

The quite improbable extension of the Dili airport runway

December, 2018

The Government of East Timor announced on December 3rd, 2018, that the Dili Airport runway would be lengthened to 3,000 m and all traffic would be diverted during construction to Suai and Oecusse airports.

The issue of Dili airport has been extensively studied and commented for several decades. The runway is what it is for reasons which the proponents of the runway extension seem not to be aware of.

1. Regarding traffic diversion to Suai and Oecusse airports

- Suai runway is 5,000 ft in length. It cannot accommodate any jet, even regional. The road trip from Suai to Dili is hazardous and takes anything between 6 and 12 hours in mini-buses only.
- Oecusse runway is 7,600 ft, which would be nearly enough even for an Airbus 330, but it is not clear how passengers will get from Oecusse to Dili, the distance being close to 300 km on mountain roads through Indonesia. Does the government envision some other means of transportation, perhaps maritime?
- Dili runway is currently 6,000 ft long and can accommodate a Boeing 737 or a light Airbus 320, nothing larger. It can hardly be lengthened significantly, as numerous studies have shown. In addition, since it is unlikely that there is any market for a larger airplane, the whole idea of making the runway longer is quite questionable.

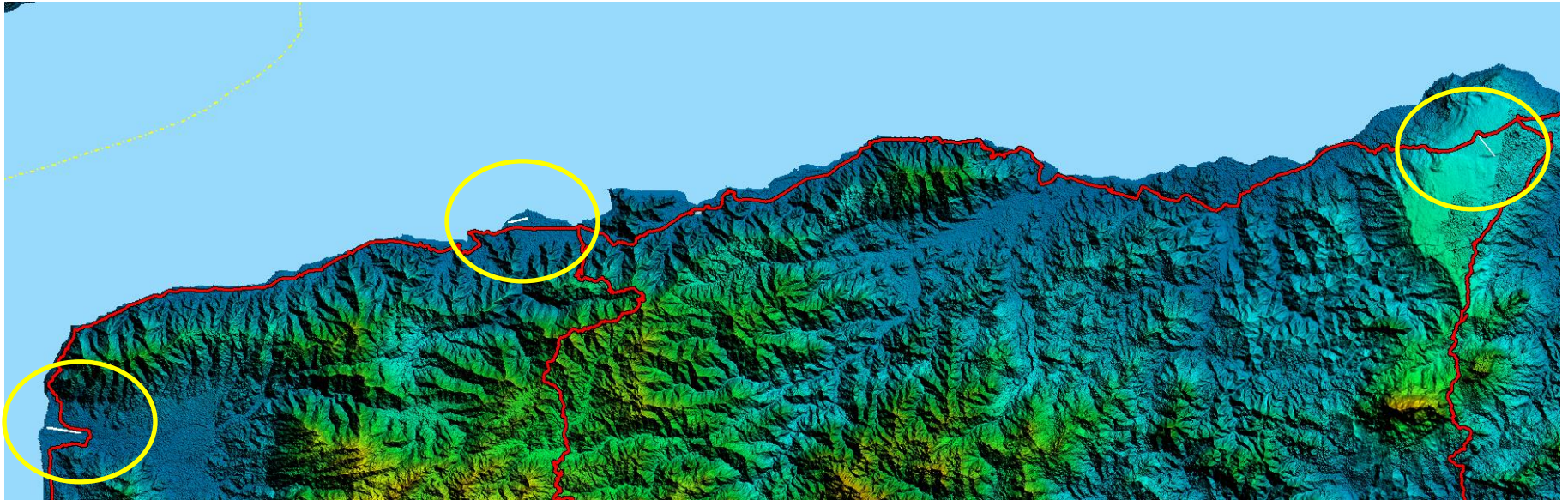
2. Regarding the available realistic options for a longer runway

East of Dili, one realistic option is to rehabilitate Baucau airport. Its 8,200 ft runway can be easily lengthened to 10,000 or longer. Of course, a good road needs to be built from Dili to Baucau, distant 120 km. Baucau is the second largest city in East Timor.

Another realistic option is to build a brand new airport 65 km west of Dili, at Taliaco, a site that offers all the advantages required for such a project.

Both options have been advocated for the past 10 years but it seems the government has other more improbable ideas.

Taliaco in the west; Dili; Baucau in the east



3. Regarding the unrealistic feasibility of a 3,000 m (10,000 ft) runway at Dili

Option 1: a 10,000 ft runway entirely west of Comoro River

The runway would run between two hills, one with a cemetery on top of it. The runway would be aligned with the Tibar Promontory, which is a high hill that protrudes above the 5% slope of the landing path. In green is the safety perimeter around the runway. Thousands of people must be removed, very close to the city center.

Option 1 is not a possibility, for three large hills would need to be removed, one because it protrudes over the landing slope, and the other two because they are too close to the runway.

The potential runway between two hills. Cemetery on hill north of the runway



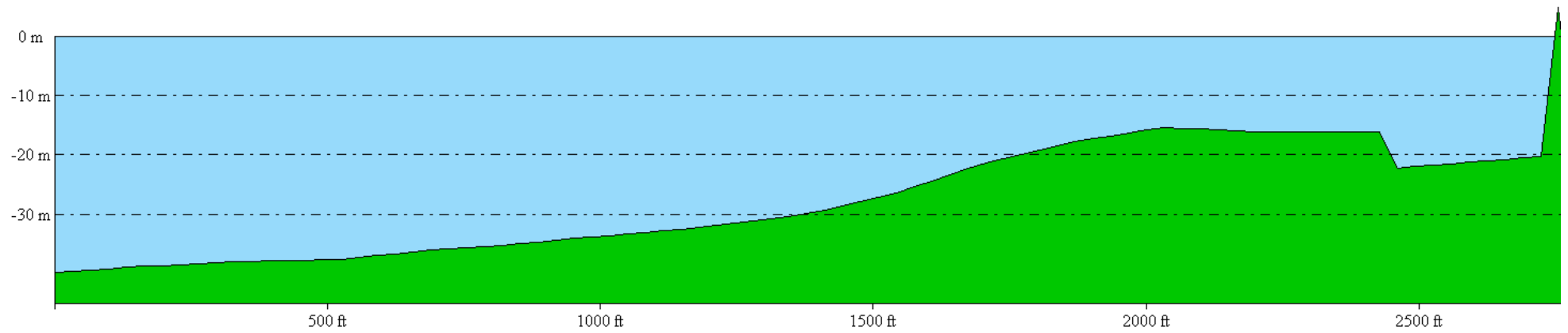
Option 2: the western end of the runway is reclaimed over water

The author of this study personally surveyed the area for the government more than 10 years ago. The study was probably buried and the data lost.

Depth is 40 m, which would make reclamation a hugely expensive task, if at all feasible.



The sea bottom slope along the potential reclaimed runway, as per the 2008 survey



Option 3: the runway is entirely on land and extends across Comoro River

The runway would have to cross Comoro River, which floods in the rainy season. The bridge only would cost way more than the \$42 million budget allocated for the project. An area of 25 hectares has to be expropriated, with its thousands of people, all the way to the Pertamina pier in Dili. Tunnels will have to be dug for access to property north of the runway. The area is only 500 m from such valuable property as the U.S. Embassy. Such a plan would kill the development of the city.

Option 3 is clearly not within the realm of reality.

