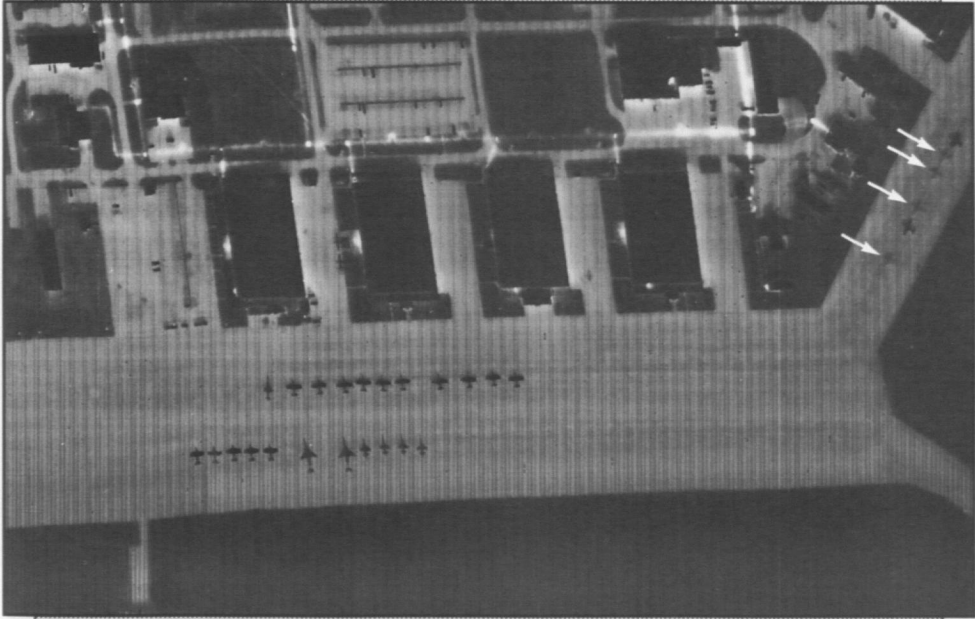


Figure 17 Thermal Infrared Linescanner Imagery of Aircraft at a Military Base



Several types of aircraft can be identified. Thermal shadows remaining in locations where aircraft were parked during the day are also visible (indicated by arrows).
(Courtesy of Canadian Department of National Defence.)

To some extent, thermal imagery might be able to provide an indication of activity levels. For example, the engines of vehicles remain detectably warm after they have been parked and turned off, thereby signalling that they have recently been moved. In Figure 17, several thermal shadows are visible on the tarmac. Aircraft were parked there during the day, providing shade to keep the underlying tarmac cool. Later in the evening, the thermal shadows remain even though the aircraft are now gone. The body heat of individual people can be resolved using some FLIR systems when operated at low flying heights. This could be useful to peacekeeping forces to detect infiltration across borders at night.

In some regions, such as Europe or Central America, an all-weather reconnaissance capability will be essential. The systems described previously cannot penetrate cloud. Commercially available airborne synthetic aperture radar would provide such a capability, albeit without the spatial detail provided by aerial photography or thermal infrared systems.

Fortunately, many of the potential objects of interest for arms control verification or peacekeeping also happen to be very good radar reflectors. Vehicles,