



PATHS OF MOVEMENT FOR SELECTED BODY SEGMENTS DURING TYPICAL PILOT TASKS

*DEPARTMENT OF INDUSTRIAL ENGINEERING
TEXAS TECH UNIVERSITY
LUBBOCK, TEXAS 79409
and
AEROSPACE MEDICAL RESEARCH LABORATORY*

20081008 078

Approved for public release; distribution unlimited

Prepared for:
AEROSPACE MEDICAL RESEARCH LABORATORY
AEROSPACE MEDICAL DIVISION
Air Force Systems Command
Wright-Patterson Air Force Base, Ohio 45433

NOTICES

When US Government drawings, specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government thereby incurs no responsibility nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise, as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Do not return this copy. Retain or destroy.

Please do not request copies of this report from Aerospace Medical Research Laboratory. Additional copies may be purchased from:

National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22151

This report has been reviewed and cleared for open publication and/or public release by the appropriate Office of Information (OI) in accordance with AFR 190-17 and DODD 5230.0. There is no objection to unlimited distribution of this report to the public at large, or by DDC to the National Technical Information Service (NTIS).

This technical report has been reviewed and is approved for publication.

FOR THE COMMANDER



CHARLES BATES, JR.

Chief, Human Engineering Division
Aerospace Medical Research Laboratory

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER AMRL-TR-75-111	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) PATHS OF MOVEMENT FOR SELECTED BODY SEGMENTS DURING TYPICAL PILOT TASKS		5. TYPE OF REPORT & PERIOD COVERED Final Report
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) M.M. Ayoub; S. Deivanayagam; K.W. Kennedy		8. CONTRACT OR GRANT NUMBER(s) F33615-73-C-4073
9. PERFORMING ORGANIZATION NAME AND ADDRESS Dept. of Industrial Engineering Texas Tech University, Lubbock, TX 79409		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Aerospace Medical Research Laboratory, Aerospace Medical Division, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio 45433		12. REPORT DATE March 1976
		13. NUMBER OF PAGES 390
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release, distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Anthropometry Photogrammetry Aircraft controls Reclining seat Paths of movement Biomechanics		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report describes the geometry of paths of motion for body segments when the hand travels between selected control locations within an aircraft cockpit. The controls selected for this study were the stick, the throttle, the overhead, the panel, the side-arm and the hatch. The control locations (start and end points of the hand travel) were selected to represent both conventional and high acceleration type aircraft cockpits. In addition (Continued)		

Unclassified

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

three different seat back rest angles (13° , 30° and 65°) were employed to represent the conventional and high acceleration seat configurations. To adequately describe the movements of all body segments, the following landmarks on the body were studied using photogrammetric techniques: Nasion, Cervicale, Suprasternale, Acromion, Shoulder joint center, Elbow joint center, Wrist center, Grip center and Greater Trochanter.

This study was performed as part of the COMBIMAN {COMputerized BIomechanical MAN} model program of Aerospace Medical Research Laboratory. COMBIMAN when completed will be a computer controlled "manikin" representing a pilot under cockpit environment. This model as a "Biomechanical Analog" of the pilot, requires as input, certain kinematic data pertaining to the movement of body segments within a cockpit doing typical pilot tasks. This effort was undertaken to provide this movement data for the primary aircraft controls from which kinematic information can be developed.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

PREFACE

This study was initiated by the Human Engineering Division of Aerospace Medical Research Laboratory (AMRL), Wright-Patterson Air Force Base, Ohio. The research was performed by the Department of Industrial Engineering, Texas Tech University, Lubbock, Texas, under contract #F33615-73-C-4307. Dr. M. M. Ayoub was the principal investigator. Dr. S. Deivanayagam and Mr. Kenneth W. Kennedy were research associates.

The authors are indebted to a large number of people who made this study and report possible. They wish to express their thanks to the personnel at AMRL who designed and fabricated the facilities at Wright-Patterson Air Force Base. Special thanks to Dr. K. H. E. Kroemer who was the contract Technical Monitor at the initial stages and to Mr. C. E. Clauser who took over these duties during later stages of the project. Thanks also goes to Mrs. Sue M. Evans and Mrs. Kathryn J. Dillhoff and other personnel at the University of Dayton Research Institute who performed the required computer programming and data reduction segments of this research. Mrs. Joanda E. D'Antuno, also of the University of Dayton Research Institute deserves special mention for the Herculean task of editing the digitizer output tapes. The authors wish to express their thanks to Mrs. Terry Wilson, Mrs. Pat Austin and Mrs. Ann Sietz for their efforts in typing this manuscript.

Table of Contents

INTRODUCTION.	11
Scope	12
Past Human Motion Investigations.	13
Experimental Techniques in Human Motion Study . .	14
Factors Affecting Paths of Human Body Segments. .	17
Degree of Skill and Training of the Operator. . .	17
Encumbrances to Free Motion	18
Stresses Under Which the Movement is Performed. .	18
Limb Orientations at Start and End of Movement	18
Direction of Motion	19
Eye-hand Coordination Necessary for the Task. . .	19
Stochastic Nature of Human Motion	19
Mechanics of the External Environment	20
THE PHOTOGRAMMETRIC SYSTEM.	20
Coordinate Relationships in Orthogonal Photogrammetry	24
Photogrammetric Facility at the Aerospace Medical Research Laboratory (AMRL)	26
Equipment	28
Camera.	28
Strobe lights	28
Digitizer unit.	29
Cockpit chair	29
Task area	29

Controls and Control Switch System.	30
Chronometer	30
TESTING AND CALIBRATION	32
Testing the Projection System	32
Testing the Stereophotogrammetric System.	34
Testing the Camera.	34
Testing the Photogrammetric System.	35
Subject Placement and Choice of System Coordinates.	38
EXPERIMENTATION AND RECORDING OF MOVEMENTS.	42
Seat Geometry	43
Controls.	43
Movement Sequence	44
Coding System for Movements	46
Points of Interest on Human Body.	46
Targets	49
Subjects.	52
Experimental Procedure.	52
Data Extraction and Computations.	58
RESULTS	71
Paths of Movement	79
Displacement-Time Relationships	86
Grip Center	100
Elbow Center.	100
Shoulder Center	101
Nasion/Head Movement	102

Statistical Summaries of Displacement-time Relationship.	102
APPENDIX A -- Computer Program Documentation	104
APPENDIX B -- Paths of Movement Data	150
REFERENCES	386

List of Tables

<u>Tables</u>	<u>Page</u>
1 Controller Positions with Respect to Seat Reference Point in Inches.	45
2 Movement Coding System.	47
3 List of Skin Surface Landmarks and the Type of Target Used.	50
4 Anthropometric Measurement of Subjects.	53
5 Comparison of Subject Sample with USAF Pilot Population	73
6 Results of Statistical Tests on Subject's Anthropometric Variables	74

