Appendices
Appendix A: Dynamic Response of an Aluminum Plate

Fig. A.1 1st transient load response of an aluminum plate (CL-CL)

Fig. A.2 1st transient response at II of an aluminum plate (CL-CL)
Fig. A.3 1st transient response at III of an aluminum plate (CL-CL)

Fig. A.4 1st transient response at I of an aluminum plate (CL-CL)
Fig. A.5 2nd transient load response of an aluminum plate (CL-CL)

Fig. A.6 2nd transient response at II of an aluminum plate (CL-CL)
Fig. A.7 2nd transient response at III of an aluminum plate (CL-CL)

Fig. A.8 2nd transient response at I of an aluminum plate (CL-CL)
Fig. A.9 1st transient load response of an aluminum plate (CL-SS)

Fig. A.10 1st transient response at II of an aluminum plate (CL-SS)
Fig. A.11 1st transient response at III of an aluminum plate (CL-SS)

Fig. A.12 1st transient response at I of an aluminum plate (CL-SS)
Fig. A.13 2nd transient load response of an aluminum plate (CL-SS)

Fig. A.14 2nd transient response at II of an aluminum plate (CL-SS)
Fig. A.15 2nd transient response at III of an aluminum plate (CL-SS)

Fig. A.16 2nd transient response at I of an aluminum plate (CL-SS)
Fig. A.17 1st transient load response of an aluminum plate (SS-SS)

Fig. A.18 1st transient response at II of an aluminum plate (SS-SS)
Fig. A.19 1st transient response at III of an aluminum plate (SS-SS)

Fig. A.20 1st transient response at I of an aluminum plate (SS-SS)
Fig. A.21 2nd transient load response of an aluminum plate (SS-SS)

Fig. A.22 2nd transient response at II of an aluminum plate (SS-SS)
Fig. A.23 2nd transient response at III of an aluminum plate (SS-SS)

Fig. A.24 2nd transient response at I of an aluminum plate (SS-SS)
Fig. A.25 3rd transient load response of an aluminum plate (SS-SS)

Fig. A.26 3rd transient response at II of an aluminum plate (SS-SS)
Fig. A.27 3rd transient response at III of an aluminum plate (SS-SS)

Fig. A.28 3rd transient response at I of an aluminum plate (SS-SS)
Appendix B: Response of the Refined Mesh Models

Fig. B.1 Load response of a refined mesh aluminum plate (CL-SS)

Fig. B.2 Displacement response at II of a refined mesh aluminum plate (CL-SS)
Fig. B.3 Displacement response at III of a refined mesh aluminum plate (CL-SS)

Fig. B.4 Displacement response at I of a refined mesh aluminum plate (CL-SS)
Fig. B.5 Load response of a refined mesh [0\textdegree/90\textdegree]_T laminate (CL-SS)

Fig. B.6 Displacement response at II of a refined mesh [0\textdegree/90\textdegree]_T laminate (CL-SS)
Fig. B.7 Displacement response at III of a refined mesh [0_4/90_4]_T laminate (CL-SS)

Fig. B.8 Displacement response at I of a refined mesh [0_4/90_4]_T laminate (CL-SS)
Appendix C: Plates with $v$-Displacements Free Along Sides

Fig. C.1 Load vs. endshortening relation for aluminum plate (CL-SS) $v$-free

Fig. C.2 Displacement response at II of an aluminum plate (CL-SS) $v$-free
Fig. C.3 Deformed shape at various points, (CL-SS) v-free (see Figs. C.1 and C.2)
Fig. C.4 Load vs. endshortening relation for $[0_4/90_4]_T$ laminate (CL-SS) $v$-free

Fig. C.5 Displacement response at II of an $[0_4/90_4]_T$ laminate (CL-SS) $v$-free
Fig. C.6 Deformed shape at various points, (CL-SS) v-free (see Figs. C.4 and C.5)
Appendix D: Static Response of an Aluminum Plate (SS-SS)

Fig. D.1 Equilibrium load response of an aluminum plate (SS-SS)

