
Part 3: Commercial Satellite Imagery for Peacekeeping Mission Preparation and Planning

Background

The objective of this project was to examine if commercial satellite imagery could provide information to support peacekeeping operations. History shows that peacekeeping missions most frequently occur in areas of the world for which maps are of dubious accuracy and reliability. Planning for peacekeeping operations must often be done with little or no on-site access. Under these circumstances, commercial satellite imagery is one of the few potential sources of information.

The United Nations Transition Assistance Group (UNTAG) operations begun in April 1989 in Namibia and Angola were chosen as a case study of how such imagery might have been useful. SPOT imagery was acquired of four sites in Namibia and Angola during May and June 1989. Panchromatic imagery was ordered of two sites: Windhoek and Ondangwa in Namibia. Merged P + XS imagery¹⁸ was ordered for the other two sites: Operet in Namibia and N'Giva in Angola. Digital and film products were ordered for each scene. A 1:400 000 scale negative was ordered for each panchromatic image. A 1:200 000 scale positive transparency was ordered for each of the P + XS images (on 482 mm × 482 mm format film).¹⁹

Information for Planning of Peacekeeping Operations in Namibia

Figure 9 shows part of a panchromatic image of Windhoek. The road network and areas of urban development are clearly visible. Areas labelled as "new housing" in Figure 9 have been identified by comparisons with a city map published in 1984. In addition to new features, there are some older ones that have changed. A former rifle range has been split in half by a new highway extension. There are also small roads evident in the images that are not shown on the map. These may be new or they may not have been included when the map was made. Nevertheless, peacekeeping forces need to know where all the roads are, and their maps should be updated to show them.

For many areas, no maps may be available that show enough information for detailed site assessments. Commercial satellite imagery can provide valuable information for those areas. For example, based upon information in the *Atlas*