determiners and auxiliary verbs are systematically deleted), the speaker uses full-blown grammatical forms (<u>I'm</u> steering to the beacon). This in itself should not present any

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particular obstacle to understanding, since key words, such as *emergency*, *fuel* or *airfield* remain in prominent positions. It does, however, serve to indicate that the speaker has abandoned the constraints of phraseology and has switched to **natural language**. Of greater consequence however is that the switch to natural language also involves the use of colloquial instead of standardised terms, (e.g.. *tune on to* instead of *contact; get me into* instead of *home me to*) and these are less likely to be recognised by non-native speakers of English,

Beyond these strictly linguistic features, the content and the structure of the message also present difficulties for understandability. In this respect too, the message presents a number of differences in relation to the recommended phraseology: the substitution of the term "emergency" for MAYDAY; information on the aircraft's current position and heading before its allotted final slot, and substitution of a request for a statement of intentions. Secondly, the wide range of topics addressed within a single message (fuel state, direction of flight, navigational aids, previous control instructions, assistance required) results in a high density of information. Thirdly when the message is broken down into its five constituent submessages, the relative status of these sub-messages is seen to be not the same. The first element is a "message marker", similar to the distress signals of the phraseology, and serves as a frame for understanding the rest of the call. As such, it is a significant aid to understanding. The next two elements provide background information about the situation: firstly the nature of the emergency (a fuel shortage) and then the position and direction of the aircraft. The core of the message comes with the fourth element (I've been told to tune...), which is in fact a request for assistance and can be considered as the real motivation for making the call. Finally, the message closes with a (more detailed) repetition of the nature of the emergency. The overall impression is of a message which, unlike the prefabricated messages of routine communications, is very much made up as it goes along. The result of this real-time structuring of the message is that the main element, the request for assistance, is "buried" amid items of background information, and the controller's (unaccustomed) task of sorting out the relative status is made all the harder. This "three-dimensional, non-linear structure" is typical of many emergency calls.

A closer examination of the form of the request for assistance reveals further problems. The pilot's choice of phrasing in fact makes the force (or the function) of the message less apparent than it could be. A sentence beginning with "Request ...", for example, would have been more instantly recognisable as having the force of a request. As it is, the only marker of the request is the infinitive of

purpose (to get me into), which is phonetically difficult to perceive, as well as being potentially expressive of a number of different forces: a wish (I want to get into ...), a reported order (I was told to get into ...), a pre-formulated plan (I'm going to get into ...). In addition, the use of the passive (I've been told), rather than the active (the VFR controller told me), places extra strain on the controller's cognitive resources due to the higher processing demands associated with passive structures.

A possible interpretation of the pilot's actual choice of phrasing is that it is an attempt to "save face". By saying "I've been told to tune on to the IFR ...", he unconsciously but neatly declines responsibility for "intruding" on a frequency which is the preserve of professional aviators, (since "somebody else told him to doso"). His discomfort may be increased by the knowledge that his situation may be partly his own fault. This is an example of an "indirect request", whereby the speaker seeks to reduce the degree of imposition of his request on the hearer. In social situations, this can be an important factor in maintaining good relations. In air-ground communications, however it is patently counter-productive in that it masks the speaker's real (and urgent) intention.

Finally, the sound recording of this call provides further information on its difficulty. Indeed, the pilot's tonal patterns and speech rate are significantly affected by stress and emotion. The overall pitch of the voice is much higher than that normally associated with pilot communications, while speech is much more rapid than usual, with no pauses between parts of the message. Such departures from the norm constitute a further obstacle to understanding in that the controller has less opportunity to process sub-messages as they occur.

Strategies for improving communications in emergency situations

The foregoing analysis has been carried out in the spirit of what Michel Jouanneaux calls "le courant ascendant"* - the upward flow of information, or the lessons that can be learned from real events. This particular lesson suggests a number of possible ways to increase chances of complete, correct and rapid understanding by the controller of emergency calls.

Future revisions of the existing phraseology could adapt existing recommendations to the observed operational constraints. For example, the force of different sub-mes-

^{*} See article "The Ambivalence of a Line Pilot's Work" in "Transpondeur", December 1993

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sages within the call should be labelled by easily recognizable "message markers"², such as the word "REQUEST" to precede all requests for assistance. A recommendation to pause between such message elements would provide additional help to the controller's understanding.

It seems nevertheless reasonable to assume that pilots, under the pressure of urgent action and with the need to provide detailed information, will need to resort to natural language in emergency calls. This implies measures to be taken during initial and in-service training of both parties.

In the field of pilot training, it is particularly important to incorporate the evaluation of speech communications in training-flight and simulation debriefings. Such evaluations should not be limited to pointing out non-conformity with phraseology, but should focus on the actual understandability and informativeness of the messages uttered.

The same strategy would be appropriate in the field of controller training. In addition, controllers need to acquire comprehension strategies associated with specific phrases to enable efficient clarification of partially understood messages. The English language training of non-English speaking controllers should concentrate on the acquisition of natural language lexis for priority topics, such as "health and medical services", "radio communications", "fire", etc., thereby maximising the chances of a pilot being understood if (s)he lapses into the vernacular.

However, for these measures to be applied effectively, and with confidence, it will be necessary to undertake a study of a wide range of communications in emergency situations. Such a study could make use of the linguistic tools used in the example above in order to determine the lexical requirements for non-native speakers, as well as the compensatory strategies to be adopted by all pilots and controllers. (This article first appeared in "Transpondeur", December 1993.)

