

Crew Statements – NH9397/18JUL Wing Contact

Pilot Statements

Pilot Monitoring (PM/CAP)

- There were no conditions that affected my performance on the day of the flight that would affect the flight. I did awake several times during the last night because I was out of the country, but I did get a couple of hours of sleep, as I usually do in the U.S., for a total of about 8 hours of sleep.
- Prior to coming to the U.S., I was able to get about 7 hours of sleep each day, and there were no problems with my physical condition or sleep situation.
- We had never flown together before, but we had a very good relationship.
- Upon arrival at Boeing, there was a malfunction that was requiring significant maintenance time. In addition, there was a problem with the center fuel pump.
- Due to software loading time, a portion of the EFB was unavailable (left seat: OPT, right seat: terminal chart), and the flight was operated with MEL applied.
- Departure was delayed by more than 3 hours, and problems such as work hour restrictions, arrival and departure slots at Haneda, etc. were recalled, but the Crew managed to mitigate concerns about them, so that they did not mind.
- Regarding information of the ramp area, only one tip was provided that "The Boeing ramp is very narrow, and there are many tight spots beyond it that can be gotten through with difficulty."
- As it moved off the Boeing ramp, we called CHS GND Control and requested "CHS GND, Request Taxi From Boeing RAMP For Take off" and received clearance "Taxi to RW15, Taxi via M, A,H, Hold Short RW21".
- We continued on the M taxiway and found several aircraft parked in the RON parking lot, but only one was facing west.
- The aircraft's tail was positioned such that it appeared close," but there was some cognitive dissonance regarding the distance, despite the taxi clearance issued by ATC.
- I thought I could just barely get through. At the moment, the PF said, "I think we'll be okay, but I will offset a little to the right.". I replied "Roger".
- To the right, the woods were right on the edge of the airport property. There were no floodlights on the apron, and there was a fence closely outside of the taxiway edge light, and beyond that was a fairly high forest. It was pitch dark and felt very close in terms of distance. Seeing the tall forest looming up to the very edge of the airport grounds at night gave us the impression that it was quite risky.
- While monitoring the right hand outside as PM, I stuck to the R2 window and monitored all the way to the wingtip, and confirmed sufficient clearance on the right side.
- Due to my face being pressed against the R2 window, my viewing angle for the left side was restricted. I believe I developed a bias, presuming that since Air Traffic Control (ATC) had issued a clearance, it was permissible to proceed, despite the obscured view of the left side.
- When the wingtip passed next to flight MX509, it felt like the closest clearance I had ever experienced, but I believed it could pass because of the taxi clearance received.
- As it passed by flight MX509, there was a dull sound and a slight swaying feeling.
- The aircraft stopped after the event and requested CHS GND to check the status of the wingtips, as the aircraft may have made contact with a stopped aircraft.

- Later, fire trucks and government-related vehicles gathered around MX509. I checked from the Cabin myself and observed a black tear-like mark near the middle of the rudder. There was what appeared to be a puddle of water under the fuselage due to liquid from the vertical stabilizer. It was too dark to see our own left wingtip.
- Once initial handling on MX509 was finished, we received an instruction to stop the engines and return to the Boeing ramp by pushback with towing tractor attached. During towing, the aircraft was offset considerably. The tires were offset until they were touching the taxiway edge lights.

end

Crew Statements – NH9397/18JUL Wing Contact

Pilot Flying (PF/PIC)