List of Illustrations

<u>Figure</u>	<u>Page</u>
1 Techniques of Human Motion Analysis	15
2 Flow Chart - Paths of Movement Research Effort. .	21
3 The Effect of Parallax.....	23
4 Orthogonal Photogrammetry-Schematic Layout. . . .	25
5 Schematic Layout of Photogrammetric System. . . .	27
6 A Typical Control Assembly.	31
7 Digitizer Readings of a Square Pattern.	33
8 Set Up for Testing the Stereophotogrammetric System	36
9 Subject Orientation	40
10 Extension Target.	51
11 A Typical Movement Sequence	59
12 Paths of Movement of Certain Selected Body Land- marks During Right Hand Movement from Side Arm Controller to Panel Release and Return	76
13 Stick Diagrams of Right Upper Extremity When Right Hand Moves from Side Arm Controller to Overhead Controller at 13° Back Angle.	77
14 Stick Diagrams of Right Upper Extremity When Right Hand Moves Back to Stick Controller from Overhead Controller at 13° Back Angle	78
15 Paths of Movement of Right Hand Grip Center During Forward and Return Movement Starting from Side Arm Controller to Overhead Controller at 13° Back Angle.	80

16	Path of Movement of the Right Wrist Joint Center Forward and Return Movement Starting from Side Arm Controller to Overhead Controller at 13° Back Angle. . . .	81
17	Path of Movement of Right Elbow Joint Center for Forward and Return Movement Starting from Side Arm Controller to Overhead Controller at 13° Back Angle	82
18	Path of Movement of Shoulder Joint Center	83
19	Paths of Movement of Nasion for Forward and Return Movement Starting from Side Arm Controller to Overhead Controller Using Right Hand at 13° Back Rest.	84
20	Stick Diagrams of Right Upper Extremity at Time Intervals of 1/10th the Average Total Movement Time Forward.	87
21	Stick Diagrams of Right Upper Extremity at Time Intervals of 1/10th of Average Total Movement Time Return	88
22	Right Hand Grip Center Paths of Movement from Side Arm Controller to Overhead Controller at 13° Back Angle for Subjects 1 and 5 versus the Average Path for all Seven Subjects	89
23	Right Wrist Center Path of Movement from Side Arm Controller to Overhead Controller at 13° Back Angle for Subject 1 and 5 versus the Average Path for all Seven Subjects. . .	90
24	Right Elbow Joint Center Paths of Movement from Side Arm Controller to Overhead Controller at 13° Back Angle for Subjects 1 and 5 versus the Average Path for all Seven Subjects	91
25	Right Shoulder Joint Center Path of Movement from Side Arm Controller to Overhead Controller at 13° Back Angle for Subjects 1 and 5 versus the Average Path for all Seven Subjects	92

26	Path of Movement of Nasion When Right Hand Moves from Side Arm Controller to Overhead Controller at 13° Back Angle.	93
27	Stick Diagram Describing Forward Movement from Side Arm Controller to Overhead Controller at 30° Back Angle.	94
28	Stick Diagrams Describing Forward Movement from Side Arm Controller to Overhead Controller at 65° Back Angle.	95
29	Displacement-time Relationship for Right Hand Grip Center for Forward and Return Movement Starting from Side Arm Controller to Overhead Controller at 13° Back Angle.	96
30	Displacement-time Relationship for Right Elbow Joint Center for Forward and Return to Overhead Controller at 13° Back Angle.	97
31	Displacement-time Relationship for Right Shoulder Joint Center and Right Acromion for Forward and Return Movement Starting from Side Arm Controller to Overhead Controller at 13° Back Angle.	98
32	Displacement-time Relationship for Nasion to Forward and Return Movement Starting from Side Arm Controller to Overhead Controller at 13° Back Angle.	99

Appendix A

A-1	Flow Chart for Computer Program Employed in Obtaining Real-world Coordinates from Digitizer Data.	105
A-2	Flow Chart for Program Used in Statistical Analysis.	115
A-3	Time-displacement Profiles for Grip Center -- Right Hand Moving from Side Arm Controller to Overhead Controller. Back Angle = 13°.	129
A-4	Time-displacement Profiles for Grip Center -- Right Hand Moving from Side Arm Controller to Panel Controller, Back Angle = 13°.	130

A-5	Time-displacement Profiles for Grip Center-- Right Hand Moving from Side Arm Controller to Hatch Release Controller. Back Angle = 13°	131
A-6	Time-displacement Profiles for Grip Center-- Left Hand Moving from Throttle to Overhead Controller. Back Angle = 13°	132
A-7	Time-displacement Profiles for Grip Center-- Left Hand Moving from Throttle to Panel Controller. Back Angle = 13°	133
A-8	Time-displacement Profiles for Grip Center-- Right Hand Moving from Stick Controller to Overhead Controller. Back Angle = 13° . . .	134
A-9	Time-displacement Profiles for Grip Center-- Right Hand Moving from Stick Controller to Panel Controller. Back Angle = 13°	135
A-10	Time-displacement Profiles for Grip Center-- Right Hand Moving from Stick Control Hatch Release Controller Back Angle = 13° . .	136
A-11	Time-displacement Profiles for Grip Center-- Right Hand Moving from Side Arm Controller to Overhead Controller. Back Angle = 30° . . .	137
A-12	Time-displacement Profiles for Grip Center-- Right Hand Moving from Side Arm Controller to Panel Controller. Back Angle = 30°	138
A-13	Time-displacement Profiles for Grip Center-- Right Hand Moving from Stick Controller to Panel Controller. Back Angle = 30°	139
A-14	Time-displacement Profiles for Grip Center-- Right Hand Moving from Side Arm Controller to Overhead Controller. Back Angle = 30° . . .	140
A-15	Time-displacement Profiles for Grip Center-- Right Hand Moving from Side Arm Controller to Panel Controller. Back Angle = 30°	141
A-16	Time-displacement Profiles for Grip Center-- Left Hand Moving from Throttle to Overhead Controller. Back Angle = 65°	142

A-17	Time-displacement Profiles for Grip Center Right Hand Moving from Side Arm Controller to Overhead Controller. Back Angle 65°. . .	143
A-18	Time-displacement Profiles for Left Grip Center-- Movement is from Throttle to Stick Controller Back Angle = 13°.	144
A-19	Time-displacement Profiles for Left Elbow Center Movement is from Throttle to Stick Controller Back Angle = 13°.	145
A-20	Time-displacement Profiles for Left Shoulder Center--Movement is from Throttle to Stick Controller Back Angle = 13°.	146
A-21	Time-displacement Profiles for Left Grip Center-- Movement is from Throttle to Stick Control Back Angle = 30°.	147
A-22	Time-displacement Profiles for Left Elbow Center--Movement is from Throttle to Stick Controller Back Angle = 30°.	148
A-23	Time-displacement Profiles for Left Shoulder Center--Movement is for Throttle to Stick Controller Back Angle = 30°.	149

Appendix B

A-24	Controller Locations for 13° Back Rest Angle. . .	154
A-25	Controller Locations for 30° Back Rest Angle. . .	251
A-26	Controller Locations for 65° Back Rest Angle. . .	344

INTRODUCTION

A large body of literature has been generated during the past few decades in the field of human-motion recording and analysis. However, in most of these studies body landmarks are limited to only a few while a body-member movement was executed under certain given conditions. Very few studies, if any, deal with real world activities involving the whole body or its segments. The highly controlled conditions under which movements are performed and studied undoubtedly produce deviations from what one would find during "real-world" conditions. It is true that these experimental conditions are imposed in order to make meaningful comparisons within the particular investigative effort as well as with other efforts. Nevertheless, these artificial conditions severely limit the general applicability of the results and knowledge derived thereof. For example kinesiologists have studied human motion with the aim of developing the best techniques for performance in sports. Psychologists have studied motion characteristics to learn about the effects of such factors as training and stress on human task performance. Such studies, no doubt, satisfy the primary needs of the investigators; however, they are of limited help to the designers of work stations.