R/T PROBLEMS AND CONTINUING COMPETENCE

John Williams, Manager of Investigation, Information and Training at London Air Traffic Control Centre.

"What did he say?" is the most commonly used phrase in the cockpit according to a survey of cockpit voice recorders. This can be developed further: "Did I hear what you said?" or "Did I understand what you meant?"

The problems in practice can be at either end: controllers can misunderstand pilots and pilots can misunderstand controllers. Communication is definitely a tricky business. One way of discovering what happens is to look at the incidents and try to see what can be learnt from them. Where did the communication actually go wrong? What can be done to avoid this type of error?

How can people be trained to improve their way of communicating? This is the role of the Investigating and Training Centre.

An example was given of a dangerous situation where two planes are too close to each other. Here the controller has precise phraseology which draws attention to the situation and gives an action to solve the problem: "B.A....Avoiding action, turn left immediately". The chances are the pilot can look out, see and avoid the other plane. There is no time for the controller to say: "I seem to have made a mistake..." This type of language is inappropriate to the situation. A demonstration can be made in the seminar room itself. If a speaker giving a talk about language says: "Leave the room immediately", what happens? Nobody moves. The audience assumes it is part of the talk. Whereas if the fire alarm bell rings people move in reaction to a known warning.

The problems of R/T transmission fit into the following categories:

1) Clipped Transmission

When the tapes are studied it transpires that the first part of the call sign has disappeared e.g."...502 climb to flight level 80". If there are two different companies with the same trip numbers this can cause confusion. One of them will call back "say again". The other will carry out the instructions -usually the one that the instructions were not intended for. Sometimes it is the last part which has vanished due to faulty equipment or to the controller's finger slipping off the button during the transmission. In this case you hear "B.A. 502 descend to ..."

² This term has been used by the authors of "Seaspeak", a purpose-built language for maritime communications.

R/T PROBLEMS AND CONTINUING COMPETENCE (contd.)

Examination of the tapes shows that if there is one error, then there are usually several errors. They always come in groups, rather like London buses!

2) Hear What You Expect

We actually hear what we expect to hear and we don't listen to the readback. This is part of human nature: we are very much creatures of routine. Here are two examples of how routine can deceive us. A pilot took off and went to FL 90 instead of 80 as instructed. When asked why he went to 90, he replied that it was a 9 day. He had taken off from runway 09 with the QNH 999 so he went to flight level 90. Another pilot who flew in to Heathrow every day on heading 130 was asked on one occasion to take heading 140 by the controller. The pilot read back 140 but set 130 on his instruments as usual, assuming that the controller must have made a mistake.

3) No Readback

This is very common. The pilot says "O.K" or "Yes" or "Roger". Here the controller asks the pilot to confirm the readback. This can build up into a whole conversation with the pilot saying: "Why are you asking me again? I already said 'yes'" etc. where all that was needed in the first place was a simple readback of the controller's last instructions.

4) Call Sign Confusion

As well as the problem mentioned above of different companies with the same trip numbers there can be the same company with the same call sign referring to two different planes. This happened with a B.A. flight from Paris to Glasgow via Birmingham which normally was the same aircraft. But on one particular day the first flight B.A. 523 was delayed in Paris. Since there were a lot of passengers booked on the Birmingham to Glasgow part of the flight, British Airways decided to put on an additional plane from Birmingham and not to wait for the delayed aircraft coming in from Paris. But they gave the extra plane the same call sign B.A.523. So at one point there were two B.A.523s in the air, one south of Birmingham and one north of Birmingham. Very confusing for the controllers!

Little suffixes which are trying for the controller are added

to call signs e.g. "A" going out and" B" coming back or "Y" for yesterday's plane. So we can find yesterday's plane going out at the same time as today's plane with practically identical call signs except that today's has "A" added and yesterday's "AY".

5) Language

When the war-time Q code was used, it could not be misunderstood: QNH meant something specific which could be looked up (a barometric pressure setting at mean sea level). It was only when language was added that confusions arose.

The British controller in a non-routine situation has to be very careful to use simple language. Taking an example from the evening menu which was displayed on the board for the Bournemouth seminar attendees, the controller should say "fish" and not "steamed mullet on a bed of pasta". The controller must be able to imagine that the person in the cockpit is unlikely to understand anything other than standard phraseology. And when none is available for a particular situation he must find a short, simple way of getting his message across using as far as possible the language familiar to the pilot from the restricted radiotelephony code.

The major difficulty working with native speakers of English is that they have at least half a dozen ways of saying the same thing. It is in fact the opposite problem from the one many of the participants have who teach non-native speakers of English to use the language of R/T.

The cartoons on the opposite page are of course an invention - but it is only a slight exaggeration of U.S. airforce patter and it demonstrates nicely how far away from the original code you can get.

Three examples of how communications go wrong were shown on videotape. In the first example the controller said: "Descend flight level 220, expect 130 at Berek". The pilot read back "descending to 130" which was not heard by the controller who was expecting the pilot to descend to 220 as in his clearance and not directly to 130. This illustrates that we hear what we expect, and also that phraseology does not make a clear enough distinction between a clearance and a piece of information In the second example the controller gave the heading 280 and the pilot read back heading 080. The pilot's mistake was not picked up by the controller until it became obvious on his screen.

