

EBOLA IN INDONESIA

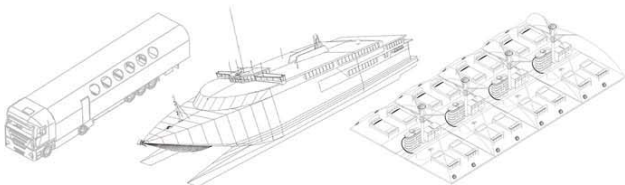
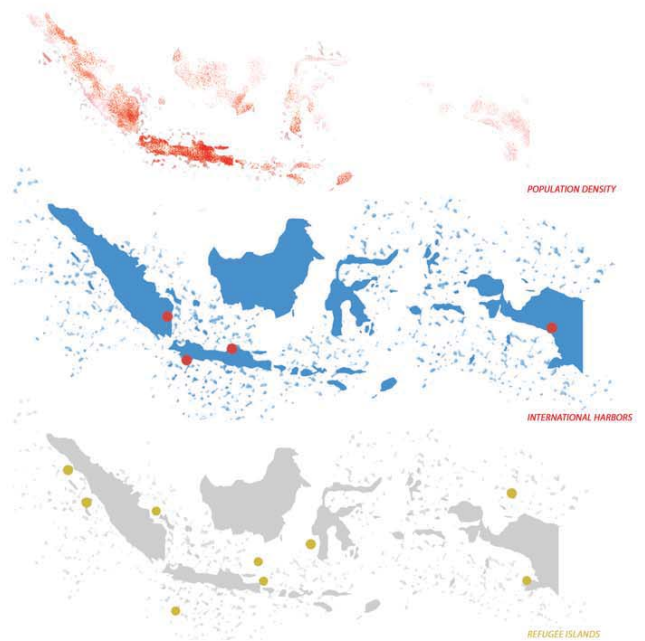
Ebola is a deadly disease caused by infection with a strain of Ebola virus. The 2014 Ebola epidemic is the largest in history. Evidence shows that ebola initial spread is believed to involve direct contact with an infected tropical animals. Being a tropical country, Indonesia has a potential to be infected by Ebola. The spread of the virus is often caused by bodily fluid. Indonesia being the 26th biggest exporter in the world and 7th most visited country in Asia would only increase the chance of Ebola virus entering the country. Therefore, a system is developed in order to face the worst possibility in which Indonesia faces the Ebola epidemic.

GROUND - WATER - QUARANTINE TRANSPORTATION

This proposal represents a system consisting of three components. Two of the components are medical transportation unit. Two transportation units are developed to adapt Indonesia's geographic and climate conditions. Indonesia is an archipelago consisting thousands of islands. Among those, Java is the most dense island in the world, requiring the ebola patients to be promptly transported to the abundant and adjacent isolated islands to prevent further damage. Therefore, one transportation unit operates on dry land and the other is a water transportation unit. The other component is a medical quarantine and isolation unit which will be located in the isolated island to act as a confinement for the infected people.

IN CONSIDERAMENT OF GEOGRAPHICAL CHARACTERISTICS

This project is affordable due to the existing transportations that are already offered in Indonesia. However, modifications are still needed in order to maximize the comfort of the patients and the effectiveness of the medical tema. More than a thousand islands are located in Indonesia. Variety of inhabited islands are offered in variety of prices. An inhabited island at an affordable price is very attainable in Indonesia.



EOB

The Ebola Quarantine Bus (EQB) is the first step of the procedure. The infected people enter the bus through the side entrance to get a final scanning to determine whether they contain the virus or not. Patient with Ebola positive proceeds to the resting area and wait to be transported to the quarantine. The EQB provides essential emergency situation needs including restroom, storage and PPE unit.