An engineering designer's interest in human motion is not limited to the motion characteristics of a single point on the human body. He is interested in the dynamic histories of various segments of the body involved in executing the movements during the entire period of motion. For example, when an operator

reaches from one control to another, the movement of the hand is brought about by a complex combination of rotary movements at the wrist, elbow and shoulder, and motions of smaller, but significant amounts at other joint centers of the body. It is essential for the designer to have information about all body segments in order to comprehend the interactions and constraints involved within and without the work station. The research reported here is an attempt in providing such data for selected, typical movements required of the aircraft pilot.

Scope

The ultimate objective of this research is to provide engineering anthropometric data for guiding the selection of cockpit control placements, specifically for the location, arrangement and optimum operation of controls under normal and stressful situations. The specific objective is to record, analyze, and describe the paths of movement of the hand, arm, shoulder, eye and other relevant landmarks of the body, while the operator reaches from one control point to another. The control points selected are typical of those located in aircraft cockpits and other manned aerospace work stations.

The data generated from this effort are expected to help in designing future cockpits and in evaluating the existing ones. An important purpose of this research is to provide kinematic data to the COMBIMAN program. COMBIMAN is a COMPUTERIZED BIOMECHANICAL MAN model of a human operator in a cockpit.

"COMBIMAN is being developed as an engineering tool to represent geometric, physical and ergonomic properties of man at his work station, and to assess interactions between man, equipment, and environment during task performance." (Kroemer, 1973, p. 75)

In order that the above objectives be achieved, the model has to provide good representation of a human operator at his work station taking into account the relevant anthropometry, biomechanics and ergonomics. In order to develop the "Bio-mechanical Analog" in this model, certain kinematic data are needed. Such data include paths of movement of the pilot's body segments while performing typical cockpit activities. Presently no such data for an aircraft pilot under cockpit environment is available that can be readily used in the COMBIMAN model. Hence, this study was undertaken to provide this kind of kinematic data needed to meet the COMBIMAN model requirements.

Past Human Motion Investigations

The 15th century artist-scientist, Leonardo da Vinci, is generally credited with the first attempt to make a systematic study of human motion. That was well before Sir Isaac Newton (1642-1727) postulated his laws of motion and principles of mechanics. A number of investigators since the days of da Vinci have performed theoretical analysis of human movement and have contributed significantly to the present state of knowledge in this area.

Fisher in 1906 described a theoretical "n" link system of the living human body with freely movable joint systems. Each joint was described in a kinetic sense and the states of motion and equilibrium were analyzed based on principles of mechanics. Amar (1920) performed further analysis of bodily movements especially oriented to work stations. In addition to describing the structural mechanics and functional kinetics, he also discussed the effect of physiological fatigue on work performance. Other authors involved in analyses of human motion include Dempster (1955), Nubar and Contini (1961), Rashevsky (1962), Karras and Stapleton (1968), Vukobrotovic and Juricic (1969).

Experimental Techniques in Human Motion Study

Experimental investigations of human movement employ a number of different techniques. Such techniques can generally be classified into the following three methodological groups, according to Ayoub (1972):

1. Photographic techniques
2. Electronic and/or electro-mechanical methods
3. Stereogrammetry

Figure 1 shows the classification of the techniques adopted in human motion analysis.

Photographic techniques generally involve taking pictures while the movement is being executed and afterwards analyzing the photographs for points of interest. There are three general methods that are available for photographic analysis of human motion:

