Please release immediately

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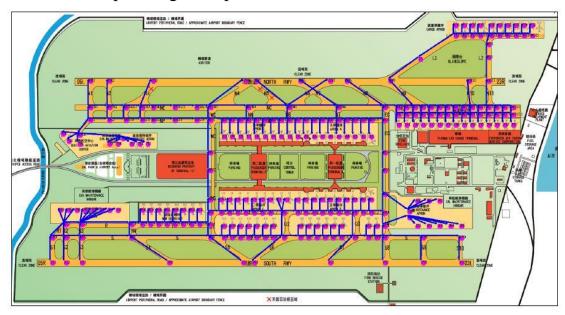
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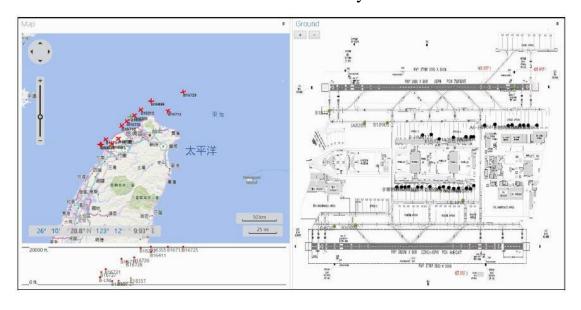# Develop airport simulation model to support TIA management decision making

To build up local airport airspace and air side specific simulation model, the IOT of MOTC has come up with the simulation prototype for the Taipei terminal area at TIA in 2017. It was enhanced in 2018 into "the airport airspace and airside simulation model" with kernel in TIA to service the TIA as a decision making support tools in planning and operation assessment and analysis.

Thanks to the fast growth in passenger transport volume (from 3.58 million passengers in 2014 to 4.653 million passengers in 2018 at a compound growth rate of up to 30%), TIA is mandating existing facilities improvements to meet requirements in the future. This brings a lot of challenges in two fronts. The first is relevant planning including the assessment and selection of the third terminal, the third runway, satellite terminal, relevant taxiways and aprons layout. The second is relevant operations including impact of construction process on airport airside operations when runways and taxiways closed for maintenance as well as terminal and apron usage allocation assessment addressing increasing future demands and airlines' operating needs. All these require an analysis by simulation models for the selection of the best solution.

This simulation model has been technology transferred to TIA for application. The latter is to organize a promotion task force for GUI customization and simulation function advancement and improvement. The IOT is to assist the integration works and join the review meeting to provide timely specialty recommendations. In addition, the model may be used by other airports of the Civil Aeronautics Administration to tackle with issues in planning and operation.

TIA network nodes layout

Simulation software screen layout