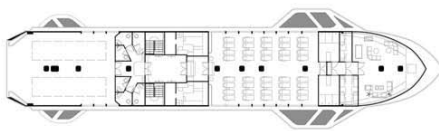
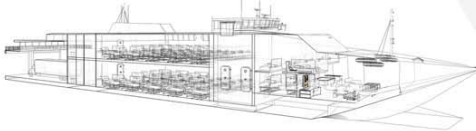


- = Patient Path
- = Medical Staff Path
- = Entrance/Exit
- = Emergency Exit

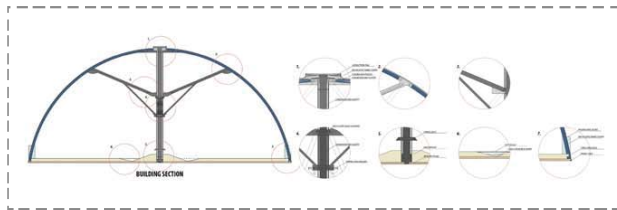


EQF

The Ebola Quarantine Ferry (EQF) is a water transportation unit that travel from one island to another. This vehicle is designed to carry extreme weights including the transport of EQB. It also contains comfortable commodities for both patients and medical staffs. The space provided are sufficient for medical team to be efficient and functional.



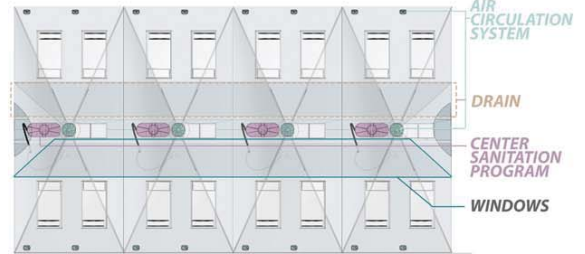
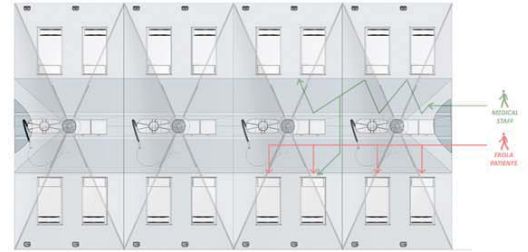
The Ebola Quarantine Tent is the final action in the procedure. The patients move from the ferry to EQT to recover. The EQT is a highly developed unit that would prevent Ebola virus transmission to the uninfected people. The sanitation zone is one of the most essential element for this strict process. It acts as a station for doctors, in which doctors have to drop by after every time they examine a patient to sanitize themselves from the virus. It lowers doctor's confusion and minimizes the risk of critical mistakes while taking care of the patients.



DETAIL



TENT TRANSPORTATION



LAMELLA CONSTRUCTION

The tent will be using lamella construction method, close to a formation of an umbrella, to minimize labor force and construction time. It does not use any electrical methods and only needs 10 people of labor force for an hour to construct a tent that holds 15 patients at one time.

> MINIMIZING LABOR FORCE/TIME

Its construction method can be altered in many different ways from the original extendable vault system to a semi-dome system.

> FLEXIBLE FORMATION



COMBUSTIBLE BIO-PLASTIC

The most efficient way to eliminate the Ebola virus is to burn the material. Thus, the whole building used for Ebola treatment should be composed of eco-friendly combustible material.

> ELIMINATION OF EBOLA VIRUS

Bio-plastic is durable, flexible, sustainable and light weight. Such characteristics are suitable for easy transportability.

> ADVANTAGE IN TRANSPORTATION



AIR CIRCULATION SYSTEM SILICA GEL LOW ENERGY A/C

DR. Sanghoon Jung (ITBC Interview): 3-4 medical staff is infected among the vast 4000 staffs... most were due to the hot climate of Africa and the long shifts in stuffy/hot environments.

> PROTECTING MEDICAL STAFF

Minimizing energy usage, making a cleaner and safer environment to work in.

> REDUCING MAINTAINMENT COST

CENTER SANITATION PROGRAM

The sanitation zone will be located in the center of a tent. Hence doctors will be able to work with minimum and most organized circulation. This is better in lowering the confusion and minimizing critical mistakes while taking care of the patients.

> EFFICIENT WORKING FLOW

