**Project Objectives**
The objective of this project was to improve the safety of air transportation by installing air navigation facilities throughout the Philippines, and thereby contribute to the increase in transport volume and the growth of the air industry.

**Effectiveness and Impact**
According to air traffic control personnel, the implementation of this project increased the coverage of air-ground radio communication by approximately 10-20% (about 81,000-162,000 square nautical miles*) in the Philippine Flight Information Region (FIR), especially in the southern and western parts of the country. The adoption of state-of-the-art high-precision equipment made improvements in communication sensitivity possible as well as direct communication between airport control centers and pilots, thus enabling the implementation of good guidance control. The installation of Doppler air navigation radio facilities at Iloilo, Tacloban, and other airports made it possible to land using instrument approach even in adverse weather conditions. Through these improvements, this project is believed to have helped improve safety and efficiency, and increased air transport volume. According to a beneficiary survey, air transportation safety has improved and the frequency of weather-related cancellations has decreased. Therefore, this project has largely achieved its objectives, and its effectiveness is highly satisfactory.

* 1 nautical mile = 1,852 meters

**Relevance**
This project has been highly relevant with the Philippines’ national midterm development plan both at the time of the appraisal and at the time of the ex-post evaluation. The plan placed the highest priority on infrastructure development of airports and air safety and communication facilities in order to provide fast, cheap, and safe travel. The importance of this project was very high, since air transportation is an indispensable means of transportation in an island country like the Philippines.

**Efficiency**
The project period greatly exceeded the planned period (220% of planned period) although the project costs were slightly less than planned; therefore the evaluation for efficiency is moderate. The project implementation delays were primarily attributable to construction delays due to a prolonged procurement process and the time needed for land acquisition.

**Sustainability**
Despite some problems including lack of spare parts and the insufficient operation and maintenance budget, sustainability of this project is moderate. Air traffic controllers and operation and maintenance personnel receive regular training.

**Conclusion, Lessons Learned, Recommendation**
In light of the above, this project is evaluated to be satisfactory. A lesson learned is that a procurement facilitation plan should be prepared at the project planning stage, since delays in project implementation lead to obsolete communication equipment technology, which is advancing at a remarkable pace. It is also advisable that the sufficient budgets be secured and that the provision of spare parts and the equipment repair system be enhanced.

**Third-Party Opinion**
Implementation of this project can be highly regarded, even from the standpoint of physical geography. On the other hand, budgetary measures of the executing agency need to be improved in order to make efficient use of the equipment and facilities and to meet increasing needs.

Name of specialist: Mr. Cesar E. A. Virata (former politician)