ABSTRAK

AirNav Indonesia sebagai penyedia jasa pelayanan navigasi penerbangan, terus melakukan upaya optimalisasi penggunaan ruang udara dengan mengadopsi metodologi dan teknologi terkini dalam navigasi penerbangan. Dengan kompleksitas penerbangan yang ada serta belum terimplementasinya pengendalian arus lalu lintas penerbangan (ATFM - *Air Traffic Flow Management*) di wilayah Bali TMA (*Terminal Maneuvering Area*), sehingga salah satu upaya untuk mengendalikan arus lalu lintas penerbangan disusun prosedur SID & STAR RNAV-1 I Gusti Ngurah Rai Bali yang telah diimplementasikan sejak 19 September 2013.

Namun sejak diimplementasikannya prosedur ini belum pernah dilakukan evaluasi, maka penulis berupaya mendapatkan masukan dari para pengguna jasa pelayanan navigasi penerbangan (ATC & Pilot) dengan menggunakan metode IPA dan QFD. Dari harapan yang disampaikan oleh ATC & Pilot terhadap prosedur ini masih kurang optimal. Pada pengujian dengan metode IPA terdapat 6 (enam) atribut (ATC) dan 1 (satu) atribut (Pilot) yang masuk kuadran I sebagai prioritas utama yang artinya belum memuaskan dalam penggunaan Prosedur RNAV 1. Untuk rekomendasinya, maka dibentuk penelitian dengan metode QFD yang dapat menyelesaikan permasalahan yaitu pengawasan pesawat udara, pola rute penerbangan, komunikasi & koordinasi antar ATC/Pilot, *Holding Point*, *Waypoint*, *Initial Clearance*, waktu mendarat/lepas landas, fasilitas navigasi penerbangan, SOP *(Standard Operating Procedures)*, pemahaman SOP, personil ATC, waktu tempuh pesawat, penggunaan bahan bakar, dan pergerakan/manuver pesawat.

Kata Kunci : Prosedur RNAV 1, SID *(Standard Departure Area Navigation)*, STAR *(Standard Arrival Area Navigation)*, IPA *(Importance Performance Analysis)*, QFD *(Quality Function Deployment)*

ABSTRACT

AirNav Indonesia as an air navigation service provider, continues to perform efforts to optimize the use of airspace by adopting methode(s) and latest technology in navigation flight. The complexity of air traffics within Bali airspace (Terminal Maneuvering Area or TMA) and program such as Air Traffic Flow Management (ATFM) to manage flow of air traffic is not implemented yet causing controlling air traffic by ATC become more complicated. The implementation of Bali Standard Instrument Departure (SID) & Standard Terminal Arrival (STAR) RNAV 1 since September 19, 2013 is one attempts to reduce ATC workload, but the programs has never been evaluated.

Writer realized about the situation and trying to figure out by collecting input from concerned stakeholders like Pilots and ATCs by using the IPA and QFD methods. Information which already collected from stakeholder mostly says that RNAV 1 Bali SID & STAR procedure is not optimally absorbs the density of air traffics. The examination using IPA method resulting 6 (six) attributes (ATC) and 1 (one) attributes (pilot) in first quadrant as the main priority which means not satisfactory in the use of RNAV 1 procedure. The recommendations to formed the research with the QFD methods that probably able to solve problems such as supervision of the aircraft, pattern of flight route, communication & coordination between ATC and Pilot, holding points, waypoints, initial clearance, time landed/take off, air navigation facilities, the understanding of SOP (Standard Operating Procedures) by ATC personnel, air travel time, fuel usage, and movement/maneuver of the aircraft/plane.

Keywords: Procedures RNAV 1, SID (Standard Departure Area Navigation), STAR (Standard Arrival Area Navigation), IPA (Importance Performance Analysis), QFD (Quality Function Deployment)