



FEU INSTITUTE OF TECHNOLOGY

COMPUTER ENGINEERING DEPARTMENT

REACTION PAPER

Name: Jammela M. Tolibas	Fieldtrip #: 1
Student #: 201510182	Faculty: Engr. Maribel Amor Misola
Section: E41	Location: IBB, One Subic and Pagasa Weather Station
Schedule: 17:00-19:00 W	Tour Guides: Engr. Angeline Lundang (IBB), Mr. Jimenez Quilantip (One Subic), Manolito Miguel (PAGASA)
Date Submitted: February 27, 2019	Date: February 20, 2019

Background of Fieldtrip Location

Several companies are visited within the vicinity in Tarlac and Subic area. The Central Luzon have a vast area of lands where power plants to broadcast facilities to weather stations can be establish and served as control stations that will contribute for the betterment not only in the Philippines but is also possible in Asia.

The International Broadcasting Bureau (IBB) located in Conception, Tarlac is funded by the American Government to operate television broadcasting from Washington to other parts of Asia. The facility is enclosed by more than two thousand acres of land, with different crops planted in other area for the benefit of those who live nearby the station. Parabolic dishes in various sizes are ejected outside the control station for complementing the power lines and fields.

Around the Subic Bay Metropolitan Authority (SBMA), a diesel powerplant named One Subic Power provides electricity in various area in Luzon. On large towers, a relay with an average of about 100 MW are suspended.

A weather station operated by the Philippine Atmospheric Geophysical Astronomical Services Administration (PAGASA) inside the International Airport of Subic Bay, Zambales generates accurate temperature, wind pressure, speed and direction, humidity, and precipitation measurements to nearby locations.

Introduction

On the 20th day of February 2019, three control stations are scouted. Tour Guides that well-guided our journey throughout the whole expedition. Employees in different department are hospitable and so much welcoming towards the professors and students of FEU Tech. For all the sites visited, it opened up the eyes of the guests to fundamental computer engineering concepts used in various works such as operating cisco networks and other networks, introducing old and new devices, applications, satellites, generators and terminals.

Brief Discussion of the Fieldtrip Location

Fun during the educational trip should not be spoiled. In order to avoid such occurrence, before entering each control stations, the students are always reminded to be in one group and avoid creating interruptions or distractions to the professors and the tourist guides. In the IBB, Engr. Angeline Lundang had enthusiastically roamed us around the area. She showed us each working department in the station. She discussed to us what happens from the signal leaving the Washington to the satellite dishes receiving the signal to projecting to large TVs and up to broadcasting channels with right frequencies and amplitude to other associated stations with IBB in Asia. IBB aims to ensure the broadcasting of signal within the country and other parts of Asia in real-time basis. The visit to One Subic Power's diesel power plant is the shortest, but the learnings were not the least. Engr. Jimenez Quintalip discussed how the diesel generator

pump work in delivering electronic power in different areas in Luzon. From the generation to the competition in the stock market were able be shared among us. Once a demand has been accepted projected in the screen, only then will the power plant be activated to consume diesel and transform it into electricity. At the final educational visit, a weather station of PAGASA, a PowerPoint presentation is discussed detailing the basics of what actually the national corporation does. They detailed how weather works, and how their devices are measuring them in real time, taking into account the different time zones. Their weather forecast is then reported to the Subic Bay Airport so that planes arriving and departing can be notified right away to prevent catastrophic failures and other difficulties while ensuring safe travel.

Insights / Reaction / Reflection

In this fieldtrip, I have learned that rules and regulations are necessary to be respected and obeyed. A professional computer engineer either by individual or by teams played a very important role in the industry. From what I have observed, most of the systems of the companies we visited are automated, which means monitoring is the major job that the employees had to do. Worst case scenarios, if there would be a down in the system those who are assigned in checking and monitoring will report the case to designated offices in order to fix it immediately. Given this opportunity to visit diverse technology facilities such as electronics and communication companies, diesel powerplant and weather forecast station let us acquire new knowledge that help not only their company's wealth and reputation but also give benefit to our country, Philippines. In general, this fieldtrip is a great experience to further discover new things that will establish greater skills either related or not in the field I am taking and therefore will contribute a huge part career growth as a computer engineer soon.

Official Pictures



Figure 1 – After Pagasa Exhibit



Figure 2 – Engr. Miguel Presenting



Figure 3 – IBB Satellite Dishes



Figure 4 – IBB Control Room

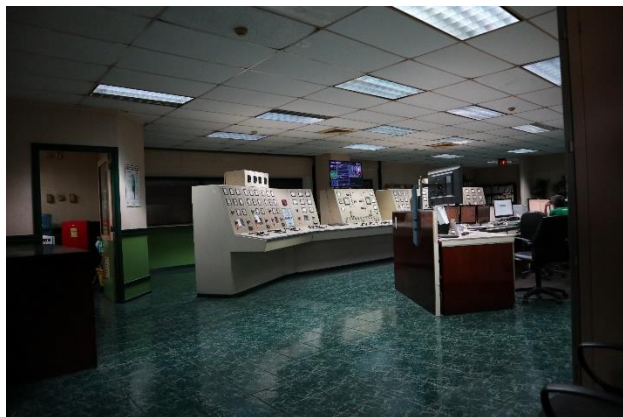


Figure 5 – One Subic Power Control Room



Figure 6 – Photo Op with Engr. Quintalip



Figure 7 – Photo Op with One Subic Guide



Figure 8 – Photo Op with Engr. Lundang