The third example showed how in a configuration of four

R/T PROBLEMS AND CONTINUING COMPETENCE (contd.)

aircraft the controller was distracted by one plane going through its level and did not notice two other aircraft converging.

These videos are used in training sessions with controllers as a basis for discussion. None of the examples shown wasfatal, but they were to demonstrate how quickly a situation develops once the first error goes unnoticed.

The main question for the trainer is : How \underline{do} we train people to use good R/T?

One way is good tuition. A second is by sampling the R/T used by controllers on the job and sending individuals home with the tapes of themselves to listen to. A general awareness of the standard aimed at and of the kind of problems which do arise helps to stimulate positive correction. A third way is to encourage GOOD HABITS i.e. constantly monitoring what is said, particularly readbacks, listening carefully and checking and confirming if in doubt. Emergencies also need to be practised so that the correct reflexes, "avoiding action" etc. become automatic.





R/T TRAINING IN THE NETHERLANDS

(AERONAUTICAL MOBILE SERVICES)

Walther Bijsterveld has been an Instructor in ATS-related subjects in the Dutch Air Traffic Control (Luchtverkeers-beveiliging) since 1971.

R/T is a form of telecommunication, so there are at least two parties involved: a transmitting one and a receiving one.

In the aeronautical mobile service the two parties are in rotation: the aeronautical station in general located on the ground and the aircraft station in general located in the air or on the ground.

To achieve the proper use of standard format and phraseology during air-ground voice interchange, it could be important that instruction of R/T to both parties be in the hands of one person. This instruction is in Mr. Bijsterveld's hands as far as controllers are concerned for 100% and as far as pilots are concerned for approximately 10%.

What is done in the Netherlands to avoid chaos or even tragedy?

Twice a year there is an advertisement in a few major newspapers inviting people to apply for the job of air traffic controller. Out of around 500 applicants, 20 to 25 people are carefully selected. They are between 20 and 26 years old, female and male though the males still constitute the majority.

Around April / May and October/ November the training starts with the four and a half month theoretical part of the course.

Among well-known subjects such as Air Law, Navigation, Meteorology, we find R/T - English being the language used in air traffic control.

Total lesson periods of the course: 415. R/T: 75 periods, so approximately 18% of the time available.

The 75 periods (of 45 minutes each) are used as follows:

 10 periods-General Operating Procedures as contained in Annex 10, volume 2, chapter 5 and Document 9432, Manual of R/T chapter 2 and Document 4444, chapters 9 and 10

- 1 period written test on the G.O P. (expected score 80%)
- · 1 period review of the test
- 2 periods explanation procedures VFR-flights outbound Schiphol
- 10 periods practical training ATCO (and pilot) R/T
- 1 period explanation procedures VFR-flights inbound Schiphol
- · 7 periods practical training

During practical training the course members perform in rotation the role of ATCO and pilot. However the assessment by the instructor is focused on the ATCO-R/T. The exercises can be performed by 1 or 2 ATCO's and 1-4 pilots (aircraft), depending on the abilities of the ATCOs. Here the instructor monitors and corrects the R/T.

- 2 periods explanation procedures IFR- flights outbound Schiphol
- 10 periods practical training
- 2 periods -explanation procedures IFR-flights inbound Schiphol
- · 10 periods practical training
- 17 periods practical training VFR/IFR inbound/ outbound
- 1 period written test phraseologies Document 4444 parts 9 and 10
- · 1 period review written test

Final testing consists of a 45 minute oral test on standard and non-standard R/T. No separation procedures are involved, as only one aircraft is under control at a time.

The final test is a GO/NO GO -item. The minimum acceptable score is 70%. In final testing the role of the pilot is played by an experienced ATCO, while another ATCO is doing the assessment and one observer is monitoring.

The assessment is on:

- R/T procedures
- · use of standard and non-standard phraseologies
- · local procedures
- · microphone techniques
- voice

R/T TRAINING IN THE NETHERLANDS (contd.)

The R/T final test is a part of the final testing after the four and a half month course. In total 9 subjects are involved. Passing the test means continuation. Failing means goodbye.

Looking at the aircraft station the R/T training is in many hands. Flying schools, professional and non-professional, R/T schools, flying clubs and so on take their part.

They have a general aim: to provide the student-pilot with an R/T rating, a few words on his licence which say: this pilot is allowed to transmit on the frequencies designated to the aeronautical mobile service.

It takes 7 evenings of 3 hours teaching each before the

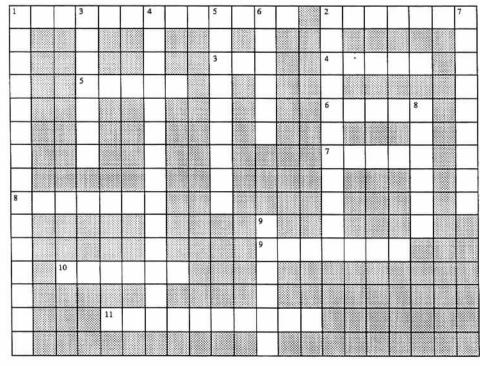
future radio-operator is able to take a written test on communication procedures, radio navigation aids, airspace structure and ATC items. 14 correct multiple-choice questions out of 20 is the pass mark.

Thereafter 9 evenings of practical training in groups consisting of 1 experienced ATCO and 8 students to prepare for an oral test on VFR-R/T: duration 30 minutes.

Another 4 evenings (1 for explanation of IFR procedures and 3 for practical training) are necessary to sit an oral test on IFR-R/T. Duration also 30 minutes.

