

The effectiveness of inspections through the use of aerial photography would also be seriously degraded due to the inherent time-lags involved in flight notifications. Any developmental or testing characteristics of biological weapons that could be identified by aerial photography could possibly be camouflaged or moved in the time a flight plan was filed and clearance to enter the zone of interest was granted.

Aerial photography would be most useful in updating maps of an area of interest. New construction of buildings, transportation networks and security fences could be monitored on a routine basis. Multi-temporal images from two or more different time periods could provide important information on infrastructure changes within a particular area. Wide-swath aerial photography using wide angle lenses or panoramic cameras from high altitude aircraft can provide an abundance of ancillary information of the area surrounding a particular facility. Narrower-swath photography from lower flying aircraft platforms can provide highly detailed information on smaller features associated with specific functions of a suspected developmental or testing facility. Any information gained as a result of aerial photography, when analyzed and interpreted with skill, could be useful in providing on-site inspectors with an additional layer of information.

Any effective use of aerial photography within the context of the BTWC must take into account the weather and local lighting conditions in which overhead images are acquired. Aerial photography is weather-dependent. Aerial photographs can not be taken through clouds, and those images acquired from beneath the clouds will have resultant shadows. For example, if aerial photographs are acquired during the day beneath a cloud layer of thirty percent, then the expected shadow cast on the ground will be thirty percent. Shadows cast by these clouds will have an adverse effect on the interpretability of the imagery. Also, aerial photography can only be acquired during daylight hours, optimally two hours before and after solar noon. Useful photography can be collected for a brief period on either side of this "acquisition window", but problems in image analysis may result due to a loss in image quality. The use of specially adapted