

- PROJECT TITLE:** Portable In-Flight Sound Recorder Development
- OBJECTIVE:** Create a sound recording application under Apple's iOS for iPhone devices to collect cabin noise information on aircraft. The application should enable the Acoustics group to quickly and cheaply compile a large database of cabin noise profiles of our products.
- DESCRIPTION:** As part of an exercise to collect cabin noise data, the candidate will be responsible to develop and test an iOS application that will allow an iPhone to record cabin noise on board. The application will also log information about the aircraft position, altitude and speed using the iPhone's built-in GPS receiver. The application will have the option of using either the built-in microphone or an external microphone. The capability to save recordings in an uncompressed format for post-processing, along with the possibility of transferring the recordings via E-Mail / USB cable / Wi-Fi shall be implemented. A basic knowledge of the codes required to develop application under Apple's iOS Software Development Kit (Cocoa and Objective-C) is a requirement.
- DELIVERABLES:**
- An operational application.
 - A 20-min project summary presentation to the Acoustics department.
- SCHEDULE:** Winter or Summer
- NO OF HOURS:** 500 person-hours
- SOFTWARE NEEDS:**
- Apple's iOS SDK is required (\$300) and the coding has to be done on an Intel-based Apple computer (Snow Leopard operating system)
- PRE-REQUISITE:**
- Undergraduate computer sciences engineering student – 2nd or 3rd year completed
- PROJECT RESPONSIBLE:** Robby Lapointe: (514) 855-5001 ext. 55218
- DATE:** December 22, 2010