

ICAEA CONFERENCE 2019 – TOKYO JAPAN

Day 2: Identifying Training Needs

SESSION 3: Equipping ab-initio pilots and controllers with language skills for operational training

Workshop Objectives

- ☐ Identifying training needs
- ☐ Understanding cultural issues
- ☐ Use of ATC in the classroom

Workshop Format

- ☐ Introduction: 15 minutes
- ☐ Workshop Activities: 30 minutes
- ☐ Discussion: 10 minutes



Session 3: Workshop F

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

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Ab-initio Aviation English Training



What should I teach
and how should I
teach it?

Teach Interaction
skills!

Make it real!

Balancing Aviation English Training Needs with Time Constraints

Task Oriented

Content Based

Chart
Reading

Flight
Planning

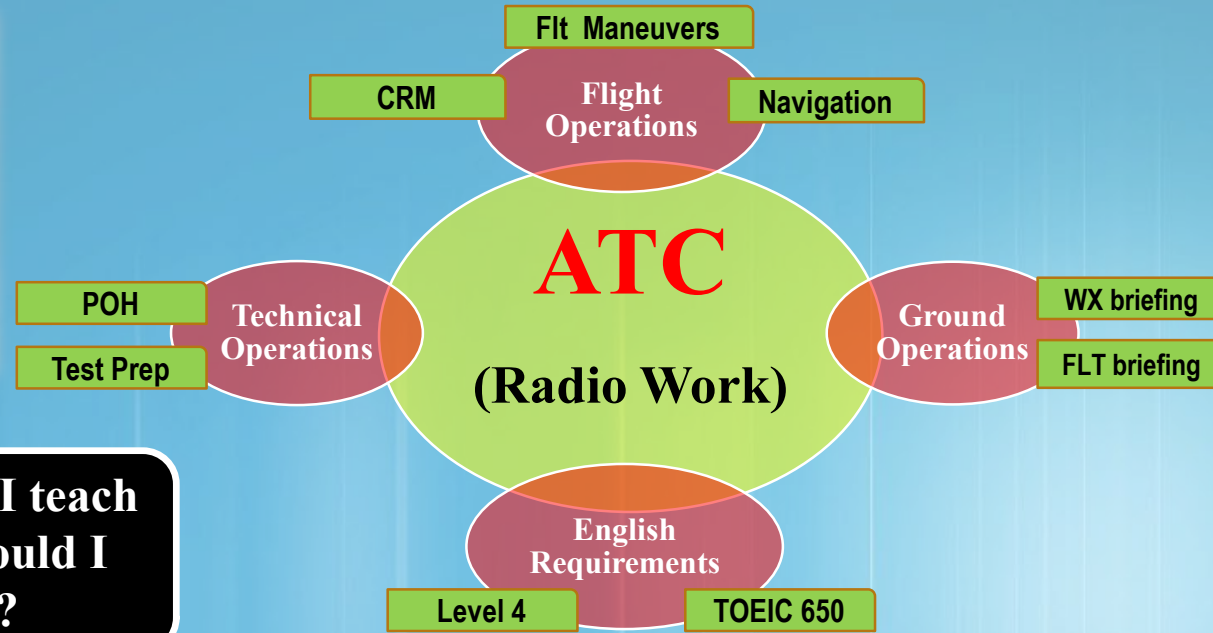
Pre-flight

WX
Briefing

Flight
Briefing

Airport
Operations

ATC communications needs to be the centerpiece of any ab-initio aviation English program



Reference materials



Characteristics of Culture and ATC 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 Comm. Characteristics

Accuracy &
Proficiency

Time
Critical

10-15 sec
transmissions

4-6 pieces of
information

Pilot / Controller Skills

Situation
Awareness

Decision -
making

Conflict
resolution

Multi-
tasking



**GND
Procedures**

**DEP
Procedures**

**ARR
Procedures**

ATC



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

WORKSHOP ACTIVITY

AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS)

Process information

Airport

Weather

RWY

NOTAM

Show relationship

Airport Info.

Name / Code / Zulu Time

WX Info.

Wind / V / SKC

TT / DP

ALTIMETER

RWY Info.

Instrument approach

LND / DEP RWY

NOTAM

ATIS	SFO	CODE / TIME:	S	/1654Z
APP. TYPE / RWY:		VIS / 19L / 19R		
Wx	180 /12	V	10	
SCT	8	BKN	12	12 / 8
ALTIMETER:		2995		
REMARKS:		BIRDS		