Fig. D.2 Equilibrium displacement response at II of an aluminum plate (SS-SS)
Fig. D.3 Equilibrium displacement response at III of an aluminum plate (SS-SS)

Fig. D.4 Equilibrium displacement response at I of an aluminum plate (SS-SS)
Appendix E: Dynamic Response of Cross-Ply Laminates

Fig. E.1 1st transient load response of a [0/90] laminate (CL-CL)

Fig. E.2 1st transient response at II of a [0/90] laminate (CL-CL)
Fig. E.3 1st transient response at III of a $[0_2/90_2]_S$ laminate (CL-CL)

Fig. E.4 1st transient response at I of a $[0_2/90_2]_S$ laminate (CL-CL)
Fig. E.5 2nd transient load response of a [0\textdegree/90\textdegree]_{S} laminate (CL-CL)

Fig. E.6 2nd transient response at II of a [0\textdegree/90\textdegree]_{S} laminate (CL-CL)
Fig. E.7 2nd transient response at III of a $[0_2/90_2]_S$ laminate (CL-CL)

Fig. E.8 2nd transient response at I of a $[0_2/90_2]_S$ laminate (CL-CL)
Fig. E.9 1st transient load response of a $[0_2/90_2]_S$ laminate (CL-SS)

Fig. E.10 1st transient response at II of a $[0_2/90_2]_S$ laminate (CL-SS)
Fig. E.11 1st transient response at III of a $[0_2/90_2]_S$ laminate (CL-SS)

Fig. E.12 1st transient response at I of a $[0_2/90_2]_S$ laminate (CL-SS)
Fig. E.13 2nd transient load response of a \([0_2/90]_S\) laminate (CL-SS)

Fig. E.14 2nd transient response at II of a \([0_2/90]_S\) laminate (CL-SS)
Fig. E.15 2nd transient response at III of a [0_2/90_2]_S laminate (CL-SS)

Fig. E.16 2nd transient response at I of a [0_2/90_2]_S laminate (CL-SS)
Fig. E.17 1st transient load response of a \([0\_2/90\_2]_S\) laminate (SS-SS)

Fig. E.18 1st transient response at II of a \([0\_2/90\_2]_S\) laminate (SS-SS)
Fig. E.19 1st transient response at III of a $[0_2/90_2]_S$ laminate (SS-SS)

Fig. E.20 1st transient response at I of a $[0_2/90_2]_S$ laminate (SS-SS)
Fig. E.21 2nd transient load response of a $[0_2/90_2]_S$ laminate (SS-SS)

Fig. E.22 2nd transient response at II of a $[0_2/90_2]_S$ laminate (SS-SS)
Fig. E.23 2nd transient response at III of a \([0_2/90_2]_S\) laminate (SS-SS)

Fig. E.24 2nd transient response at I of a \([0_2/90_2]_S\) laminate (SS-SS)
Fig. E.25 1st transient load response of a 16 in. by 16 in. $[0_{4}/90_{4}]_T$ laminate (CL-CL)

Fig. E.26 1st transient response at II of a 16 in. by 16 in. $[0_{4}/90_{4}]_T$ laminate (CL-CL)
Fig. E.27 1st transient response at III of a 16 in. by 16 in. \([0_{4}/90_{4}]_{T}\) laminate (CL-CL)

Fig. E.28 1st transient response at I of a 16 in. by 16 in. \([0_{4}/90_{4}]_{T}\) laminate (CL-CL)
Fig. E.29 2nd transient load response of a 16 in. by 16 in. \([0/90]_T\) laminate (CL-CL)

Fig. E.30 2nd transient response at II of a 16 in. by 16 in. \([0/90]_T\) laminate (CL-CL)
Fig. E.31 2nd transient response at III of a 16 in. by 16 in. $[0_4/90_4]_T$ laminate (CL-CL)

Fig. E.32 2nd transient response at I of a 16 in. by 16 in. $[0_4/90_4]_T$ laminate (CL-CL)
Fig. E.33 Transient load response of a $[0_4/90_4]_T$ laminate (CL-CL)