- There were no conditions that affected my performance that day that would have affected the flight. I was unable to achieve uninterrupted sleep because we were out of our home country. But I could get several periods of a few hours of sleep.
- This was the first time for us to fly together as a crew member. We had been communicating by e-mail since the day before the flight, and we had a lot of conversations from the start of our assignment, so there was no negative impact at all despite this being our first time flying together as a crew.
- Hotel pickup was at 2:00 p.m. and we arrived at Boeing around 2:15 p.m.
- Upon arrival, we were informed that the aircraft had a data loading malfunction.
- At the time we were informed of data loading problems, (around 2:30pm), it was estimated that recovery would take until around 9pm or 10pm local time. This almost determined a delay of 3 to 4 hours.
- Additionally, we were informed of the possibility of MEL application for fuel pump issues and the confirmed MEL application for EFB unavailability.
- Regarding the EFB malfunction, we confirmed which functions were available and determined the flight could be conducted.
- The delay became so big that we recognized the possibility that the flight would extend into late night/midnight hours. Before 6:00 p.m., there was no possibility that we could depart at the original departure time (6:00 p.m.). Therefore, we asked OMC for reconfirmation of NOTAM, and then it was decided that we would need to re-plan. However, we were told that the revised flight plan could not be released until the exact departure time was determined.
- We checked the latest flight plan, and since it would be late at night, STARs and APP Procs could change, so we checked those as well.
- The big delay gave us enough time to cross-check the new flight information with each other.
- We were able to confirm routes that would not be available at night, and the possibility that the actually assigned STARs might differ from those filled, and we were able to confirm routes such as northbound routes by using "Flight Radar".
- There were a variety of threats, but since there was time to mitigate them all, we believe they were successfully managed.
- Although we had heard that the severe handling restrictions existed for this series of airlift flights due to staff working hours at HNL, we thought we could handle them by adjusting the interval at LAX, the next stopover point.
- I had been to Charleston last April and had a general grasp of the airport itself.
- Last time, we departed in the evening, but this time the departure time was different.
- Jepp FD did not have much information about the Charleston airport, and there was no special information about the taxi routes we were assigned this time.
- Last time I was in the left seat as PIC, but I was not aware that the location where the event occurred this time was a point that needed special attention.
- Upon departure, we contacted ATC via the Boeing facility and requested a Pushback.

- Pushback was facing North, same direction as M-TWY since the TWY is a one-way street. We started the engines after the push back was completed.
- In accordance with the special procedure at Boeing, which is different from the usual, Boeing staff placed the gear pins on the ground on the right side of the aircraft, and we departed after confirming them.
- The taxi clearance received from Charleston Ground was "Taxi to RWY15, via M, A, Hold short of RWY21".
- Around the area where we slowly taxied out of the Boeing area and then turned left and proceeded straight, visibility was straight ahead and extended far into the distance. It was somewhat hazy because it was nighttime and there was a lot of water vapor, but visibility was similar to what is typically experienced at an Asian airport at night.
- It was Thundershower (TS) when we left the hotel, but by 5:30 p.m. local time it had calmed down and conditions were perfectly clear by departure time.
- This was my first time Taxiing on M-TWY at night, but it was very dark and there was no center line light on the TWY, so I had to rely on taxi lights and maintained awareness of the center line.
- During taxiing, the MX509 aircraft in front of us was in sight from a considerable distance ahead and we were aware of its presence.
- While the other parked aircraft were stopped facing east on R1 to R5, while only the MX509 was facing west and parked on R6. All other aircraft were located further back.
- Those aircraft were positioned with very little wing clearance between them, as is often observed in open spots at night. Since it was nighttime, I assumed they were parked that way.
- The ramp area was illuminated, with lights located further west of R1 to R5, illuminating only the apron area.
- M-TWY was in pitch darkness and had no centerline light. The ramp was on the left, edge line on the right, and a forest to its east.
- The MX509 was in sight after we made a left turn onto M-TWY and proceeded straight for a while, but its parked position seemed to be in a normal position and did not feel particularly abnormal or out of its usual position.
- At first sight, the subject aircraft appeared to be parked in its normal position and we thought we could pass it without any problems, but as we approached it, we felt that it was "a little closer than normal".
- I told the PM that I would offset to the right just to be safe because it felt somewhat close, and he replied, 'Roger'. Neither of us thought the aircraft were close enough to make contact.
- I stated my intention to offset to the right, but the PM also said that he did not think we would "hit" him. That's how the visual distance felt.
- Although there would normally be no problem proceeding along the centerline, it felt a little close, so I offset slightly to the right.
- I generally do not offset from the centerline, and I had the idea that I would rather stop than offset it. However, at the time, I felt that I could certainly clear the other aircraft, but I had the feeling that it was close, so I chose to offset.

