Experience with a modern photoflight navigation system

ROLF BECKER, München

ABSTRACT

This paper reports on nearly three years experience with airborne GPS applications in commercial aerial survey projects. During this period airborne GPS procedures have been successfully used in numerous large aerial survey and mapping project in Europe, Africa and the Middle East. Much of the experience gained during these operations has be used in the design of a computer assisted photoflight management system that makes maximal use of the GPS potential. This system does not only control the acquisition of aerial photography and airborne geodetic control but has also developed into an essential component of the integrated project planning, that is required to take full advantage of the systems potential. The achieved navigation accuracy, the results of GPS-assisted aerial triangulation as well as the overall impact on cost and time requirements for aerial survey projects are demonstrated.