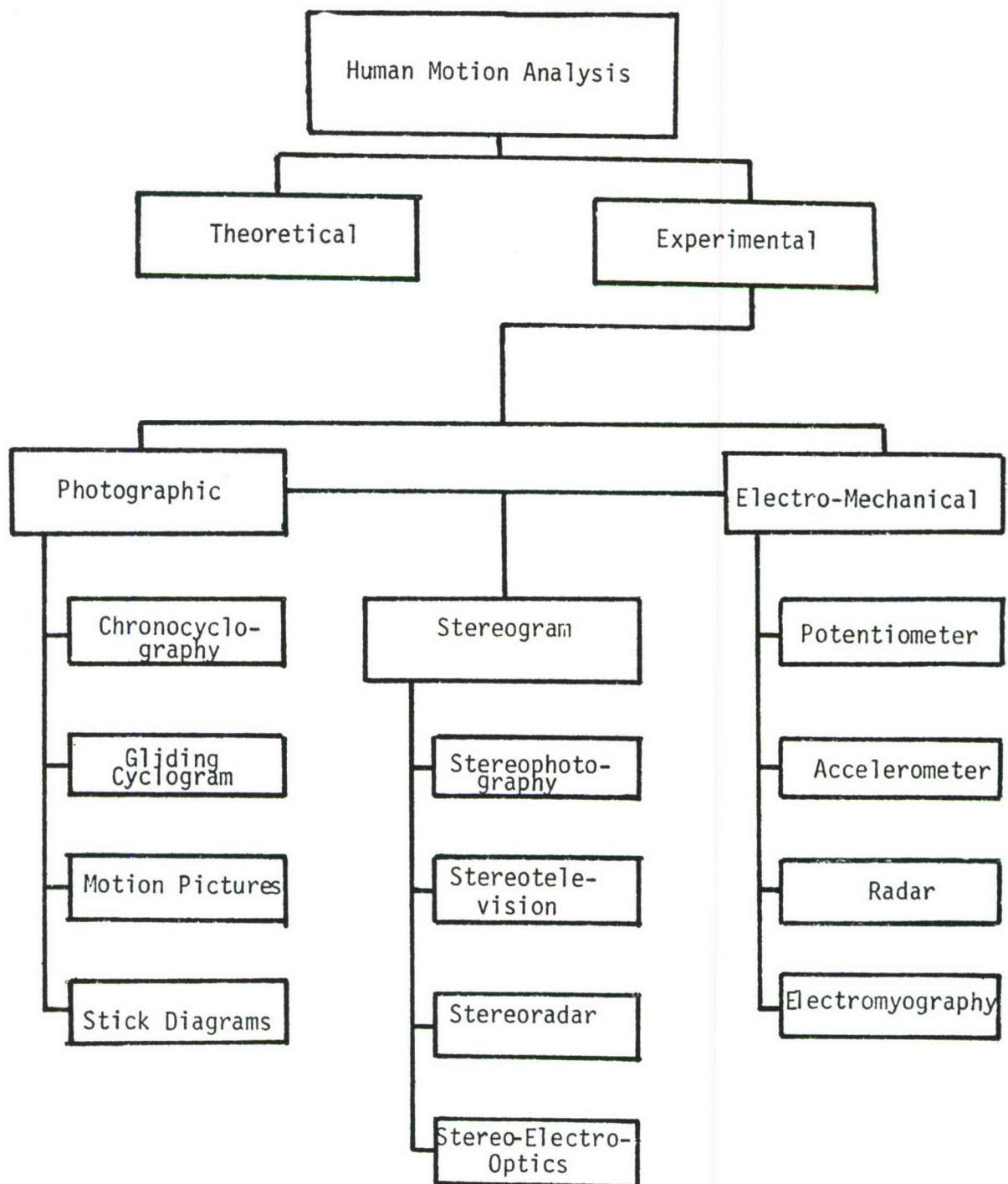


Fig. 1. Techniques of human motion analysis.
From Ayoub (1972)

- (a) Cyclography, chronocyclography, and interrupted light photography (Marey, 1895, 1902; Gilbreth, 1917; Popova, et al., 1934; Polnauer, 1952)
- (b) Gliding cyclograms (Drillis, 1960)
- (c) Motion pictures (Eberhart and Inman, 1947; Taylor and Blaschke, 1951; Plagenhoef, 1966)

Motion analysis by electro-mechanical and electronic devices employ transducers to convert the displacements into electrical signals and record them in some form. The signals recorded have some definite relation to the characteristics of the movement performed. These techniques can be classified into three basic systems:

- (a) Potentiometric systems (Karpovich, et al., 1960; Raheja, 1966; Ramsey, 1968)
- (b) Radar-like systems (Goldman, 1955; Covert, 1965)
- (c) Accelerometer systems (Liberson, 1936; Ayoub, 1966)

Human motion analysis has been performed employing stereogrammetrical techniques which include three basic systems: stereophotography, stereotelevision, and stereoradar. All the three systems use the technique of observing the movements from different angles. Stereophotography has been employed by a number of researchers in the study of human motion (Zeller, 1953; Brewer, 1962; Nakumara and Tamura, 1966; Preston, 1967; Gutewort, 1968; Ayoub, 1969).

Factors Affecting Paths of Movement of Human Body Segments

Movement of human body members is the result of a complex interrelated activity involving the nervous system, musculo-skeletal system, and the metabolic processes. In addition to the internal, structural, and functional factors involved, there are a large number of other highly relevant factors, both internal and external to the human body which have an effect on the motion characteristics of any limb. Listed below are the more important factors that should be considered when the primary interest is to describe the geometry of paths of movement of body segments; i.e., when the hand travels between specific locations:

- (i) Degree of skill and training of the operator
- (ii) Encumbrances and obstacles affecting free motion
- (iii) Stresses under which the motion is performed
- (iv) Limb orientations at start and end of movement
- (v) Direction of motion
- (vi) Eye-hand coordination necessary for the task
- (vii) Stochastic nature of human motion
- (viii) Mechanics of the external environment

Degree of skill and training of the operator. The skill and familiarity of the operator with the kind of movement being performed has a definite effect on the path of movement. An operator, skilled in the task, generally has a smoother pattern of movement and less variability in repeated trials compared to unskilled operators.

Encumbrances to free motion. The encumbrances and restraints placed on the operator in general and on the moving body segments in particular, affect the path of movement to a large extent. Even under otherwise very similar conditions, the movement pattern of a pilot fully encumbered in a flight suit would be very different from that when performing the same movement without encumbrances. Similarly, the path of movement may be significantly altered due to any obstacles encountered.

Stresses under which the movement is performed. The degree of stress under which the task is performed has a bearing on the resultant path the moving segments follow. The stress can be physical, psychological and/or environmental in its origin and nature.

Limb orientations at start and end of movement. Based on recent studies of motion recording and analysis at Texas Tech University, it is evident that limb configuration at the start and end points of a movement have a significant effect on the path of the hand. (Ayoub, 1966; Ayoub, et al., 1970; Petrino, 1973; Ayoub, et al., 1974). The distance through which the hand travels also affects the paths of movement. Generally, the shorter the distance traveled by the hand, the flatter is the path of motion taken by the hand (Ayoub, 1966). The configuration of the musculoskeletal system at the starting point of the movement influences the path of the segment involved. This is due to the initial and final characteristics of the

lever system (the bones and joints) and the forces involved and their directions of application (the muscle tensions).

Direction of motion. Direction of motion has been shown to influence not only the path of motion of the hand, but also the path of motion of any point on the upper extremity. For example, a movement along the mid-sagittal plane performed in the horizontal plane of the work surface shows a different path of motion for the elbow than does the path of motion made in the horizontal plane of the work surface but at 45° on either side of the mid-sagittal plane. In addition, whether the movement is made away from the body or toward the body, as well as with gravity or against gravity, can significantly change the path of motion.

Eye-hand coordination necessary for the task. The degree of eye-hand coordination necessary to perform the task can affect the path of motion of the hand and the other body segments involved when reaching for a specific control. Further changes in this path of motion can be observed if, in addition to reaching to a specific control requiring eye-hand coordination, other tasks requiring the visual apparatus are performed simultaneously.

Stochastic nature of human motion. Although this is not a variable, it is included here, since the path of motion taken by a body segment may not always be identical under repeated trials while performing the same task under essentially identical conditions.

Mechanics of the external environment. The external environmental conditions such as acceleration, vibration, etc. have an effect on the movement characteristics of body segments. The intensity and duration of exposure to such conditions are critical factors to be considered in analyzing human body member movements under such environmental conditions. Johnson and Ayoub (1972) reported some effects of vibration on voluntary movement.

THE PHOTOGRAMMETRIC SYSTEM

The summary of the system adopted and the steps involved in the present investigation are outlined in the flow chart shown in Figure 2. The various steps are discussed in detail in the following sections.