Task oriented / Content based

- Copy the ATIS
- Call out / Respond back

Responsibility of information

- ❖ Speak up!
- ❖ Check & confirm
- ❖ Use Inquiry



FFZ ATIS

Pronunciation

Structure

Vocabulary

Fluency

Comprehension

Interactions



IWA ATIS

Pilot / TWR

WORKSHOP ACTIVITY ATC RADIO WORK

Station

Call sign

Position

Request

ATIS



Request

Landing

Touch and
Go

Transition



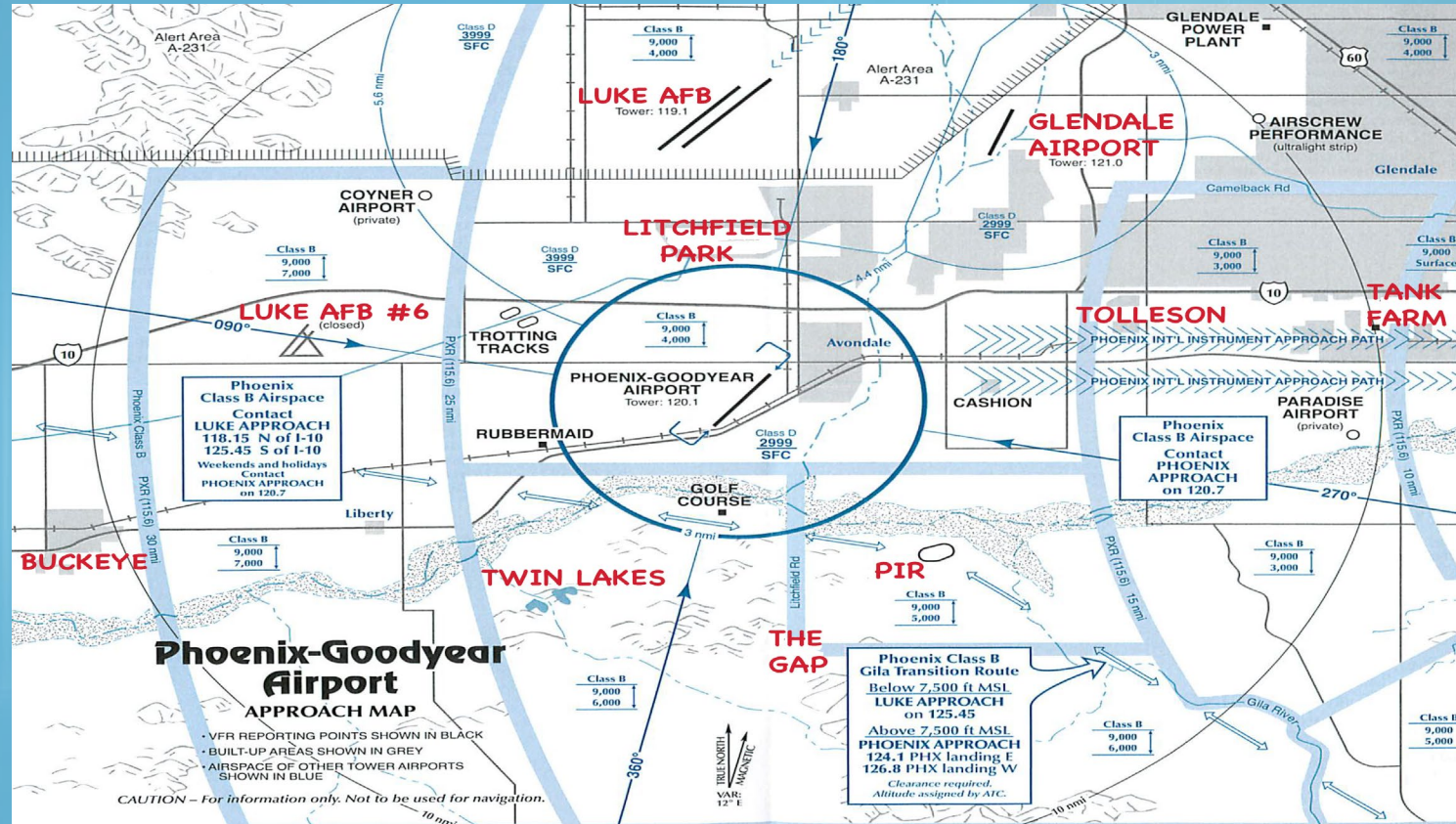
Initial
Contact

TWR
Instructions

Position
report

TWR LND
Instructions

LND
Clearance



- Straight in
- Normal
- Direct base

Pattern entry

RWY assign.

Reporting
point

- Report 2 mile final
- Report downwind
- Report 2 mile base

Initial Contact - ARR



Initial
Contact

KEEP IT SIMPLE

TWR
Instructions



Station

Call sign

Position

Request

ATIS

Pattern Entry

RWY
Assignment

Reporting
Position

Teaching Objectives

- Interaction skills
- Timely responses
- Accuracy & Proficiency
- Check & Confirm skills

Critical-thinking skills

- Situation Awareness
- Decision - making
- Conflict resolution
- Multi - tasking

PILOT: Goodyear Tower, Cessna 1212F, over PIR,
request full stop landing with 'Alpha'

TWR: *Cessna 1212F, Goodyear TWR, enter left downwind,
RWY 21, report downwind*

PILOT: Report downwind, RWY 21, Cessna 1212F

*Process the
information*

Position: Glendale
Request: LND
TWR: RWY 21

Practice making initial contact with a partner.

Position: Twin Lakes
Request: Full Stop
TWR: RWY 3

Position: The Gap
Request: T/G
TWR: RWY 21

*Anticipate the
action*

Position: Tank Farm
Request: LND
TWR: RWY 21

Automated RTF



Conclusion

- Pilots / 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 ATC communication skills involving situation awareness, decision making and conflict resolution.
- The 6 evaluation areas, especially INTERACTION, should be applied in all tasks

Create situations where students must make a decision on how to resolve a conflict

Radio Comm. Characteristics

Accuracy & Proficiency

Time Critical

10-15 sec transmissions

4-6 pieces of information

Teaching aims?

Discussion

Method?

Constraints?

