Project #2

Title: Aircraft Landing Gear Performance: Standard Tools Development (Phase 2)

Objectives: Planning, creation, and management of a library of dynamic analysis tools used in the design and evaluation of aircraft landing gear (phase II)

Description: Support of the project objective: - The student's goal will be to further the development of a library of programs for the dynamic analysis of landing gear, begun in phase I, coded in Visual Basic - The student will be consolidating and version-controlling a variety of analysis tools in FORTRAN, VBA and MATLAB. - The student will meet regularly with Collins Performance Engineering staff to ensure key analysis capabilities are present in the tools ported to the tools library. - Training/presentation: the student will develop training materials on the use of the tool library, in the form of a user manual, and an end-ofterm tutorial presentation. Progress meetings and support: The projects will be managed and supported by a member of the Collins Performance Engineering staff. Regular meetings will take place to discuss status and remaining tasks.

Prerequisite and Skill Required: - Familiarity with analysis/simulation mechanical system loads and dynamics - Systems modeling - Software development experience (VB is an asset) - Familiarity with GIT is an asset Interpersonal Skills - Good communications skills - Independent worker Interpersonal Skills - Good communications skills - Independent worker

Eligibility
- In good academic standing
- Enrolled in MIE MEng program
- M. Eng. majored in Mechanical or Industrial Engineering
- Strong English communication skills, oral and written
- Students must maintain their student status throughout the project
- Students must be Canadian citizen or Permanent Resident

Start Date and duration of the project: May 2021 (~4 months)

Application Instructions: Please combine (1) application form, cover letter and resume and unofficial transcripts (undergrad and grad) as one PDF file and email it to: imdi@mie.utoronto.ca.

Please name your file as: Collins-first name initial,last name, project number e.g. Collins -J.Smith, #1).

Application Deadline: *Applications to be submitted to imdi@mie.utoronto.ca by Wed Jan 13 @ 5PM.*

Questions to be directed to the UT-IMDI Office imdi@mie.utoronto.ca