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GPS has become a major part of our lives both in space, as well as requirements for the system to function as a global positioning system. The GPS technology for civilians and the military, drives the modernization. The expansion of the European Galileo satellite system that is currently on the drawing board and will be operational by 2014, will incorporate the latest technology will also increase the need for modernization to stay competitive. This edition of *GPS Satellite Surveying* includes a major reorganization of the material, keeping in mind that many developments in GPS and its uses have matured while new capability is added. This made it necessary to delete some material contained in previous editions. However, it is also important to note that other topics such as adjustments and geodetic models remain essential, well developed and relevant and are, therefore, included with considerable detail as reference. This new edition, like previous editions, attempts to provide a comprehensive treatment on GPS as used in applications that require high positional accuracy.

As the tools for positioning become more refined with time, geodesy remains relevant as the basic science that provides a unified foundation for spatial referencing. As the geodesy and the geodetic reference frame are always involved, users will gain a deeper understanding of geodetic theory when higher position accuracy is