

Ab-initio pilots and air traffic controllers

Dealing with culture in developing an effective language program for ab initio training

Michael Kelly, J.F. Oberlin University (Japan)

Jenny Drayton, GAL Air Navigation Services L.L.C. (UAE)

ICAEA CONFERENCE 2019 – TOKYO JAPAN

Day 2: Identifying Training Needs

SESSION3: Equipping ab-initio pilots and controllers with language skills for operational training

Workshop Objectives

- Explore aviation and culture
- Identify importance of RTF
- Task-based language teaching

Workshop Format

- Introduction: 10 minutes
- A phraseology lesson: 30 minutes
- Discussion: 10 minutes



Workshop F:

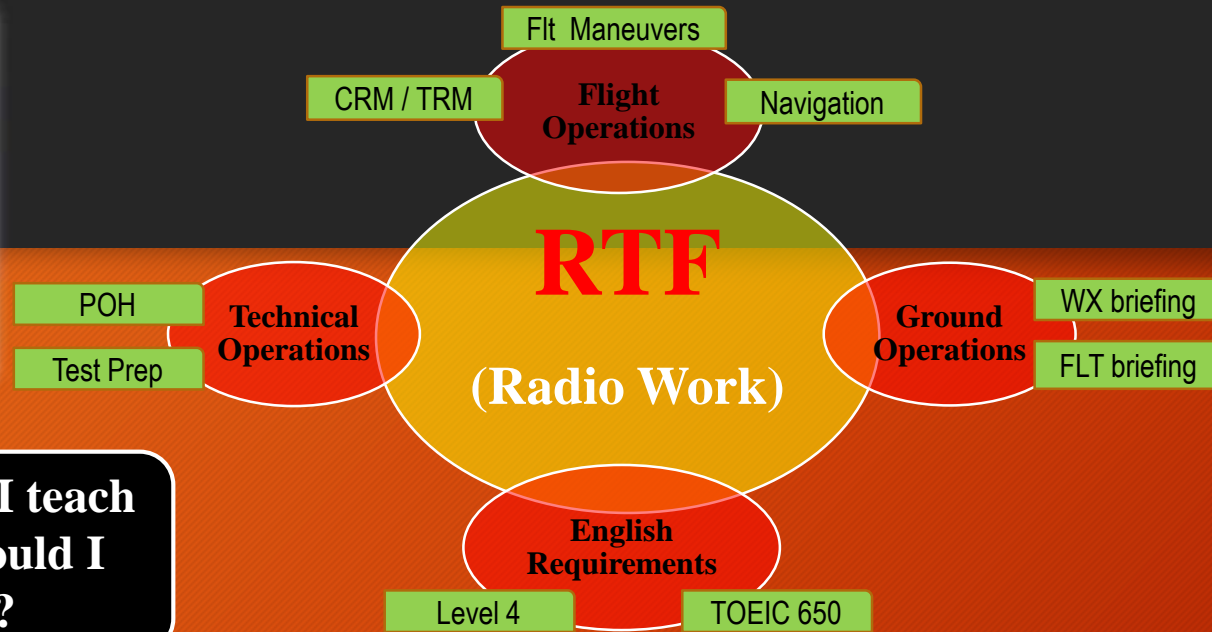
Dealing with Culture in Developing an Effective Language Program for Ab- initio Training

Jenny Drayton, GAL Air Navigation Services L.L.C. (UAE) & Michael Kelly, J.F. Oberlin University (Japan)

Ab-initio Aviation English Training



What should I teach and how should I teach it?



Reference materials



Balancing Aviation English Training Needs with Time Constraints

Task Oriented

Content Based

Chart Reading

Flight Planning

Pre-flight

WX Briefing

Flight Briefing

Airport Operations

RTF communication needs to be the heart of any ab-initio aviation English program

Characteristics of Culture and RTF Communications



Japanese don't ...

Speak up!

