



ICAEA Test Design Guidelines

Session 4

Criterion 2:

Separate test instruments need to be designed for pilots and air traffic controllers

INTERNATIONAL CIVIL AVIATION ENGLISH ASSOCIATION

supporting the use of English for aviation safety

Warm up

Are there separate LPR tests for pilots and ATCOs in your state?

1. What are the unique (specific) language and communication contexts that pilots and air traffic controllers share?

(What makes aeronautical communication different from other types of communication?)

1. What are the unique (specific) language and communication contexts that pilots and air traffic controllers share?

(What makes aeronautical communication different from other types of communication?)

- Communicate over the radio
- Use voice-only communication
- Not personalised and don't know the audience
- Wide audience (multiple pilots can hear transmissions on the same frequency)
- Use phraseology and plain English in radiotelephony
- Need to listen for information (e.g. requests, readbacks, reasons, etc)
- Need to use/understand aeronautical language and contexts
- Need to communicate efficiently

2. What is different and specific to the language and communication needs of pilots vs air traffic controllers?

(What are the features of communication that makes pilot aeronautical communication different from ATC aeronautical communication?)

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Pilots:

- listen to only one ATCO at a time
- operate in all phases of flight
- make requests
- give information
- communicate with other crew/colleagues

ATCOs:

- listen to multiple pilots
- manage aircraft in limited phases of flight (aerodrome, approach/departure, area)
- give instructions
- ask for information
- coordinate with other ATC units/colleagues

Activity 2.1

Match the communicative functions on the left with the radio transmissions on the right. Decide who would say each transmission, pilots (P) or ATCOs (C).

Communicative functions	Transmissions	P / C
a) Announce a problem	..... We're coordinating with Approach now. Advise if you will be able to vacate the runway or whether you'll need a tow.	.....
b) State intentions	..... Descend to FL 120.	.....
c) Ask about feasibility	..... We'll need a couple of minutes in this position to run some checks and see if we can sort this issue out.	.....
d) Warn	..... We just received a report from the aircraft lining up that something became dislodged and fell from the lower side of your right wing.	.....
e) Paraphrase	..... We have a passenger experiencing a suspected epileptic fit.	.....
f) Give an order	..... Proceeding traffic reports windshear, final approach, Runway 23.	.....
g) Give reasons	..... Negative, the problem is the cabin altitude is rising – we're losing cabin pressure - it's some kind got a pressurisation issue.	.....
h) Announce a past action/event	..... That's correct. We can't continue with the climb while the flaps remain stuck in the extended position.	.....

Activity 2.1

Communicative functions	Transmissions	P/C
a) Announce a problem	We have a passenger experiencing a suspected epileptic fit.	P
b) State intentions	We'll need a couple of minutes in this position to run some checks and see if we can sort this issue out.	P
c) Ask about feasibility	We're coordinating with Approach now. Advise if you will be able to vacate the runway or whether you'll need a tow.	C
d) Warn	Proceeding traffic reports windshear, final approach, Runway 23.	C
e) Paraphrase	Negative, the problem is the cabin altitude is rising – we're losing cabin pressure - it's some kind got a pressurisation issue.	P
f) Give an order	Descend to FL 120.	C
g) Give reasons	That's correct. We can't continue with the climb while the flaps remain stuck in the extended position.	P
h) Announce a past action/event	We just received a report from the aircraft lining up that something became dislodged and fell from the lower side of your right wing.	C

Activity 2.2

Is this task suitable for pilots, controllers, neither or both? Why?

Listen to the recording and answer each question by typing a number in the box.

1. What runway is in use now for arrivals?

2. What is the wind speed?

3. What is the QNH?



Activity 2.3

Is this task suitable for pilots, controllers, neither or both? Why?

Listen to the recording and answer each question clicking the correct option to complete each sentence.

1) Air Asia has ordered _____ A330neo

- ☐ 100
- ☐ 66
- ☐ 34

2) Air Asia evaluated the A330neo for _____ .

- ☐ availability
- ☐ efficiency
- ☐ reliability

3) Air Asia plans to use the new aircraft for _____ .

- ☐ domestic flights
- ☐ short international flights
- ☐ long haul flights

4) Air Asia will base the A330neo in _____ .

- ☐ Bangkok
- ☐ Mauritius
- ☐ Malaysia

5) Air Mauritius _____ two A330neo aircraft.

- ☐ will soon have
- ☐ has ordered another
- ☐ already has



Activity 2.4

Is this task suitable for pilots, controllers, neither or both? Why?

Interlocutor questions:

1. What does this picture show?
2. How would you react in this situation?
3. Why is it important for pilots and controllers to communicate in situations like this?



Activity 2.5

Is this task suitable for pilots, controllers or both? Why?

Listen and note down the problem each pilot reports.

a)

b)

c)

d)

e)

f)



Activity 2.6

Is this task suitable for pilots, controllers or both? Why?

You will hear 3 short PILOT-ATC exchanges. You can take notes while you listen. After each recording explain what happened. You will be asked questions about the incident.

- **EXCHANGE 1**



Interlocutor script

EXCHANGE 1

Prompt as required

- What happened?
- Where was the problem?
- Who first noticed the problem?
- What did ATC advise the pilots would happen next?

Activity 2.7

Is this task suitable for pilots, controllers or both? Why?

You will hear an investigator summarise an incident.

Listen to the recording and add key information to complete the report.



ANSP incident investigation report summary
Edinburgh Airport

Nature of incident	1)
Details about of 737	2)
Location of A320	3)
Reason for incident	4) A320:
	5) 737:
Supervisor action	6) Trainee controller:
	7)
Outcome of review: safety actions	8) - Improve procedures



Discussion

1. Why is it necessary to have different test instruments for pilots and ATCOs?
2. What issues can arise if a test instrument is not designed specifically for pilots or ATCOs?

Criterion 2: Checklist

- ☐ **Are the test tasks specific to ATC or PILOT communication needs?**
- ☐ **Do the test tasks assess the specific language ATCO or PILOT test takers use?**
 - ☐ Do the test tasks require pilot test takers to use/understand language that pilots use in the real world (not assessing language ATCOs might use).
 - ☐ Do the test tasks require ATCO test takers to use /understand language that ATCOs use in the real-world (not assessing language pilots might use).
- ☐ **Is the context and content of the input matched to the ATCO/PILOT test taker needs?**