

Some military facilities, however, may not be very evident in commercial satellite imagery. UNTAG headquarters, located at the former South African Suiderhof base, is not very evident in the imagery (Figure 12). This is because it is surrounded by urban developments and lacks distinctive features to identify it as a military facility. Without first-hand knowledge of the area, facilities such as this could not be identified using commercial imagery. If a facility's location were precisely known already, commercial imagery might be useful to provide a better indication of its general layout.

Discussion

Commercial satellite imagery could be useful for preparation and planning of peacekeeping operations in several ways. Even given its limitations, commercial satellite imagery could greatly improve the quality of information available for planning during the initial preparatory phase of a peacekeeping operation. Planning for operations must often be done with little or no on-site access. Maps may well be out-of-date or have unsuitable scales.

Commercial satellite imagery is useful to detect new areas of development by comparing the imagery with a topographic map of the same area. Developments located at the periphery of a city are easier to recognize than those in areas that are already identified on the map as being developed. Areas of development within a city may be detectable if there is a clear change in land use that can be interpreted from the image. The imagery can also provide basic information on military facilities that are not shown on maps, or for which very little information is shown. In some cases, when maps may be inadequate because of scale or quality, commercial satellite imagery might be the *only* reliable source of information.

The advanced notice that would be required to order the imagery would not necessarily be a serious problem for such an application. First indications of a potential peacekeeping requirement can occur months or years before an actual commitment to undertake the mission. Meanwhile, much of the information derived from the satellite imagery could still be useful even after one year or more.

Commercial satellite imagery is usually available as a film product or as a digital product. Although a film product will almost certainly be required eventually, there are benefits to ordering the digital imagery. With a digital image, it is possible to write a section of the image onto film at *any* scale with no loss of information. The imagery of Namibia used in this report was written onto film at a scale of 1:25 000 and then contact printed to provide prints at the same scale. If these images had been photographically enlarged from film with a 1:400 000 or 1:200 000 scale, some of the fine spatial information would have been lost, impairing the usefulness of the imagery.