Using acoustic data to manage air tour noise in national parks

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In 2000, Congress passed the National Parks Air Tour Management Act (NPATMA) requiring the National Park Service (NPS) and Federal Aviation Administration (FAA) to cooperatively develop air tour management plans for all nation parks where sight-seeing air tours were offered. Since NPATMA was passed, FAA and NPS have worked together to develop monitoring protocols, acoustic metrics, and methods for modeling and analyzing acoustic conditions. In addition, procedures for characterizing noise impacts from air tour aircraft were developed. Impact analysis includes the development of acceptable thresholds for noise impacts to wildlife, cultural resources, visitor experience, and other park resources and values. This paper discusses methods used to determine natural and existing ambient sound levels in national parks and to identify, measure and describe impacts from air tour noise. The result of the process is the development of policies and plans for determining air tour routes, operation levels (number of flights/year), and other operating parameters that air tour operators must follow over national parks. Examples developed for Mount Rushmore National Memorial will be presented.

