

Factors affecting real-world pilot and ATC communication – 2 –

PILOT, ATC and linguistic expert panel



INTERNATIONAL CIVIL AVIATION ENGLISH ASSOCIATION

supporting the use of English for aviation safety

ICAEA Moderators



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- 26 years of experience Aviation English test and curriculum design, development and implementation
- Master's in Applied Linguistics
- Aeronautical Radio of Thailand - curriculum and training support for the Thai ATCOs since 2011



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- 20 years in air traffic control and airside operations
- 15 years in aviation English testing and training
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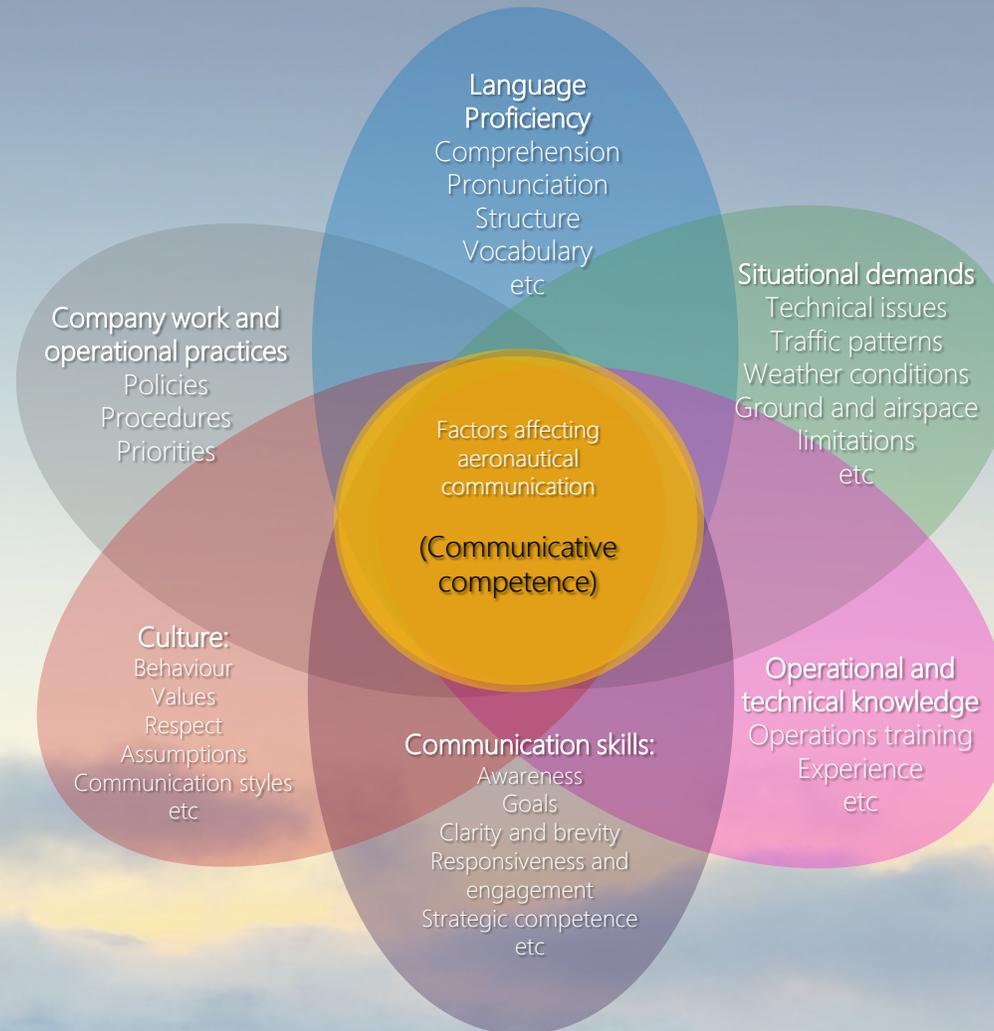
Ana Lucia Monteiro *ICAEA Board*

- PhD in Applied Linguistics and Discourse Studies, focusing on construct specification cultural factors in pilot-controller communications
- ANAC (Brazil) regulator, test developer, interlocutor, rater and rater trainer since 2005