Testing is done by the Dutch counterpart of the CAA called: Rijksluchtvaartdienst. ■

CROSSWORD



ACROSS

- The old term made them sound like assistants. This one has more status. (5,8)
- 2. The boss. (7)
- 3. An American overhead locker. (3)
- Also a little house made of logs.
- 5. Necessary to take flight. (5)
- 6. The one who flies. (5)
- 7. Not an ivory one. (5)
- 8. Taxi instruction: "Take the next on the left". (7)
- Paths through the sky, British or otherwise. (7)
- 10. The person on board who controls the money and pulls the strings?
 (6)
- She treats you like a guest on board. (3,7)

DOWN

1. An androgynous term for a cabin crew member. (6,9) 2. The bunch at the sharp end. (7,4) 3. He also works in ships' cabins. (7) 4. Is the Harry Lime Theme his swan song? (6,8) 5. They are trained to get you out in a hurry. (5,4) 6. A place to begin and end a flight. (6) 7. The old star gazer. (9) 8. A Scottish invention to keep the surface hard. (6) 9. Where they slave away to make you meals? (6) (Solution on page 15)

INTERNATIONAL AVIATION ENGLISH ASSOCIATION

MEMBERSHIP APPLICATION FORM

I wish to apply for individual membership of the INTERNATIONAL AVIATION ENGLISH ASSOCIATION and enclose the annual membership fee of **200 French Francs**. This membership is strictly personal and is not transferable to an institution, airline or association.

As an individual member I am entitled to:

- receive 1 copy of each issue of the Association's Newsletter (three or four issues planned for 1993).
- contribute to the Association's Newsletter,
- attend all Conferences, Seminars and Workshops organized by the Association.

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	226	
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NEWSLETTER

BOURNEMOUTH: AFTERNOON HANDS-ON SESSION



Mr Freddy Herring

fter an excellent buffet lunch laid on by the college, the attendees were treated to a session in the simulator used by the college to train novice controllers. The room had a number of tables each equipped with two controller's radios linked together for pair practice. We had two exercises to do. The first involved simply reading a typical pilot-controller dialogue with a partner using the headsets, speaking into the microphone, with the script in front of us, and learning how to press the button each time it was our turn to speak and to switch off the button when we had finished our transmission. Elementary you might think. However, apart from those who had experience of such simulators, we found it surprisingly difficult to coordinate these simple operations and get our tongues round the language and put some belief into our voices as we had been told. Numbers and letters were giving the most trouble. Sticking strictly to our part of the script many of us didn't notice the mistakes our more wily partners were throwing in -we were not listening and monitoring correctly! But then some of us weren't able to use the Alpha, Bravo alphabet quickly enough and some of us had trouble with the names of the

beacons and the zeros of the headings. One thing it showed is that for non-native speakers, reading these "texts" aloud is a sufficiently difficult exercise in itself. Native speakers who are not familiar with this type of language also need practice. The second exercise required more knowledge of the R/T system. Again working in pairs we had one part scripted and our partner a blank page. So here one party had to produce the missing script following the prompts given by his partner. A lot of heretical R/T was overheard and corrected by our Bournemouth College Instructor, John Moore, aided and abetted by Tony Roome, John Williams and Amelia McCourty who had their work cut out trying to keep us on the straight and narrow course. Heated arguments about numbers seemed to be breaking out in various parts of the room between partners who up to this point had seemed sweet-tempered and calm. Some pilots got hopelessly lost! And some controllers gave up their jobs with relief.

The session was felt to have been illuminating and enjoyable. It was interesting for those who teach controllers abroad to see the type of practical exercises done by student controllers in Great Britain and for those who teach pilots to see the controllers' part more closely. ■



Mrs Mirna Marincic

SOME ASPECTS OF R/T TEACHING TO NON-NATIVE SPEAKERS

Mirna Marincic teaches both ATCOs and pilots at the Faculty of Traffic Sciences which is part of the University of Zagreb.

Is R/T a language?

Is teaching R/T a language teacher's job or is it strictly an ATC instructor's job?

Mrs Marincic opened her talk with these rather provocative questions. The answer to the first she left for another discussion, but for the second she argued for the language teacher most persuasively.

At the University of Zagreb the programme for controllers consists of 250 hours of ATC theory, 250 hours of English and a certain number of hours for the other subjects (navigation, electronics etc.). The English programme covers specialized English (Aviation) and then R/T phraseology. All the tuition in the English programme takes place in English, with very occasional translation of selected items. The entry test requirement on general spoken English is intermediate or upper intermediate. The goal at the end of the course is advanced or very advanced. This means that the basics of the language have been mastered. You do not have to explain why it is "clearED" or "you are advisED". The students recognise that it is part of the passive form. However it is necessary for them in their job to differentiate between "Be advised of" and "Advise if". So in the teaching everything is geared towards the final product.

The aim is to increase the level of professional English, but this cannot be achieved without increasing the level of general English. It does in fact take quite a bit of knowledge of English to understand and reproduce exactly such phrases as:

"I don't think you have enough space to overtake".

"Numerous flocks of birds reported in the Zagreb area or in the vicinity of Zagreb"

"We've just skidded off the runway" "Confirm you've skidded off runway 23"

"Trenches are being dug on the east side of the taxiway"

For Croatians who consider the use of the passive "improper" in their mother-tongue, it takes a lot of practice to say "Left gear seems to be blocked" and not "it seems that the left gear is blocked".

