1 Introduction

Every day, more than 5,000 aircraft fly in the sky above Japan, and the type varies from large jets to small airplanes and helicopters. Aircraft need some external assistance to operate safely and efficiently because they are characterized by following features.

① Flying in three-dimensional space adding up and down directions to front/back/left/right.

②Moving at high speed and inability to increase or decrease speed to an extreme level or stop in mid-air for safety reasons.

③Limited takeoff/landing locations.

④Susceptible to various weather condition.

Therefore, Air Navigation Services Department, Japan Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism provides ANS (Air Navigation Services) in the airspace known as the Fukuoka FIR (Flight Information Region). We work at airports and Area Control Center (ACC) 24-hour per day.

ANS consists of the following services, which work together organically to ensure safe and efficient air traffic.

〇Air traffic control services :

Duties related to instruction of flight routes, altitude, order of landing/take-off etc. to aircraft.

〇Air traffic information services/Air traffic communication services :

The wide range of duties such as examination of flight plans, provision of aeronautical information, coordination of search and rescue etc.

〇Air traffic engineering services :

Duties related to the development and maintenance of radio navigation aids, radar, ATC data processing systems.

〇Visual aids and electrical systems services :

Duties related to installation and maintenance of aeronautical lighting and other electric facilities.

〇Flight inspection services :

Duties related to implementing the tests by flight inspection aircraft that air navigation facilities are functioning properly.

〇Secondary power systems services of air navigation services :

Duties related to standby power supply equipment to secure power supply to air navigation facilities.