

Experience Report - Boeing Factory Tour 2017

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1. What was the most interesting part of the tour?

I was most interested in Renton Factory of Boeing. Renton Factory is a manufacturing facility of Boeing 737 which was manufactured in a line production system in which large aircrafts are manufactured progressing little by little. Conveyor belts were utilized to reduce production cost in the production line. Aircraft parts were brought in just in time and there were only as many parts as needed in the factory. The factory was very clean and organized. Despite the huge factory, it was very well managed. I thought it was wonderful.

2. What was the most interesting (impressive) part of the Boeing assembly line? And what did you learn by observing the assembly line?

The Boeing 787 assembly line left most impression on me. The Boeing 787 assembly line was clear compared to the Boeing 747 assembly line. The number of the parts was largely reduced by using techniques such as integral molding of carbon on the Boeing 787. Most of the parts are manufactured in Japan and Italy and are air transported by Dreamliners. Therefore, the shape of the aircraft was almost completed at the initial stage of the assembly line. I learned that it is improving production efficiency by sharing work. In addition, I learned that the Boeing 787 is advanced by not only the performance of the aircraft but also the aircraft with improved comprehensive technology including the production line.

3. Did you enjoy the tour of the Museum of Flight? Which was the most interesting exhibition?

I was very interested in an aircraft called MiG-15 in the Museum of Flight. This aircraft has some devices to check the storage of the landing gear. A mark moves up and down in conjunction with the movement of the landing gear at the position seen from the pilot. I learned that safety can be improved by such simple devices. Sensor technology has been developed in modern times, and many sensors are used for safety equipment of aircraft. However, I think that if these safety measures can be improved by such devices, the production cost of the aircraft can be reduced. I think that we may better train the idea of making a device that does not depend on state-of-the-art technology.

4. What was the general impression about the US, Seattle area and also Boeing Corporation?

I thought that all American things were bigger than Japan. For example, the road was wider, and there were many traffic lanes. The cars were bigger, and the truck in particular was the size that could not run on the roads in Japan. Boeing's factory was huge not only the sites but also the buildings. I thought that it was a scale that can't be found in Japan. Due to the large scale, I felt that everything had plenty of margin. So I felt that I could expect future development.

5. Is there any point which we should make improvements?

I think, we should have actively asked questions. Because we weren't able to communicate fluently in English, we were not able to ask constructive questions at Boeing factory and Museum of flight.