
Appendixes

Appendix A.—Glossary of Terms and Acronyms

Glossary of Terms

degree of freedom: capacity for active movement
electrode: conductor through which EMG signals are transmitted from the stump to the prosthesis
EMG signals: electromyographic signals, i.e., electrical charges that accompany muscle contraction
extension: movement of straightening a joint
flexion: movement of bending a joint
hold: amount of weight a prosthesis will support
lift: amount of weight a prosthesis will raise
mental workload: amount of conscious thought required to operate a prosthesis
myoelectric: controlled by EMG signals
proportional speed: speed that varies with the strength of muscle contractions
prosthesis: artificial limb
range: distance a prosthesis travels from full flexion to full extension
repair cycle: how often a prosthesis needs repair
service life: how long a prosthesis lasts, with repairs
socket: hollow part of a prosthesis that holds the amputee's stump
speed: how long it takes for a prosthesis to travel from full flexion to full extension
stump: part of limb left after amputation
terminal device: hook or artificial hand

Glossary of Acronyms

AOPA — American Orthotics and Prosthetics Association
FDA — Food and Drug Administration, Department of Health and Human Services
IAB — (Massachusetts) Industrial Accidents Board
ILC — independent living center
MIT — Massachusetts Institute of Technology
MRC — Massachusetts Rehabilitation Commission
NIHR — National Institute of Handicapped Research, Department of Education
PSAS — Prosthetic and Sensory Aids Service, Veterans Administration
REC — Rehabilitation Engineering Center
RSA — Rehabilitation Services Administration, Department of Education
SSDI — Social Security Disability Insurance
SSI — Supplemental Security Income
VA — Veterans Administration
VR — Vocational Rehabilitation