The grammar of the spoken language is needed to understand the difference between "a two mile separation " and "a separation of two miles or "the temperature is falling" and a "fall in temperature".

Prepositions, always a difficult part of a foreign language, have mostly been dropped from R/T. But the few that remain often cause problems and have to be mastered:

- · cleared TO
- · distance FROM
- · a radial OF
- · south OF

If the students see how a radial works through a demonstration they will understand that it is a radial OF and not TO or FROM.

The use of "check", "verify", "disregard", "cancel" is examined in the spoken language and in R/T.

Precise understanding helps to see why it is "passing" a flight level but "crossing" a radial, and to use them correctly.

All the language taught during the course is based on the needs of the future controller. As English is his tool, it is essential for him to have a level far above the minimum requirement.

The English course and the ATC theory take place simultaneously and the two instructors work closely together relating the items to each other and emphasizing the same points. So, when the ATC instructor begins his introduction, the basic vocabulary of aviation is introduced in English. Definitions have to be learnt by heart (airport, aerodrome; manoeuvring area, movement area and so on) from a thick manual specially prepared by Mrs Marincic. As the course continues the meanings of these terms fall into place.

The ICAO alphabet is drilled insisting on the correct pronunciation of "niner" "faif" "fower" ("tri" presents no trouble for Croatians-it is their own "three") and demonstrating by use of tapes that these numbers are not clear and that care must be taken not to slip back into the "normal" way of pronouncing them.

When all the vocabulary and phrases of the Aviation English manuals have been truly mastered, then the students move on to the R/T phraseology. This is taught in the classroom, in the lab, and lastly in the simulator. In the lab they get used to using the equipment properly, and have lots of practice breathing, dividing up the phrases

SOME ASPECTS OF R/T TEACHING TO NON-NATIVE SPEAKERS (contd.)

into short, manageable chunks with natural pauses, keeping their voice level and coming down at the end of the sentence. The controller indicates by his intonation that he expects a readback. Voice control is an important part of his job.

The students practise these chunks of information hundreds of times, by listening and repeating, doing gap fill exercises, working on tapes at home at their own pace where they can check if they have given the correct phrase and working in pairs in class where they correct each other. They also have to be able to play the part of the pilot accurately as they often have to do this during their tests. It is not enough to know just one half of the communication. (The same goes for teaching pilots; they have to play the part of the controller during their tests).

When they get live scripts they enjoy spotting the mistakes, and alas there are plenty! Such is the gap between the training situation and the operations room. The beginning of an extract from Zagreb control goes as follows. The students are invited to criticize:

P: Dobra Vyecher (Good afternoon) Zagreb. Croatian 423 inbound.

(Zagreb what? A very poor position report)

C: Croatian 423, Zagreb Control, Good afternoon. Cleared via flight planned route to Split. Descend to flight level 190.

(Good R/T; greeting in the correct place)

P: Leaving 250, down 190 (Sloppy R/T; what is 250? What is the call sign?)

C: Croatian 423, correct. (Importance of this confirmation: if the controller has not heard the call sign, he must say it himself)

Unfortunately there was not time to see any more of this script beyond the tantalising call of the next pilot which began "Zagrebe" (the vocative case: "O Zagreb"). The linguists will have to wait for another occasion to enjoy more of Mrs Marincic's fascinating Slavonic examples.

RT TRAINING MATERIALS FOR PILOTS

Fiona A. Robertson, Centre de Linguistique Appliquée, Université de Franche Comté, France.

Published Materials

When ESP(English for Specific Purposes) first became all the rage in the language teaching world, there was little or no published material in any specific fields, except perhaps the odd manual on business English. So everyonestarted to produce fancy training packages with needs analyses and materials tailored to the specific needs of the students. This was fine in the hey days when training budgets were expanding. Creating training materials is time consuming and expensive and it always takes much longer to write than one has estimated.

A piece of advice about writing specialised language materials gleaned from one of the annual ESP weekends in France: DON'T write your own materials if you can possibly avoid it. The corollary: if it's published, use it. It may of course need adaptation to be appropriate for your courses but it can save you a lot of time and free you to develop certain trickier parts in more detail.

Advantages

The most obvious advantage is the saving in time. Making exercises for routine phraseology in RT for the classroom is reasonably easy, once you have tracked down an up-to-date copy of the official phraseology in use wherever you are working. Although even this is sometimes amazingly complex-a reflexion of how little attention is paid in practice to the abc of phraseology use. After your students have a thorough mastery of letters, numbers, the list of basic phrases (roger, acknowledge, say again etc.) where do you turn after that for something that prepares them for real communication? The most seductive idea is to get hold of recordings of live traffic but this may prove rather difficult, and even if you do manage, it may not be the answer to your prayers.

A book is professionally laid-out, with an index and a consistency of content. It is generally user-friendly and it is reassuring for everyone to have course contents in one volume, bound together. No more despair as the photocopier packs in and anxiety about all these loose pages

RT TRAINING MATERIALS FOR PILOTS (contd.)

which only the most organised of students files carefully away. A book is reassuring. It is all under one cover and gives the impression that the amount of language to be assimilated has been pinned down and limited in an orderly fashion.

The tape recordings accompanying a course book are made in a professional studio, so they should be far superior to anything you can hope to produce yourself. You should, however, listen to recordings to check before buying any kind of language training course.