An effective system to collect data on human movement for this investigation must be able to meet the following technical requirements:

- (i) To monitor a large number of body landmarks simultaneously
- (ii) To provide a permanent record of the movement so that the analysis can be performed at a later time
- (iii) To be technically simple, but versatile and easily adaptable to provide any workplace set up

The technique employed in this investigation is a combination of slow speed motion pictures and interrupted photography. It consists of recording two orthogonal views of the task, side by side, on a single frame of the film. The graphic information

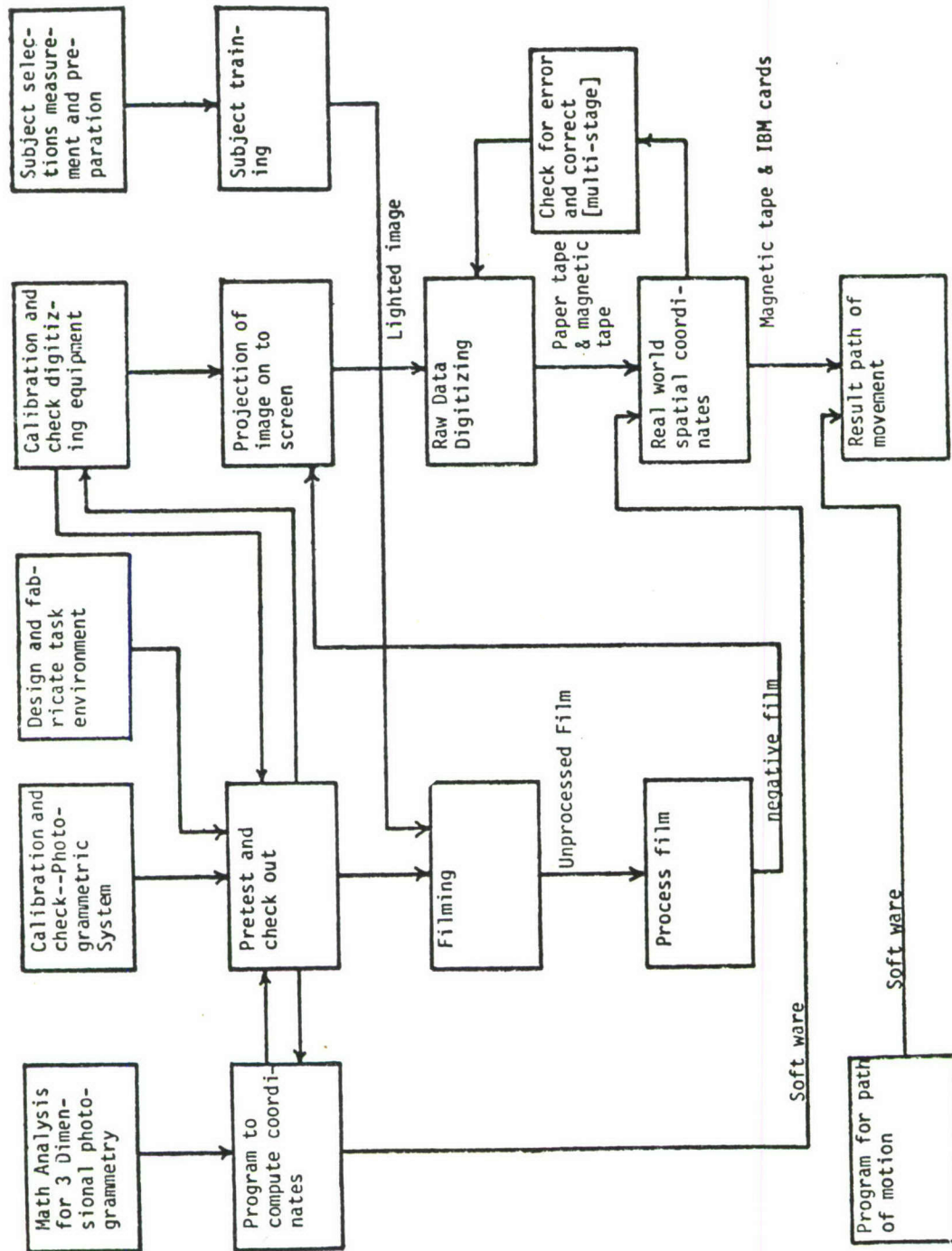


Fig: 2 Flow Chart - Paths of Movement Research Effort

available in a photographic picture is a scaled down version of the real world situation. However, there are two important differences that make it difficult to employ a simple photograph for an accurate three-dimensional measurement. A simple photograph, by nature, being two-dimensional, does not lend itself easily to three-dimensional information presentation. Also, the scaling factor between the real world and image is not a constant; but is a function of the lens to object distance.

The second deficiency, parallax, is explained schematically in Figure 3. Equidistant from the focal axis of the camera are two points A and B. However point A, at a distance d_A , is farther away from the lens than point B, which is at a distance d_B from the lens. Their corresponding images are a and b at distances X_a and X_b respectively from the center of the image plane. It can be seen that X_b is greater than X_a even though in real world both A and B are at equal distance X , from the focal axis. This apparent displacement at the focal plane is due to parallax, which in general causes reduction in image size of objects farther away from the lens.

It is possible to overcome the above problem by taking pictures of the same object as viewed at two different angles. The information available from the resulting two photographs can be pooled together to obtain three-dimensional coordinates of any point in the space covered by both pictures. The

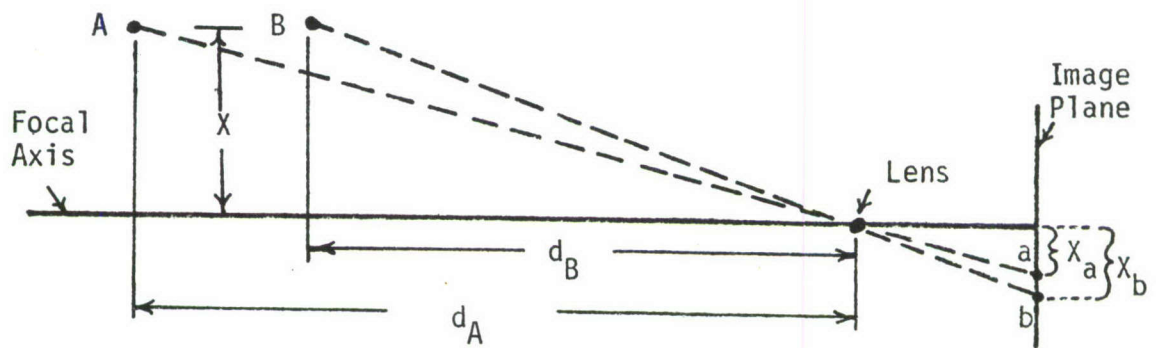


Fig. 3. Showing the Effect of Parallax

computational procedures are simplified when the viewing angles are at 90° to each other. The technique in this case is called Orthogonal Photogrammetry.

Coordinate Relationships in Orthogonal Photogrammetry.

Consider a situation as presented in Figure 4. A point P is viewed (or photographed) along x and y axes as shown. The imaginary point of intersection of the focal axes (x and y) is 0 and is assumed to be the origin of the system. With respect to 0, point P has coordinates x_p and y_p . The lenses are at distances X_o and Y_o from 0 along x and y axes respectively. The images of 0 and P are O_x and P_x on one image plane and O_y and P_y on the other. P_x is at a distance of y'_p from O_x and P_y is at a distance x'_p from O_y . Also assume that the lenses have identical focal lengths, f. [This assumption is not a requirement for the analysis. It is made only to be consistent with the technique described later, where a single camera (lens) replaces the two cameras.] It can be shown from properties of similar triangles that,

$$\frac{x'_p}{x_p} = \frac{f}{y_o - y_p} \quad \text{and} \quad \frac{y'_p}{y_p} = \frac{f}{x_o - x_p}$$

solving the above two equations for x_p and y_p , we get:

$$x_p = \frac{x'_p (fy_o - x_o y'_p)}{f^2 - x'_p y'_p}$$

and

$$y_p = \frac{y_p' (fx_o - y_o x_p')}{f^2 - x_p' y_p'}$$

In the above, f , x_o , y_o are system parameters and are constants for a given set of cameras and their locations.

