

TAM 674

Applied Multibody Dynamics

Spring Term 2003, Mon & Wed 10:10-11:00, 202 Thurston Hall, 3 credits.

June 20, 2003

Errata on the final project notes: TAM674notbp.pdf

Page 5, line 10: replace second $\dot{\mathbf{x}}_2$ by $\dot{\mathbf{x}}_1$

Page 5, line 11: replace second \mathbf{v}_2 by \mathbf{v}_1

Page 5, line 12: replace second $\dot{\mathbf{v}}_2$ by $\dot{\mathbf{v}}_1$

Page 6, last line: $\tilde{\mathbf{x}}'_{A/2} \rightarrow \mathbf{x}_{A/2}$

Page 6, last line: $\tilde{\mathbf{x}}'_{A/1} \rightarrow \mathbf{x}_{A/1}$

Page 7, last line: $\mathbf{R}_2 \tilde{\mathbf{e}}'_{y1} \rightarrow \mathbf{R}_1 \tilde{\mathbf{e}}'_{y1}$

Page 11: $(\mathbf{A}'(\mathbf{p}_i))^{-1} \rightarrow (\mathbf{A}'(\mathbf{p}_i))$, 3 times.

Page 11: $(\mathbf{A}'_1)^{-1} \rightarrow (\mathbf{A}'_1)$

Page 11: $(\mathbf{A}'_2)^{-1} \rightarrow (\mathbf{A}'_2)$

Page 10, Convective terms \mathbf{g} should be:

$$\begin{bmatrix} g_1 \\ g_2 \\ g_3 \end{bmatrix} = \begin{bmatrix} rc_\theta \dot{\theta}^2 + rc_\theta s_\theta \dot{\phi} \dot{\psi} \\ -s_\phi \dot{x} \dot{\phi} + c_\phi \dot{y} \dot{\phi} \\ -c_\phi \dot{x} \dot{\phi} - s_\phi \dot{y} \dot{\phi} + rc_\theta^2 \dot{\phi} \dot{\psi} - rs_\theta \dot{\theta}^2 \end{bmatrix}$$

Forget about the substitution.

Errata on the Final Project

Page 1, item b: 12 m/s \rightarrow 4.2 m/s

Page 1, item c(2): 10 m/s \rightarrow 3.5 m/s