With a bit of luck, you might find a coursebook which can be the mainstay of your syllabus, or, failing that, a book which can be a jumping-off point for classwork. A book can provide you with a source of inspiration for making similar material and it can also be used (or adapted) for self-access work.

Disadvantages

RT phraseology evolves faster than publishers can reedit books and recordings. This puts the onus on the teacher to keep up-to-date with changes.

You seldom find the perfect publication to fit your course, and a bound book is rather rigid. The pages are presented in a fixed sequence and certain types of students become distressed if the teacher misses out bits and hops gaily from one end of the book to another. The reassuring aspect of a book can become a straightjacket. The ringbound book might be an answer to this problem, and to up-dating.

Some RT materials currently on the market:

Manuel de radiotéléphonie en langue anglaise (QRRI) by J-P Montraisin, published 1982 by CEPADUES-EDITIONS, 111 rue Nicolas-Vauquelin, F31100 Toulouse, France. Tel:61 40 57 36 fax:61 41 79 89.

This kit consisting of a book and 2 cassettes, made for self study, teaches very basic RT phraseology for private pilots, using mainly translation exercises (French to English) on tape, with words phrases, and a few dialogues. Price 380 francs.

Airspeak by F.A.Robertson, published 1988 by PRENTICE HALL, Campus 400, Maylands Avenue, Hemel Hempstead, Herts. HP2 7EZ, England. Tel. 0442 881900 fax 0442 252544

Sold as a kit consisting of a book and 6 cassettes or the book alone. Teaches basic routine phraseology with quite

a lot of recorded practice material, also includes some non-routine situations. Designed for classroom use or self-study. Price: kit \$96.29, book \$15.91.

Skytalk by L Leveson, published 1984 by STANLEY THORNES, OldStationDrive, Leckhampton, Cheltenham, Glos. GL53 0DN.

Students book, teacher's book and cassettes. Designed for teaching basic phraseology to both pilots and controllers.

English for Pilots and Controllers Book A: Ground Movements, Book B: Approach and Landing Book C: En Route by Y Rengade, published 1988 by Ecole Nationale de l'Aviation Civile, 7 ave Edouard Belin 31055 Toulouse Cedex, France, tel. 62174082.

Each book is accompanied by recorded cassettes, 1 for Book A, and 2 each for Books B and C. These books assume that the basic standard phraseology is known and concentrate on non-routine situations scripted from live traffic and re-recorded. Most of the dialogues are between native speakers and so introduce lots of deviations from the phraseology norms. The recordings are clear, if not always very realistic. Good value for money. Book A 72 francs, tape 65 francs. Book B 72 francs, tapes 173 francs. Book C 110 francs, tapes 210 francs.

Manuel de radiotéléphonie pour navigants professionels Tome I by Y Rengade, published 1990 by CEPADUES.

Sold as a kit with book and 6 cassettes. Part I of this book contains similar materials to the English for Pilots and Controllers, with upgraded recordings and accompanying exercises. Part II uses live traffic including two complete flights. Price:990 francs.

Manuel de radiotéléphonie pour navigants professionels Tome II by Y Rengade and G Roves, published 1988 by CEPADUES.

Sold as a kit with book and 3 cassettes. The first part of this volume concentrates on written exercises to reinforce language appearing in Part I of Tome 1. Section 2 gives practice tests for the written part of the French International Radiotelephony examination and Section 3 consists of live traffic. Price 410 francs.

Writing your own materials

Numbers and the international alphabet are an easy starting point, and it is surprising how many mistakes occur in this area in the real situation e.g. callsign confusion. Routine dialogues written using standard phraseology and

RT TRAINING MATERIALS FOR PILOTS (contd.)

simply read aloud in class by students can throw up quite a lot of interesting points, for example pronunciation errors and bad habits such as "point" instead of "decimal".

For an RT course to be effective, the teacher must try to simulate reality. The way in which this is done depends on the means at the teacher's disposal. The language laboratory is, of course, an excellent tool for individualised practice giving students the opportunity to progressively build up the speed of their reactions in English. However, it can also lull people into a false sense of security where even when a correct written version of the exercise is provided, the student does not hear his or her own mistakes on the tape. The teacher must stay vigilant.

Live tapes have high face-value credibility in class. They may be used for both speaking and listening exercises. Listening exercises can be either global, with comprehension questions to be answered, or intensive where words or phrases in the script are blanked and the student must complete the text. You must, of course, first script your tape - a painstaking job, but worth the effort. If you want to use live traffic for practising routine phraseology, you may have some difficulty finding stretches where the standard of phraseology is good enough. However, that is life, people are not perfect, and everyone has to get along with it so there is an argument for working on the real thing warts and all. The live tape can be blanked for the student to reply to or initiate exchanges, taking the role of the pilot speaking to the controller(s) on the tape, or vice versa. The tape has to be well edited for this to succeed, but again it is worth the effort involved. The main criticism of this type of simulation is that it is difficult to provide for requests to "say again".

If you are seeking non-routine situations, you may have to listen to miles and miles of tape to find anything remotely interesting. In fact most RT tapes are extraordinarily boring. In absolute terms, we must be happy that this is so. You will probably have to resort to scripting and recording your own non-routine imaginings to cover the types of situations you require.

We must not forget the resources that the students themselves can provide. If they have any professional experience, they can create their own simulations and play the role of pilot or controller for their colleagues. The task of writing a brief script as a point of departure can in itself lead to interesting discussions about the nitty gritty of how things should be expressed. For non-routine situations, students often enjoy playing the instructor who interrupts a smooth routine operation with some more or less outlandish incident.