Photogrammetric Facility at the Aerospace Medical Research Laboratory (AMRL)

The photogrammetric facility at AMRL which was employed for this research is based on the principle of using two orthogonal views to compute three-dimensional coordinates of an object. However, it is unique in the sense that the two orthogonal views are not obtained using two cameras positioned with their optical axes perpendicular to each other. Instead only one camera is used and the orthogonal views were obtained on the same picture frame, side by side. This is made possible by using two pairs of front surface distortion-free mirrors suitably placed with respect to the camera and the task area. The system was designed by Mr. Kenneth W. Kennedy of AMRL, fabricated and erected under his supervision by the Aeronautical Systems Division personnel at Wright Patterson Air Force Base. Figure 5 presents a pictorial layout of this system. The entire system is housed in a room 23' -6" x 18' -3". The task area is centrally located at one end of the room and is an approximately 7' -6" square. On both sides and forward of this task area are two large mirrors, 7' -3" square in size.

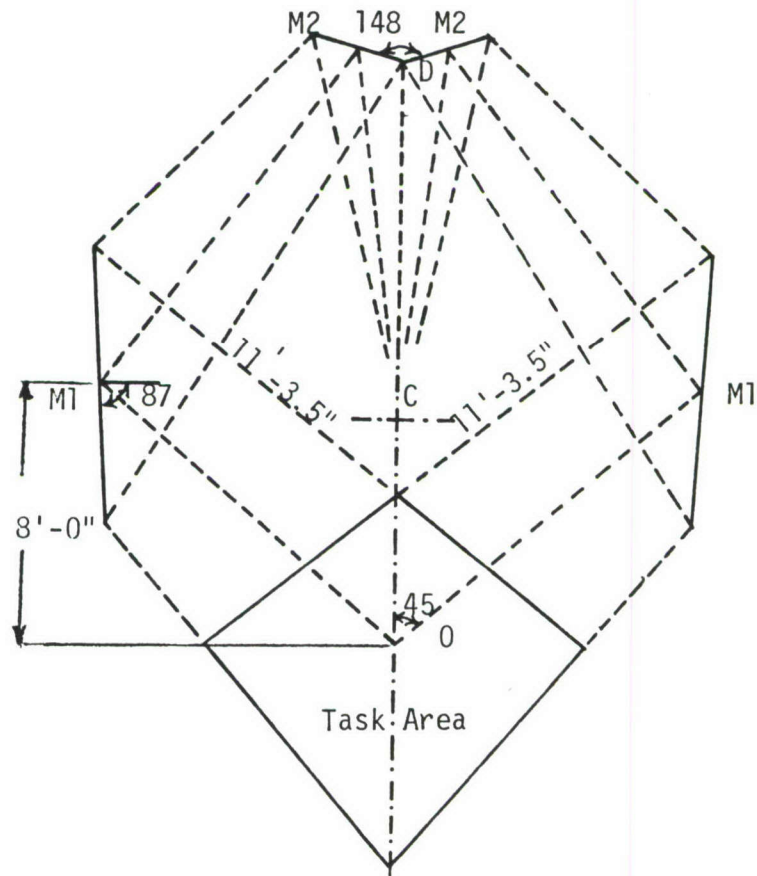


Fig. 5. Schematic Layout of Photogrammetric System

M1 - 7' 3.5" sq. Mirror

M2 - 2' 6" sq. Mirror

C - Camera. O - Center of Task Area

CD - 9' 7.25" OC - 6' 7.25"

(Modified from the original drawing by K. W. Kennedy,
AMRL, Wright-Patterson AFB, Dayton, OH)

These mirrors are vertically mounted on stable framework to avoid distortion and displacement. A pair of small mirrors, 2' -6" square each, is placed in front of the task area and beyond the large mirrors. The camera is placed between the front mirrors and the task area, facing the small mirrors. The mirrors are not parallel to each other but are converging toward the task area. The large mirrors converge toward the center line of the system at an angle of 3° each and the small mirrors intersect at an included angle of 148° . Also the mirrors are placed symmetrically about the optical axis of the camera lens.

Equipment

Camera. The Hulcher 70, Model 102 camera was used in recording the movements. This camera uses 70 mm roll film available in lengths of 100 ft/roll. The camera can be operated either as a still camera or as a fast sequence (motion picture) camera at varying speeds of 5 to 20 frames per second. It provides negatives of $2\frac{1}{4}" \times 2\frac{1}{2}"$ on 70 mm films. Thus it has the advantages of a large negative area and relatively fast film rates.

Strobe lights. The strobe light system known as "sequistrobe" consists of 4 lights coupled to 2 power units. Both units were synchronized with the camera shutter. The duration of the strobe flash is approximately $7\frac{1}{2}$ microseconds.

Digitizer unit. A Viable Systems x-y digitizer unit was employed to extract coordinates from the film projections. It consists of a 70 mm projector, a rear projection screen with a mirror, x-y digitizer with a movable cursor and a paper tape punching unit. The system was assembled using commercially available components.

Cockpit chair. The experimental cockpit chair to support the subject was designed by Systems Research Laboratory, Dayton, Ohio and fabricated at the AMRL workshop. This chair had the following ranges of adjustability:

- *Seat height - from 2" to 10" height above the heel rest
- *Seat pan angle - from 6° to 25° to horizontal
- *Back rest angle - from 0° to 70° to vertical
- *Head rest angle - from 0° to 40° to plane of back rest

For purposes of this research, the imaginary point of intersection of the midlines of seat and back rest (the seat reference point, or SRP) is defined as the reference or origin point.

Foot rests were provided in front of the chair to simulate rudder controls at neutral position [36.25" in front of and 3.5" below SRP].

Task area. The simulated cockpit chair was placed in the task area shown in Figure 5. A rectangular hardwood platform was erected over the task area to provide a level surface. A semi-circular platform rotatable about the center of the

area provided the base on which the chair, foot rest and other control supports were mounted. This rotatable platform also provided a means to change the orientation of the subject with respect to the photogrammetric system. The camera as positioned in relation to the mirrors covered this entire area (approximately 53 square feet) to a height of 8 feet above the task platform.

Controls and control switch system. The primary controls were simulated using cylindrical handles mounted in such a way as to permit placement and orientation of each control in space according to aircraft design practices. In addition, an event switch system was designed and mounted on all of the controls. Figure 6 shows a typical control assembly system. The control point could be moved forward or backward and up or down easily and could be fixed at any position. Six such units were fabricated. Thus these units can be fixed at any desired location in space, within reach of the subject, above the platform and around the seat. These units represented the following six controls.