Fig. E.34 Transient response at II of a $[0_4/90_4]_T$ laminate (CL-CL)
Fig. E.35 Transient response at III of a $[0/90]_T$ laminate (CL-CL)

Fig. E.36 Transient response at I of a $[0/90]_T$ laminate (CL-CL)
Fig. E.37 1st transient load response of a [0\4/90\4]_T laminate (CL-SS)

Fig. E.38 1st transient response at II of a [0\4/90\4]_T laminate (CL-SS)
Fig. E.39 1st transient response at III of a $[0_4/90_4]_T$ laminate (CL-SS)

Fig. E.40 1st transient response at I of a $[0_4/90_4]_T$ laminate (CL-SS)
Fig. E.41 2nd transient load response of a $[0/90]_T$ laminate (CL-SS)

Fig. E.42 2nd transient response at II of a $[0/90]_T$ laminate (CL-SS)
Fig. E.43 2nd transient response at III of a [0_4/90_4]_T laminate (CL-SS)

Fig. E.44 2nd transient response at I of a [0_4/90_4]_T laminate (CL-SS)
Fig. E.45 Transient load response of a [0/90]_T laminate (SS-SS)

Fig. E.46 Transient response at II of a [0/90]_T laminate (SS-SS)
Fig. E.47 Transient response at III of a \([0_{4}/90_{4}]_{T}\) laminate (SS-SS)

Fig. E.48 Transient response at I of a \([0_{4}/90_{4}]_{T}\) laminate (SS-SS)
Appendix F: Dynamic Response of Angle-Ply Laminates

Fig. F.1 Transient load response of a $[\pm 30_2]$$_S$ laminate (CL-CL)

Fig. F.2 Transient response at II of a $[\pm 30_2]$$_S$ laminate (CL-CL)
Fig. F.3 Transient response at III of a $[\pm 30]_S$ laminate (CL-CL)

Fig. F.4 Transient response at I of a $[\pm 30]_S$ laminate (CL-CL)
Fig. F.5 Transient load response of a $[\pm 30_2]_S$ laminate (CL-SS)

Fig. F.6 Transient response at II of a $[\pm 30_2]_S$ laminate (CL-SS)
Fig. F.7 Transient response at III of a $[\pm 30_2]^S$ laminate (CL-SS)

Fig. F.8 Transient response at I of a $[\pm 30_2]^S$ laminate (CL-SS)
Fig. F.9 Transient load response of a $[\pm 30_2]_S$ laminate (SS-SS)

Fig. F.10 Transient response at II of a $[\pm 30_2]_S$ laminate (SS-SS)
Fig. F.11 Transient response at III of a $[±30_2]_S$ laminate (SS-SS)

Fig. F.12 Transient response at I of a $[±30_2]_S$ laminate (SS-SS)
Fig. F.13 Transient load response of a [+30°/-30°]_T laminate (CL-CL)

Fig. F.14 Transient response at II of a [+30°/-30°]_T laminate (CL-CL)
Fig. F.15 Transient response at III of a [+30°/-30°]_T laminate (CL-CL)

Fig. F.16 Transient response at I of a [+30°/-30°]_T laminate (CL-CL)
Fig. F.17 1st transient load response of a \([+30_4/-30_4]_T\) laminate (CL-SS)

Fig. F.18 1st transient response at II of a \([+30_4/-30_4]_T\) laminate (CL-SS)
Fig. F.19 1st transient response at III of a $[+30_4/-30_4]_T$ laminate (CL-SS)

Fig. F.20 1st transient response at I of a $[+30_4/-30_4]_T$ laminate (CL-SS)
Fig. F.21 2nd transient load response of a $[+30\rangle_{4}/-30\rangle_{4}$T laminate (CL-SS)

Fig. F.22 2nd transient response at II of a $[+30\rangle_{4}/-30\rangle_{4}$T laminate (CL-SS)
Fig. F.23 2nd transient response at III of a \([+30/\{-30\}]_T\) laminate (CL-SS)