Reference works

Whatever syllabus and materials you choose for your RT course, you must try to acquire or gain access to the most up-to-date reference works possible. Below is a list based on the writer's experience in France. It would be useful if readers could complement this list for other countries.

Convention of Procedures for Air Navigation Services: Rules of the Air and Air Traffic Services; ICAO, Montreal 1985, PANS-RAC ANNEX 10, Vol 2, and PANS-RAC, Doc.4444-RAC 501/11

ICAO Lexicon, ICAO, Montreal, 1986, Doc 9294

Manual of Radiotelephony ICAO, Montreal 1990, Doc 9432-AN/925

Procédures de Radiotéléphonie à l'Usage de la Circulation Aérienne Générale:Phraséologie, 4ème édition juin 1991, Ministère des Transports, Direction de la Navigation Aérienne, Service de l'Information Aéronautique, 91205 Athis Mons Cedex, France.

CAP413 Radiotelephony Manual 3rd edition August 1992, reference no. 0413, price \$5.00 plus p&p, Civil Aviation Authority, Printing and Publication Services, Greville House, 37 Gratton Road, Cheltenham, Glos. GL50 2BN, England. ■

Crossword solution

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THE FIFTH INTERNATIONAL AVIATION ENGLISH FORUM

The FIFTH INTERNATIONAL AVIATION ENGLISH FORUM is being held at the Hotel Campanile, Porte d'Italie, Paris on 17th-18th March on the theme:

"PEOPLE, FLYING MACHINES AND ENGLISH: THE HUMAN FACTOR".

The programme is as follows:

Thursday 17th Mar	rch
9.00 - 9.30	Opening. Mr. Georges Zask, Director, CLA
9.30 - 10.45	Dr. Susan Baker, RAF Institute of Aviation Medicine HUMAN FACTORS IN PILOT/CONTROLLER COMMUNICATION
10.45 - 11.15	Coffee
11.15 - 12.15	(a choice between)
	Mr. John Williams, Training Manager, London Air Traffic Control Centre EXPECT WHAT YOU HEAR, HEAR WHAT YOU EXPECT
	or Mr. De Wilde
12.15 14.00	PRESENTATION OF COMPUTER SOFTWARE FOR AVIATION ENGLISH
12.15 - 14.00 14.00 - 15.00	Lunch Captain Matti Sorsa
14.00 - 15.00	THE USE OF LANGUAGE, IMPLICATIONS FOR FLIGHT SAFETY
15.00 - 16.00	(a choice between)
10.00	Mme Kitka Toncheva, Bulgaria
	READING AND UNDERSTANDING AVIATION DOCUMENTS
	or
	Mr. William Niggli, Swissair
	MOTIVATION FOR TRAINERS AND TRAINEES
16.00 - 16.30	Coffee
16.30 - 17.30	Mr. Stephane Corcos, Direction Générale de l'Aviation Civile, France
17.30 - 18.00 19.00	The Association Cocktail
19.00	Cockian
Friday 18th March	
9.00 - 10.00	Professor Beneke, University of Hildesheim
	CROSS-CULTURAL ASPECTS OF CUSTOMER CARE
10.00 - 11.00	(a choice between)
	Mme Evelyne Berard, CLA
	or Mme Carmel Codmet
	A SYLLABUS FOR AERODROME AND APPROACH CONTROLLERS
11.00 - 11.30	COFFEE
11.30 - 12.30	(a choice between)
	Mme Elena Antova, Bulgaria
	COMMUNICATION IN THE ENGLISH LANGUAGE CLASSROOM
	or
	Mr. William Niggli
12.20 14.00	PUBLIC ADDRESS IN THE COCKPIT AND THE CABIN
12.30 - 14.00 14.00 - 15.00	Lunch Mr. Jeremy Mell, ENAC
14.00 - 15.00	HOW THE PEOPLE TALK ABOUT THE FLYING MACHINES
15.00 - 16.00	(a choice between two workshops)
	Mr. John Williams/LACK OF PRACTICE = LOSS OF COMPETENCE
	or
	Professor Beneke/CREATING CROSS-CULTURAL AWARENESS
16.00 - 17.00	(a choice between)
	Mr. Adrian Enright, Eurocontrol
	ENGLISH LANGUAGE EXIT TEST FOR STUDENT AIR TRAFFIC CONTROLLERS
	or Mme Claire Pellegrin, Aeroformation
	COCKPIT RESOURCE MANAGEMENT
17.00 - 17.30	Closing comments: FEEDBACK FOR THE FUTURE

RADIOTELEPHONY

Chris Swan, instructor at the CAA College of Air Traffic Control and an experienced controller himself, gave a talk on how standard phraseology is taught to students during their initial training. The reference manual used is the Manual of Air Traffic Services Part One.

In his introduction Chris Swan made the point that although the students were all English selected-among other criteria - on the basis of their capacity to speak reasonably accurate English, the college tutors nevertheless had to teach them to "speak English" or rather how to re-use their English in the specific two-way communication system which is the basis of R/T. They had to develop clear and concise delivery using the standard phraseology. The objective is to communicate the information, and efficient communication means being understood clearly internationally, the first time. Otherwise misunderstandings occur, which are a source of great worry to all involved in traffic control. To put right a mistake, or even to realise that a mistake had been made, was one of the most difficult things to do.