- | | | |
|----------|-------------|-------------|
| 1. Stick | 2. Throttle | 3. Panel |
| 4. Hatch | 5. Side Arm | 6. Overhead |

Chronometer. A chronometer positioned in the task area was used to verify the camera speed and also provide information on movement time.

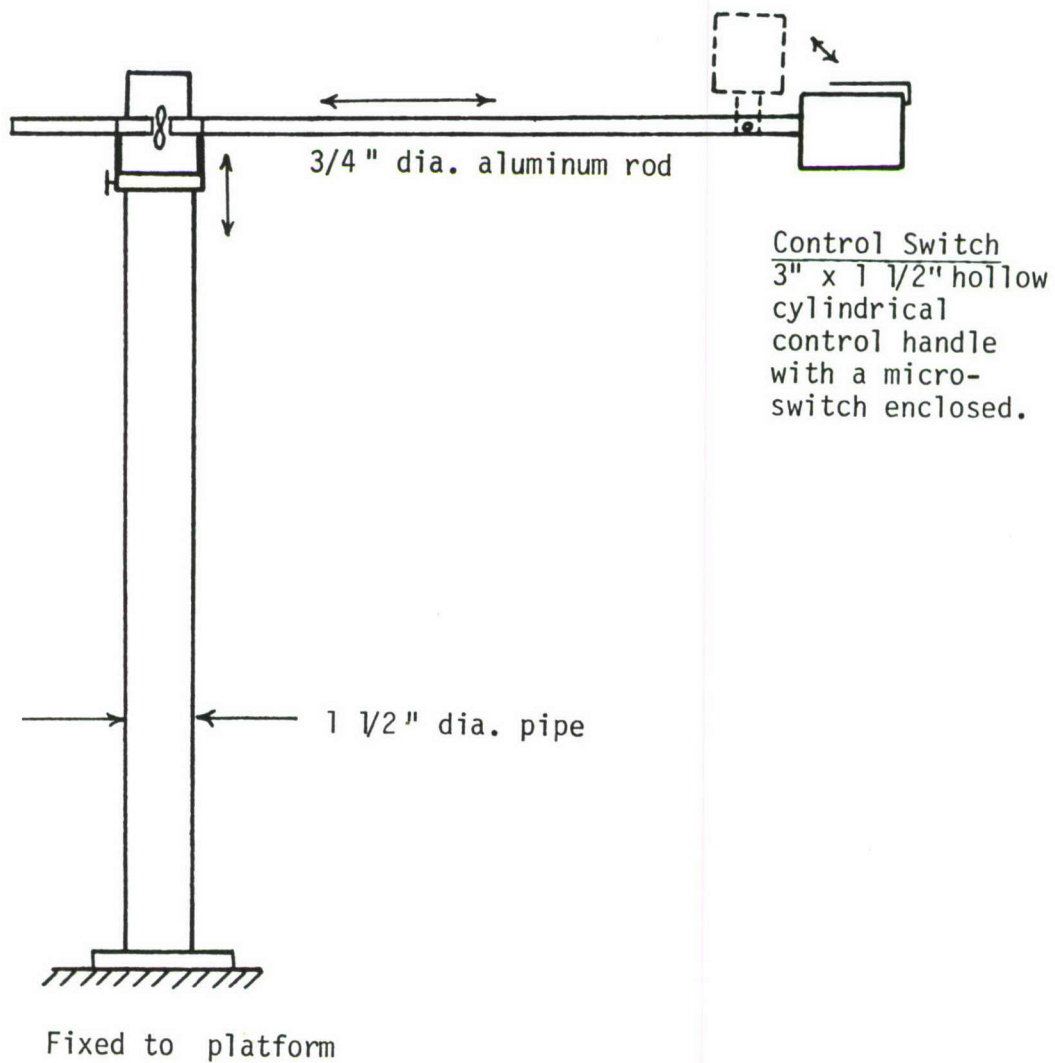


Fig. 6. A typical control assembly

TESTING AND CALIBRATION

Testing the Projection System

The projection system made available at the anthropology unit laboratory of AMRL was tested for its accuracy. The procedure outlined below was adopted for this purpose. A 16"x16" grid pattern of 2" squares was drawn accurately on white paper. The grid was photographed and a glass slide suitable for use with the projector was made. During this process the 16"x16" dimension was reduced to 1 9/16" and the 2" small squares were reduced correspondingly. A suitable slide carrier for the projector was also made. This slide was then projected through the system. Digitizer readings of each intersection of the projected image were recorded. The intersection at the center was taken as origin or (0,0). (See Figure 7 for the digitizer readings.) The X coordinates are noted below and the Y coordinates are noted above the respective intersections. Ideally, the Y coordinates of all points lying on any single horizontal line should be the same and similarly the X coordinates along a vertical line. However, it can be observed that this is not the case. There seems to be some distortion of the image caused by the projection system. Figure 7 also shows the maximum difference observed along any particular line. These differences suggest a systematic error coupled with some random error. The random error could be due solely to "human error," while the systematic error could be due to some distortion in



33

the projection. It was also observed that this systematic error varied with orientation of the focusing lens of the projection. For example, the readings in Figure 7 were obtained with a projected image having the bottom-most line horizontal (note that the difference is only 3 units over its entire length) and the intersection at the center in best focus. It was found that if any one of the vertical lines were to be adjusted for true vertical, an entirely different set of readings was obtained. This suggests some distortion caused by the focusing lens. The maximum error caused by this distortion was 2.23% (appearing in X coordinate of the upper right hand corner, see Figure 7) which was felt to be acceptable for this application. To avoid increase in the errors of the projection system, it was decided that during the analysis of any particular sequence of film, the focusing would not be altered.

Testing the Stereophotogrammetric System

Testing the camera. For purposes of testing the camera for any abnormal distortion, a large grid pattern was used. This was constructed of two plexiglass plates of 5'x5' and 1/4" thick each and glued together. A 2"x2" grid pattern made of 1/32" wide black vinyl tape was placed between the two plexiglass plates. The glass plates were supported by steel frames and a suitable base. This grid pattern was placed about 8' in front of the camera and a set of pictures was

taken. Extreme care was taken to place the grid pattern exactly perpendicular to the focal axis of the camera. An engineer's transit (theodolite) and plumbobs were used to achieve this. Negatives of the pictures taken were carefully examined visually and no distortion could be detected. However when projected through the system some distortion could be noticed. It was believed that this distortion was caused by the projection system and was not in the picture itself. Errors detected here were within the 3% maximum attributable to the projection system. At this point it was concluded that the performance of the camera was satisfactory and no further testing was necessary.