Panel

ATCOs	Pilots	Linguists
 <p>Peter McCrostie</p> <ul style="list-style-type: none">• 36 years as an ATCO in New Zealand and the Middle East including in Standards and Training management.• CELTA, with aviation English teaching and rating experience• Currently contracted with Airways International in New Zealand delivering ICAO course to Saudi students.	 <p>Jacqueline Pulido</p> <ul style="list-style-type: none">• 22 years in aviation industry• Formerly A320 Captain for Volaris Airlines• Type rating instructor for Alliance Aviation Inc• Aviation English instructor	 <p>Markus Bieswanger</p> <ul style="list-style-type: none">• 15 years of experience in Aviation English research and consulting• professor of English linguistics (Bayreuth University, Germany)• president of the German Association of Applied Linguistics (GAL)
 <p>Thiago Silva</p> <ul style="list-style-type: none">• Over 23 years in the aviation field, 13 of which as an air traffic controller;• Aviation English instructor since 2013 and examiner since 2017;• Cambridge CELTA and Teacher Trainer certified;• Currently working as a Regulatory Consultant at the Department of Airspace Control	 <p>Christopher Coconnier</p> <ul style="list-style-type: none">• First Officer for Ryanair (Boeing 737) since 2017 based in Berlin• Aerospace Engineer for Airbus 2008-2015 in UK and Germany• Bilingual English, French and fluent in German	 <p>Malila Prado</p> <ul style="list-style-type: none">• PhD in Applied Linguistics, with a focus on Aviation English teaching and materials design• Teaching Aviation English to pilots since 2008• Lecturer and researcher at Fujian University of Technology in China since 2020
 <p>Yun Ping Chelsea Chen</p> <ul style="list-style-type: none">• 5 years experience in ATC• Tower Controller in Taiwan Taoyuan International Airport	 <p>Krzysztof Sysio</p> <ul style="list-style-type: none">• 44 years in aviation• B787 captain, TRI/TRE with 20,000 flight hours.• LPR English interlocutor and rater since 2008 for RELTA, ELPAC and Polish KSEJ	

Aeronautical communication daisy



TAM8078



A330 – Nose gear twisted on approach
(JFK, New York, 2012)



5:01 73°





TAM 8078: Kennedy Tower good afternoon, TAM 8078 heavy established on the localiser 22 Left.

JFK Tower: TAM 8078 heavy Kennedy Tower. Caution wake turbulence. Previous arrival heavy A330. Runway 22 Left cleared to land.

TAM 8078: 22 Left cleared to land. TAM 8078 heavy.

TAM 8078: PAN PAN PAN, TAM 8078 heavy. We need to go-around due to a malfunction. We'll call for return.

JFK Tower: TAM 8078 heavy, roger. I'm sorry, say again. That's ah, you need to go-around?

TAM 8078: Affirmative. Go-around due to malfunction.

JFK Tower: TAM 8078 heavy, roger, you can climb and maintain 2000. Ah, start a left turn heading 180 when able and state the nature of your problem.

TAM 8078: Standing by, climbing 2000. Heading 180 when possible.

JFK Tower: TAM 8078 heavy, I'm sorry. Say again.

TAM 8078: We are turning now heading 120, climbing 2000. Ah, problem with the gear. Eh, just standby.

JFK Tower: OK roger. You can stay 180 on the heading, 2000. You can stay on this frequency for now.

TAM 8078: OK maintaining this frequency.

JFK DEP: TAM 8078 heavy. When able just let me know what the nature of the problem is.

TAM 8078: Affirmative. We have a problem with the nose-wheel steering. Maybe we will need to maintain the runway after the landing.

JFK DEP: OK.

JFK DEP: TAM 8078 heavy how is the fuel? How much fuel do you have until complete exhaustion?

TAM 8078: OK we have more three-five minutes of fuel time, TAM 8078 heavy.

JFK DEP: TAM 8078 heavy roger. You have 35 minutes of fuel 'til complete exhaustion?

TAM 8078: No, no negative. Until we'll go to the alternate.

JFK DEP: OK. And that's three five ... thirty-five minutes?

TAM 8078: Affirmative. Thirty five until go to the alternate but we will return soon. Just standby.

JFK DEP: OK.



TAM 8078: New York TAM 8078 heavy request return to Runway 22 Right if possible.

JFK DEP: TAM 8078 heavy turn left heading 040, it'll be vectors ILS Runway 22 Right approach.

TAM 8078: Affirmative. Turn right, sorry, turn left?

JFK DEP: Turn left correct TAM 8078 heavy turn left heading 040 for ILS 22 Right.

TAM 8078: Turn left heading 040 to ILS, vectors for ILS 22 Right approach.

JFK DEP: TAM 8078 heavy, I just need to verify - are you declaring an emergency?

TAM 8078: We have a nose-wheel steering problem. It's stuck and need to maintain the runway after landing and request some towing. Negative emergency. Just have to maintain the on after-landing position on the runway and request towing direct to leave the runway.

JFK DEP: TAM 8078 heavy thank you for the information. Contact Approach now on 125 point 7. Have a great day.

TAM 8078: Left heading 320 TAM 8078 heavy. TAM 8078 heavy just confirm we will maintain the runway after the landing.

