Aircraft Noise Assessment of Allowing CS100 Flights at Billy Bishop Toronto City Airport. FAA transition to integrated ground- and space-based navigation systems architecture as well as provide fundamental support to NextGen. Tetra Tech and its partner have an extensive acoustical engineering and consulting expertise specializing in the design, implementation and management of airport noise abatement programs, airport environmental issues and customized software solutions for the aviation industry. Noise Exposure Forecast (NEF) is a single number rating of overall aircraft noise. It takes into account the duration of the flyover, the peak noise level, the tonal characteristics and the number of aircraft movements in both the day and night time period. Acoustic liners. The Silent Aircraft uses extensive, multi-segment liner, optimised to attenuate fan broadband noise. Tom Law, Ann Dowling. Requirements. Low noise landing gear. Noise performance is evaluated with an acoustic array. 10dB. Configurations are tested in the Department of Engineering wind tunnel. Cabin layout with assessment of interior vibration and noise. Maintenance considerations. 27th May 2008. 1. Actual aircraft noise level measurements 2. Artificial sound source (loudspeaker) measurements For the artificial sound source method, the aircraft noise spectrum (frequency content of the sound source) used in the data analysis process plays an important role in the estimate of NLR. Program sponsors are currently using a variety of aircraft sound sources and associated frequency spectra to represent the exterior noise source, as the selection of an aircraft noise spectrum is not standardized for the artificial sound source testing method. 1.1 Study Purpose This report provides the results Boundary-layer noise produced by rough surfaces is a potential contributor to airframe noise. In this paper, an attempt is made to assess the surface roughness noise for a conceptual Silent Aircraft design SAX-40 using a prediction model described in previous theoretical work (Liu and Dowling(12)). Estimates of three idealised test cases show that surface roughness could produce a relatively high noise level and enhance the trailing-edge noise somewhat. Roughness height and roughness density are two significant parameters which affect surface roughness noise, with roughness height having the m