Fig. F.24 2nd transient response at I of a \([+30/\{-30\}]_T\) laminate (CL-SS)
Fig. F.25 1st transient load response of a $[+30_4/-30_4]_T$ laminate (SS-SS)

Fig. F.26 1st transient response at II of a $[+30_4/-30_4]_T$ laminate (SS-SS)
Fig. F.27 1st transient response at III of a [+30_4/-30_4]_T laminate (SS-SS)

Fig. F.28 1st transient response at I of a [+30_4/-30_4]_T laminate (SS-SS)
Fig. F.29 2nd transient load response of a $[+30_4/-30_4]_T$ laminate (SS-SS)

Fig. F.30 2nd transient response at II of a $[+30_4/-30_4]_T$ laminate (SS-SS)
Fig. F.31 2nd transient response at III of a [+30/4/-30/4]laminate (SS-SS)

Fig. F.32 2nd transient response at I of a [+30/4/-30/4]laminate (SS-SS)
Appendix G: Dynamic Response of Unsymmetric Laminates

Fig. G.1 1st transient load response of a $[\pm 30/90/0]_2\mathrm{T}$ laminate (CL-CL)

Fig. G.2 1st transient response at II of a $[\pm 30/90/0]_2\mathrm{T}$ laminate (CL-CL)
Fig. G.3 1st transient response at III of a $[\pm 30/90/0]_2T$ laminate (CL-CL)

Fig. G.4 1st transient response at I of a $[\pm 30/90/0]_2T$ laminate (CL-CL)
Fig. G.5 2nd transient load response of a $[\pm 30/90/0]_2T$ laminate (CL-CL)

Fig. G.6 2nd transient response at II of a $[\pm 30/90/0]_2T$ laminate (CL-CL)
Fig. G.7 2nd transient response at III of a $[\pm 30/90/0]_2T$ laminate (CL-CL)

Fig. G.8 2nd transient response at I of a $[\pm 30/90/0]_2T$ laminate (CL-CL)
Fig. G.9 Transient load response of a $[\pm 30/90/0]_{2T}$ laminate (CL-SS)

Fig. G.10 Transient response at II of a $[\pm 30/90/0]_{2T}$ laminate (CL-SS)
Fig. G.11 Transient response at III of a $[\pm30/90/0]_{2T}$ laminate (CL-SS)

Fig. G.12 Transient response at I of a $[\pm30/90/0]_{2T}$ laminate (CL-SS)
Fig. G.13 Transient load response of a $[\pm 30/90/0]_2T$ laminate (SS-SS)

Fig. G.14 Transient response at II of a $[\pm 30/90/0]_2T$ laminate (SS-SS)
Fig. G.15 Transient response at III of a $[\pm 30/90/0]_2T$ laminate (SS-SS)

Fig. G.16 Transient response at I of a $[\pm 30/90/0]_2T$ laminate (SS-SS)
Fig. G.17 Transient load response of a [30/90/0]_{2T} laminate (CL-CL)

Fig. G.18 Transient response at II of a [30/90/0]_{2T} laminate (CL-CL)
Fig. G.19 Transient response at III of a $[30_2/90/0]_{2T}$ laminate (CL-CL)

Fig. G.20 Transient response at I of a $[30_2/90/0]_{2T}$ laminate (CL-CL)
Fig. G.21 Transient load response of a $[30_2/90/0]_{2T}$ laminate (CL-SS)

Fig. G.22 Transient response at II of a $[30_2/90/0]_{2T}$ laminate (CL-SS)
Fig. G.23 Transient response at III of a $[30\_2/90/0\_2]_T$ laminate (CL-SS)

Fig. G.24 Transient response at I of a $[30\_2/90/0\_2]_T$ laminate (CL-SS)
Fig. G.25 Transient load response of a [30°/90°/0]_2T laminate (SS-SS)

Fig. G.26 Transient response at II of a [30°/90°/0]_2T laminate (SS-SS)
Fig. G.27 Transient response at III of a $[30_2/90/0]_2T$ laminate (SS-SS)

Fig. G.28 Transient response at I of a $[30_2/90/0]_2T$ laminate (SS-SS)