

## **APPENDIX A. COMPUTER PROGRAMS**

### **A.1 Program listings**

The analysis of the subject walking was performed automatically under the control of three command files. The mass property data used in the analysis was inputted into a \*.dat file for use with each trial day by the command file Prosdatt.com. The analysis of the static data (used with the pelvis and the ulna segments) was performed by Staticp.com, again once for each trial day. The actual calculation of forces and moments for each dynamic data trial for performed using the command file Fullamp.com. The full listing of all the programs used are on the enclosed CD-rom (software listing.pdf; software listing.txt).

The names of the command files, the computer algorithms they refer to and the subroutines called by the algorithms are listed below. The names of the routines used in the oxygen consumption analysis are also listed.

#### **A.1 Command file listings**

A.1.1 Prosdatt.com

A.1.2 Staticp.com

A.1.3 Fullamp.com

#### **A.2 Fortran program listings**

A.2.1. Prosdatt.for

A.2.2 Stlulna.for

A.2.3 Strulna.for

A.2.4 Phipstat.for

A.2.5 Copstat.for

A.2.6 Scale2.for

A.2.7 Filter.for

A.2.8 Dcjcpc.for

A.2.9 Diff2.for

A.2.10 Lankle.for

A.2.11 Lknee.for

A.2.12 Lhip.for

A.2.13 Rankle.for

A.2.14 Rknee.for

A.2.15 Rhip.for

A.2.16 Lshank.for

A.2.17 Lthigh.for

A.2.18 Rshank.for

A.2.19 Rthigh.for

A.2.20 Normpc.for

A.2.21 Normpdl.for

A.2.22 Normpdr.for

A.2.23 Normgrfp.for

A.2.24 Llram.for

A.2.25 Lshold.for

A.2.26 Rlarm.for

A.2.27 Rshold.for

A.2.28 Lulna.for

A.2.29 Lhumer.for

A.2.30 Rulna.for

A.2.31 Rhumer.for

A.2.32 Flaxis.for

A.2.33 Normang.for

A.2.34 Torso.for

A.2.35 Pflow.for

A.2.36 Normpf.for

A.2.37 Bwl.for

#### **A.3. Subroutines**

#### **A.4. Oxygen consumption programs**

A.4.1 Volox.pas

A.4.2 Gen\_Ben.pas