JFK APP: TAM 8078 heavy. Understand you're going to stay on the runway, is that correct? You need a tow?

TAM 8078: Affirmative we will need a tow.

JFK APP: TAM 8078 heavy roger. Fly heading 310. Traffic one o'clock, 5 miles southbound. Indicating fifteen hundred. Type is unknown.

TAM 8078: OK heading 310 TAM 8078 heavy. Maintaining speed.



JFK Tower: TAM 8078 heavy Kennedy Tower. I'm being told that your nose gear appears to be in the wrong position.

TAM 8078: No negative. The nose-gear... the landing is down and locked but we don't have the nose-wheel steering so we need to maintain the runway after the landing

JFK Tower: TAM 8078 heavy roger. You still wish to land?

TAM8078: Affirmative, we will land.

JFK Tower: TAM 8078 heavy roger. 22 Right cleared to land.

TAM8078: 22 Right cleared to land, and we will maintain the runway.

JFK Tower: TAM 8078 heavy, it appears your nose-gear is sideways, do you still want to land?

TAM8078: Affirm... sorry, say again?

JFK Tower: It appears that your nose gear is sideways, not fully down.

TAM8078: OK, we are initialing a go around... performing a go-around, TAM 8078 heavy.

JFK Tower: TAM 8078 roger. Fly runway heading, maintain 2000.

TAM8078: Maintain 2000, runway heading, TAM 8078 heavy.

TAM 8078: We will need area to do our sequence for next landing. Can you vector us?

JFK DEP: Yes. TAM 8078 heavy, fly heading 190 and I understand the nose-wheel is sideways. Is that correct ... is that what they told you?

TAM 8078: Yes affirmative but appears now that nose-wheel is a little bit out of track. So turning left ah, heading 190.

JFK DEP: TAM 8078 can you repeat what you said? The...you have... something appears....ah, and just to tell me what is wrong again.

TAM 8078: Affirm. But here in the cockpit here. Everything appears normal with the landing gear. Just had a nose-wheel steering fault but the tower during our approach told us that the landing gear appears to be not in the right position so we tried to go-around to investigate for a few moments. So we need some ... about five to ten minutes around here to...

JFK DEP: I understand now TAM 8078. You want to run...you want to run your checklist and you want to check and see if you can understand what the fault is.

TAM 8078: Affirm. We don't know exactly though but here in the cockpit everything appears normal but the tower told us that ... could not be in the normal position so we decided to go-around and see what we can do here OK.

JFK DEP: I understand. OK speed is your discretion if you want to slow down and fly heading 220. I will vector you over in this area.



JFK DEP: Just for your information, the tower did visually see that the gear was sideways when... from the tower, so just for your information.

TAM 8078: Ah... OK... so... we'll check some components here and let you know in a few moments what we can do.

JFK DEP: OK and also I can offer you - when you're ready for to come back - I can offer you Runway 31 Left for landing.

TAM 8078: OK, we can take 31 Left. It's longer than you.

JFK DEP: TAM 8078 heavy I have a message from maintenance when you're ready.

TAM 8078: Affirmative go ahead.

JFK DEP: OK what I got from maintenance: they would like you to reset the... anti-skid switch, anti ah... the nose-wheel ant...steering anti-skid switch on the co-pilot side of the airplane.

TAM 8078: Affirmative we are recycling the anti-skid already TAM 8078 heavy.

JFK DEP: OK, so you already re-set that switch on the co-pilot's side?

TAM 8078: We are doing this now.

JFK DEP: Very good.

TAM 8078: From TAM 8078, appear that the re-set of the anti-skid was successful and everything appears normal here. We're waiting for the confirmation from the tower on the final approach. It seems that it's alright now.

TAM 8078: Tower good afternoon TAM 8078 heavy ILS 31 Left on the localiser.

JFK TWR: TAM 8078 heavy Kennedy Tower. Wind 230 at 9. Airbus 320 on a 3 mile final for Runway 22 Left. The emergency vehicles are standing by. Runway 31 Left cleared to land.

TAM 8078: Thank you cleared to land 31 Left TAM 8078 heavy. Tower, can you confirm for TAM 8078 if the nose-wheel landing gear appears normal?

JFK TWR: TAM 8078 heavy it does not appear to be normal.

TAM 8078: Thank you very much TAM 8078 heavy.

JFK TWR: TAM 8078 heavy it appears cocked at 90 degrees.

- TAM 8078 lands -

JFK TWR: TAM 8078 heavy it appears as you were landing, the nose gear did straighten out and you can stop whenever you like.

TAM 8078: Affirmative. If you wish we can vacate the runway.

Aeronautical communication daisy

