Preparation of Papers for AIAA Technical Journals

First A. Author[a] and Second B. Author Jr.[b]
Business or Academic Affiliation 1, City, State, Zip Code

Third C. Author[c]
Business or Academic Affiliation 2, City, Province, Zip Code, Country

Fourth D. Author[d]
Business or Academic Affiliation 2, City, State, Zip Code

[a] Insert Job Title, Department Name, Address/Mail Stop, and AIAA Member Grade (if any) for first author.

[b] Insert Job Title, Department Name, Address/Mail Stop, and AIAA Member Grade (if any) for second author.

[c] Insert Job Title, Department Name, Address/Mail Stop, and AIAA Member Grade (if any) for third author.

[d] Insert Job Title, Department Name, Address/Mail Stop, and AIAA Member Grade (if any) for fourth author (etc.).

Nomenclature

(Nomenclature entries should have the units identified)

A = amplitude of oscillation

a = cylinder diameter

C_p = pressure coefficient

Cx = force coefficient in the x direction

Cy = force coefficient in the y direction

c = chord

dt = time step

Fx = X component of the resultant pressure force acting on the vehicle

Fy = Y component of the resultant pressure force acting on the vehicle

f, g = generic functions

h = height

i = time index during navigation

j = waypoint index

K = trailing-edge (TE) nondimensional angular deflection rate

I. Introduction

II. Combined Vehicle Analysis In CART3D

III. First Stage Optimised Trajectory

IV. Comparison With Two Stage Rocket

compare the rocket stages with-and without- the scramjet