The problem with the English used by some of the students with regional accents such as broad Scots or Northern Irish was that they could be understood by British pilots but not by foreign pilots. These students also had a tendency to lapse into fast local speech when busy or flustered. One remedy in these cases was to give the trainees speech therapy. An example of a Northern Irish distorted *tui* (two) being confused with *tri* (three) was given.

The body of Chris Swan's talk was devoted to the common errors of novice controllers:

1) Speaking too quickly

When under pressure it is human nature to speak too fast. Trainees have to learn the golden rule: the busier you are the slower you speak. Pilots, often tired, find it hard to listen to R/T on the frequency. If it is clear and the volume is right and the background noise is reduced, then the pilot can pick out his part easily.

2) Assuming that the pilot is familiar with the airport

A common mistake is to give too complicated instructions too fast concerning taxiways etc. which the pilot may not recognize. The controller must be patient and clear. He must also give the pilot something he is willing to accept. If not, then a discussion starts up and can take a long time to resolve. Reporting points, although designed to be easily said and understood, can cause trouble if the pilot is unfamiliar with the names.

3) Using colloquial phrases

These may be perfectly familiar to native speakers of English, but not to others. The controller must not use phrases he has invented for the occasion, but stick to the standard phraseology in his manual. Intercom and telephone communications are notorious for misunderstandings due to casual or colloquial usage. In these areas the English language becomes dangerously imprecise. An illustration of an airmiss due to such casual use of language was given: two controllers were discussing two different planes. One was referring to "the one at the front" and "the one at the back". But one of the planes was a BAC 1-11 and it was in front. It transpired that the controllers were not talking about the same plane.

4) Using courtesies on R/T

Controllers accept a limited amount of courtesies but do not initiate such greetings as "Happy Christmas", "Have a good day", "Thank you very much indeed, that's really kind of you " etc.

It was noted that pilots announce their arrival on the frequency with their call sign plus "Good morning." This was acceptable as a way of signing in on the frequency. Similarly "Goodbye" replaces the old "roger and out".

RADIOTELEPHONY (contd.)

5) Hesitating on the transmission with "um", "er", "ah"

These are an inevitable part of human conversation while we think about what we are going to say. However it is a waste of precious R/T time and so thinking on the R/T is discouraged .

The controller must have his ideas straight before he starts transmitting.

Training at the college was directed towards rectifying these common errors and teaching correct R/T procedures.

Discussion after this presentation centred around changes in phraseology which do occur and how difficult it is for controllers to change their habits. "Go ahead" was banned in the UK and was replaced by "pass your message" when a pilot carrying the Prime Minister on board misinterpreted "go ahead" to mean "proceed" and just missed another plane. The Prime Minister was not impressed and the phraseology was changed overnight. New technology also causes new phraseology to be generated as in the recent experiments in the UK with the T-CAS project.

The phraseology is under discussion at the moment.

Another question concerned the acknowledgement by the controller at the end of a pilot-controller exchange. It is often common practice that if the controller is satisfied nothing is said, although the controller should use the call sign to acknowledge that he has heard. The very last and separate piece of information is the transfer to the next frequency. The controller must have everything read back before this stage so that he is not in any doubt that the pilot has received the correct instructions. The lack of readbacks in the US was deplored. There the pilot is expected to get it right first time and there is no check.

In conclusion Chris Swan emphasized the importance of maintaining a high standard of air traffic control firstly through education and secondly through continuing vigilance once controllers were working at their stations.

For all correspondence about the Newsletter, please write to: International Aviation English Association

International Aviation English Association 72, boulevard Vincent Auriol 75013 PARIS - France

For the attention of the Editor

HOW RUSTY IS YOUR PHRASEOLOGY?

What examples of bad habits and poor phraseology can you identify below?

- Pil Speedy Five Double Five request start up clearance.
- Ctl Speedy Five Double Five, taxi to holding point zero nine, contact Tower one one eight decimal two.
- Pil Holding point zero nine, one one eight point two, Speedy Five Double Five.
- Pil Speedy Five Double Five, taxi please.
- Ctl Speedy Five Double Five, taxi to holding point zero nine, contact Tower one one eight decimal two.
- Pil Holding point zero nine, one one eight point two, Speedy Five Double Five.
- Pil Speedy 555, good morning, reaching holding point zero nine.
- Ctl Good morning Speedy 555, number 3 for take-off.
- Pil Number 3, roger.
- Ctl Speedy 555 after the 747 on final, clear to line up and hold
- Pil After the 747, line up and hold, Speedy 555.
- Ctl Speedy 555 clear for takeoff, wind calm.
- Pil Cleared for takeoff.

Here are some suggested improvements:

- Pil Speedy Five Five Five request start up.
- Ctl Start up and push back approved, Five Five.
- Pil Starting up, Five Five Five.
- Pil Speedy Five Five Five, request taxi.
- Ctl Speedy Five Double Five, taxi to holding point zero nine, contact Tower one one eight decimal two.
- Pil Holding point zero nine, one one eight decimal two, Speedy Five Five.
- Pil Speedy 555, good morning, reaching holding point zero nine.
- Ctl Good morning Speedy 555, number 3 for departure.
- Pil Number 3, roger.
- Ctl Speedy 555 do you have the 747 on final in sight?
- Pil Traffic in sight, Speedy 555.
- Ctl Speedy 555 behind the 747 on final, line up behind.
- Pil Behind the 747, lining up Speedy 555. ■