- We did not consider the option of stopping or having ground personnel confirm clearance at that point because we decided that we could pass through or "didn't think we were close enough to hit it". There was no sense that it was that close. There have been a few times when I have stopped and asked ATC, "Is this okay?" but on this occasion it didn't seem that close.
- I did not lean out from my seat to check the left side.
- There were no illusions or assumptions due to the fact that it was nighttime.
- M-TWY was covered with concrete plates and had a grid pattern, so as a guide for myself, I thought each square (plate) would be at least 5 meters wide. I was aware that the size of these plates were different at various airports, and taking these factors into account, I determined that there was clearance to the outermost point of the aircraft, and therefore, there was no problem to continue taxiing. However, the grid itself was dark and visible only up to the seam in front of it. Although the visual estimation was based on that as well, the PM on the right side did not feel any discomfort with that assessment, and had no particular objections.
- The PM, who is also a certified RTC and has extensive experience in the right seat, did not seem to feel any discomfort/incongruity.
- From the cockpit, I felt a "light vibration" shortly after passing the MX509. Initially, there was no feeling of the wings scraping, just as if we had passed over a joint in the taxiway surface.
- There was no sound and no significant rattling vibration, but I stopped because I reconsidered that there should have been no seams on the taxiway surface during the taxiing and was somewhat concerned that the wingtips might have scraped.
- Since Boeing's factory was right behind us, we thought that if we contacted them, they would come and assess the aircraft for damage right away.
- After stopping, I informed ATC of my intention to stop, along with the possibility of contact, and requested confirmation. In hindsight, I should have stopped earlier.
- Considering recent incidents involving our own airline and others, we believed that there was always a possibility of contact even under ATC control.
- Only the MX509 parked on R6 was stopped facing west, while the others (R1 to R5) were stopped facing east; we thought that R6 might be a location not normally used.
- There were no other aircraft parked facing west other than the MX509, and it was impossible to compare and determine from the cockpit whether the aircraft was parked outside of its regular parking position.
- When I received the taxi clearance, I was not reassured that there was no problem with distance and clearance with other aircraft. We did not stop and proceeded because we had visually determined that there was no problem with clearance. If we had felt the visual clearance was tight, we would have checked with ATC.
- M-TWY is only connected to Boeing's plant, which is primarily for Boeing aircraft manufacturing, and I believe its maximum width is likely designed to accommodate B787.
- A short time after the stop, I realized that the same air traffic controller was also in charge of the tower.
- As a guide for wing tip clearance from the cockpit of the B787, although there is no specific guide for directly checking the wingtips, the number of concrete squares (plates) is used as a reference.
- There is a general perception that on the B787, it is difficult to see the position of the wingtips due to the positioning of the cockpit windows.

- The B787's wingtips are visible from the cockpit, and although it is possible to look back at the wingtips while turning around in an uncrowded airport (area), it is difficult to determine detailed clearances due to the distance from the cockpit to the wingtips.
- There were two employees in the jump seat (J/S) and a boarding mechanic in the cabin on this flight. If we perceived the clearance to be extremely tight, we could have asked the onboard mechanic to take a look, but we did not deem it necessary to take that option. After the stop, I contacted the onboard mechanic using the passenger address (PA) system and asked them to check the wingtips.
- In the pre-departure takeoff briefing, threats regarding taxiing in this Ramp area were mentioned, such as it is dark and unfamiliar with the airport, and that it is difficult to enter J TWY if an RTO (Rejected Takeoff) occurred, that the taxiway is narrow, and the presence of a Hold Short point.
- However, we did not specifically extract or mention this Ramp area, the width of the TWY, or the specific threats for clearance. It was not a particularly memorable points from my last experience in April. Therefore, we did not specifically highlight this ramp area or brief in a way that would alert us to potentially tight clearances.
- There did not appear to be any workers around the MX509.

end