amount of structural engineering work required for installation of a SAR into an aircraft platform.

The average maximum operating altitude of these twin engine aircraft is 9,300 meters with an average cruise speed of approximately 250 nautical miles per hour. Typical endurance is five to six hours at cruise speed, with long range capability of seven to nine hours possible with the addition of extra fuel tanks.

There is a broad array of used twin engine aircraft available within the aviation industry. A used, fully functional twin engine platform with avionics could be acquired for approximately (US) \$750,000. A new aircraft would cost between (US) \$ 1 - 1.3 million dollars.

## Single Engine Aircraft

11

The second category of appropriate aircraft includes a very specialized, high powered single engine platform. There are very few of these type of aircraft available but one example of is the Turbo Thrush. This aircraft was originally designed for agricultural crop dusting and seeding purposes. Special models of have been produced with reconnaissance and surveillance applications in mind. The Turbo Thrush is an ideal platform for such imaging systems as an infrared linescanner, a FLIR or an electro-optical camera system.

In peacekeeping operations in remote locations, the Turbo Thrush provides a short takeoff and landing capability, under 230 m at normal surveillance mission weights. The Turbo Thrush can fly at very slow airspeeds (70 knots), a requirement for maximizing the usefulness of FLIR imagery. The endurance of this aircraft is seven hours, an essential characteristic when patrolling requirements are addressed.