Ask Questions

Check & Confirm

Challenge Authority

- ❖ Memorization vs Critical Thinking
- ❖ 立場 (understanding your place)
- ❖ 我慢 (avoid conflict / keep the peace / harmony)

Radio Communications

Accuracy & Proficiency

Time Critical

10-15 sec transmissions

Max 3 pieces of information

Pilot / Controller Communications

Situation Awareness

Decision-making

Conflict resolution

Multi-tasking



GND Procedures

DEP Procedures

ARR Procedures



RTF

Communication skills play a large role in the high level of trust required between controllers and pilots

THE TRAINEES

- Ab-initio air traffic controllers or pilots
- No exposure to phraseology
- ICAO language level of 3 to 4
- Previously studied aerodrome layout

TASK-BASED LANGUAGE TEACHING

- Real world focus
- Focus on meaning
- There is a gap
- Learners rely on their own resources
- Not a language outcome

LEARNING GOALS

- Lesson One:
 - Identify events associated with a radiotelephony conversation between a pilot and an ATCO
- Lesson Two:
 - Direct aircraft to line-up and wait, taxi and take-off, observing all the requirements of RTF and aviation phraseology: hearback, turn-taking, callsigns, identifying speaker and person spoken to, using numbers and phonetic alphabet

PRE-TASK

- Stage 1 - prime for prediction
- Stage 2 - prediction task
- Stage 3 - preparing to report
- Stage 4 - report

