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NEXT GENERATION AUDIO BROADCAST SATELLITES

Abstract

A Satellite Broadcasting System (Sound) or Satellite Digital Audio Radio Service (SDARS) has been operating over the North American continent for decades providing more than a hundred audio and related program channels to 57 million subscribers primarily in moving vehicles. The satellite constellation providing this Service has been detailed in prior IAC papers and consists of four large geosynchronous orbit satellites, two each providing Service to subscribers of the two respective operators who merged in 2008. A new generation of satellites has been developed for replacement of the existing constellation satellites at the end of their lifetimes with the first of these recently placed in orbit. These new satellites have enhanced capabilities over the existing ones, particularly the ability of each satellite to provide either of the two Services, expanded Service coverage areas and improved fleet management planning. The paper describes these next generation satellites and their improvements.