TASK

- Stage 5 - Watch video

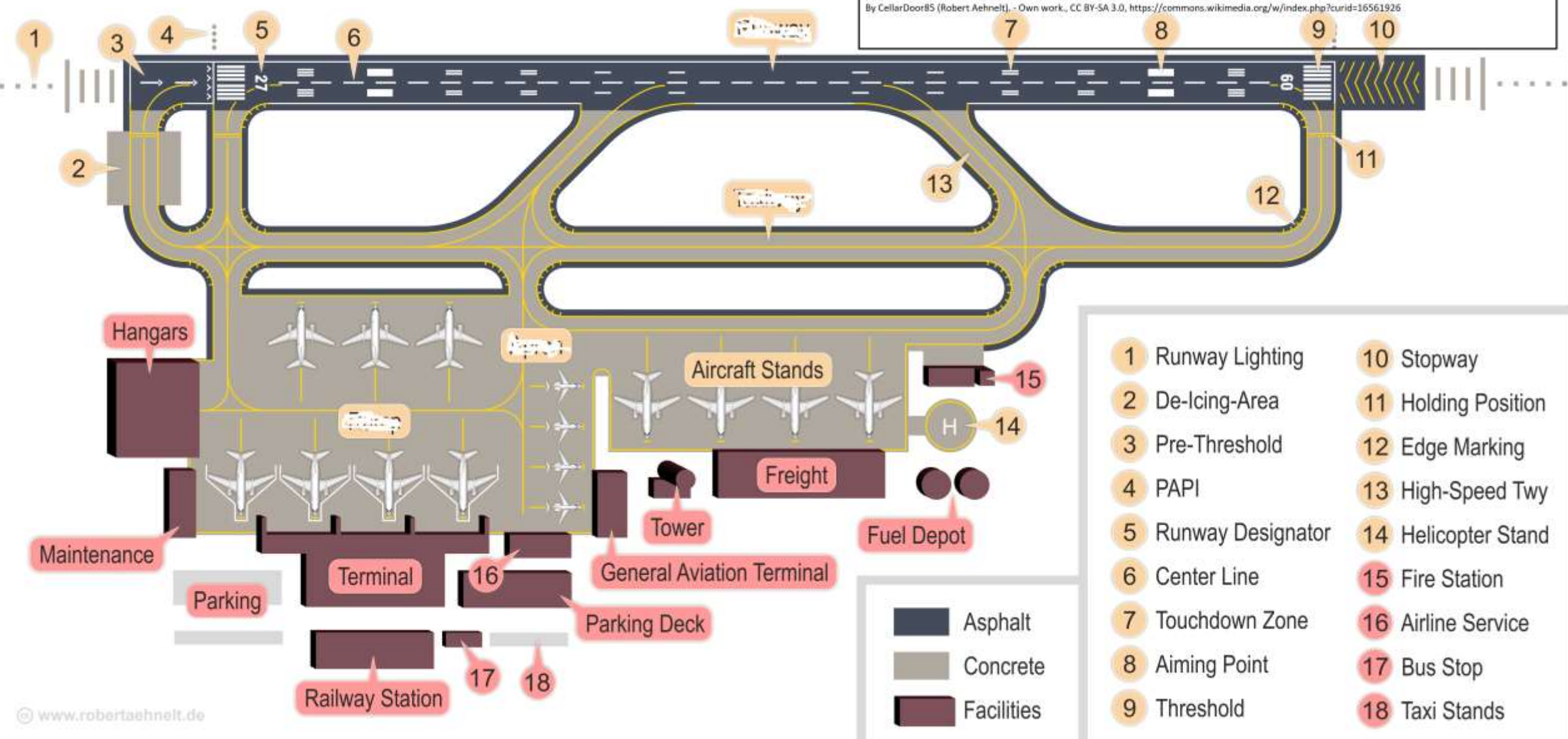
Focus on Form

- Stage 6 - notice the language patterns

Stage 1 - Prime for prediction

- How would you write a heading to go East?
- What does fly straight out mean?
- What does taxi mean?

By CellarDoor85 (Robert Aehnelt). - Own work., CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=16561926>



- | | |
|---------------------|---------------------|
| 1 Runway Lighting | 10 Stopway |
| 2 De-Icing-Area | 11 Holding Position |
| 3 Pre-Threshold | 12 Edge Marking |
| 4 PAPI | 13 High-Speed Twy |
| 5 Runway Designator | 14 Helicopter Stand |
| 6 Center Line | 15 Fire Station |
| 7 Touchdown Zone | 16 Airline Service |
| 8 Aiming Point | 17 Bus Stop |
| 9 Threshold | 18 Taxi Stands |

Stage 2 - prediction task

- Watch the video
- Where will the aircraft go?



Stage 3 - preparing to report

- Write down where you think the aircraft is going and parts of airfield to get there
- Write down what you think they are saying

Stage 4 - Report

Stage 5 - watch video



Stage 5 - Task

- Trainees discuss in pairs or groups
 - Is it different to their predictions? How?
- Answer:
- What taxiway did they use?
- What runway?
- How many controllers were there?
- What does Deer Valley Ground mean? Deer Valley Tower?
- What is Cessna 75600?

Stage 6 - Focus on form

- Re-create the conversation
- Answer questions



Questions - noticing

Questions - applying

Practice

- What would you do next?

How I continued

- Revise correct way of saying numbers 0 to 9
- Practice listening for numbers using RMIT English Worldwide (2007) page 1
- Drill the numbers, hold up sequences of numbers and get class to say them
- Ask students to recall any phonetic alphabet letters they know
- Drill difficult letters e.g. sierra
- Demonstrate spelling name with the alphabet
- Demonstrate saying a date with the numbers

Activity

- In pairs or groups of three, a set of cards to practice phonetic alphabet and numbers
- Class game

Did we do it?

TASK-BASED LANGUAGE TEACHING

- Real world focus
- Focus on meaning
- There is a gap
- Learners rely on their own resources
- Not a language outcome

Automated RTF



Conclusion

- Pilot / Controller students need to speak up and make simple, accurate and timely responses
- Courses should be task-oriented and content based
- Focus should be on RTF communication skills
 - For better situation awareness, decision making and conflict resolution.
- Should the 6 evaluation areas, especially INTERACTION, be applied in all tasks?

Create situations where students must make a decision on how to resolve a conflict
Would phraseology help in an emergency?



Teaching aims?



Discussion

Constraints?

Method?