Testing the photogrammetric system. It was also necessary to test the entire photogrammetric system. The following procedure was adopted for this purpose. The semicircular rotatable platform was removed and the grid (mentioned earlier) was placed on the stage as shown in Figure 8. A 9" offset from the center of the stage was chosen because the supporting base for the semicircular platform was mounted at the center of the platform. Again a set of plumbobs was used to align the grid properly with the camera. A check for the placement of the grid was performed by placing a transit in the position of the camera and measuring the angles of eight selected points on the grid as viewed through the mirrors. Four of these points were displaced from the center of the grid at distances of 10"

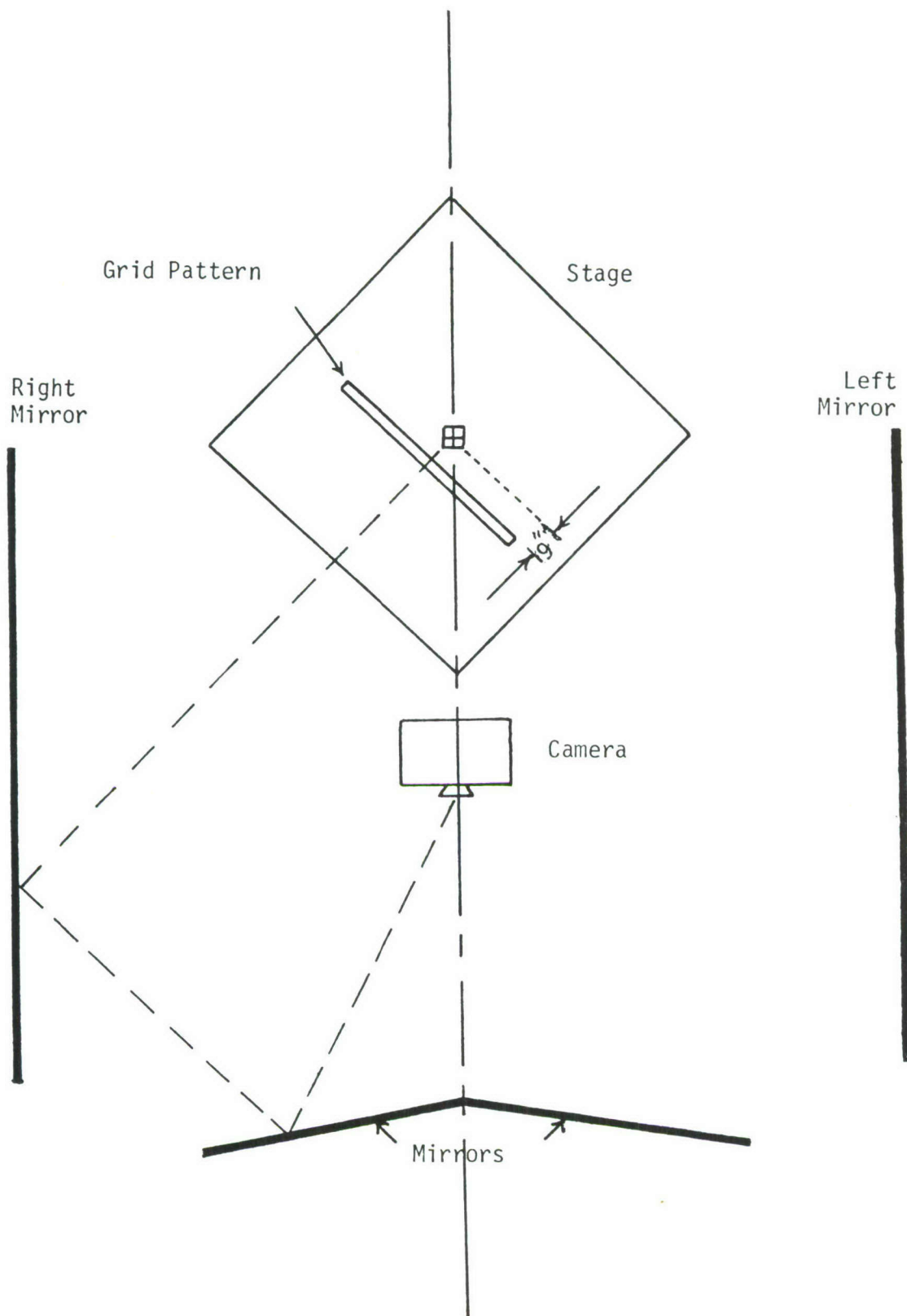


Fig. 8. Set up for Testing the Stereophotogrammetric System

horizontally and vertically and four others at distances of 20" horizontally and vertically. Based on the alignment angles read off the transit, the coordinates of these eight points were computed with the center of the grid as origin. The resulting average error of the system was found to be less than 1.5%, which was considered acceptable for this investigation.

The next step was to take pictures of the grid facing: (i) right side mirror, and (ii) left side mirror. The processed pictures were then projected and digitized using the projection system already tested. In each view, 40 different measurements were made. The lengths varied from 14.14" to 56.56". The average error was found to be less than 0.5" or 2.5%. This level of error is considered acceptable. Again, it must be remembered that the projection system itself is liable to a maximum error of about 2.23%.

On the basis of the above testing procedures, the following relationships were obtained.

(i) The projection system magnification factor is 6.8192. In other words, a length of 0.1466" on the film is magnified to 1" on the screen.

(ii) A length of 10" on the stage is equivalent to about 245 units of the digitizer. This approximate ratio was not used for any computational purposes. Instead, exact computations based on the focal length of the camera lens were used to obtain a ratio between the real world

distances and the distances on film. The projector magnification factor mentioned in (i) above was used further to convert the film distances to digitizer units. (It is known that each digitizer unit is equal to 0.004" on the projector screen).

Subject Placement and Choice of System Coordinates

In principle, orthogonal photogrammetry requires that in order to compute the spatial coordinates of any point its image should be visible in both orthogonal views. In this case it was found impossible to achieve this for all the bodily points that were of interest. In other words, the subject could never be so positioned with respect to the mirrors that all points can be seen in both views of the photograph simultaneously. This is due to interference of the subject's own body and other hardware such as chair and control assemblies with camera view. Hence it was decided that only those points on either the right or the left side of the subject's body be monitored at a time during a movement. Thus, for recording any movement on film the subject was first positioned and oriented such that at least one side of his body was seen entirely in both views of the photograph. After filming once, the platform was rotated 180° so that the other side of the subject's body was visible in both views. Then a second recording of the same movement was made. From these two sets of film a complete record of the movement showing all targets of interest was compiled.

No assurance can be given that the movements were identical in all respects when repeated. However, in the case of a well-trained subject, the deviations can be reasonably assumed to fall within a small range. Also when a number of subjects are considered, then the individual paths of movement would form an "envelope" representing the most likely path.

Figures 9a and 9b show schematically the orientations of the subject with respect to the camera. They also show the relationship between the coordinate axes for the mirror-camera system and the coordinate axes for the subject in both orientations. This relationship was used in the computational procedures to yield results compatible with COMBIMAN input. Markings were made on the fixed platform so that the rotatable platform could be positioned at the same two locations, even after repeated rotations.

As can be seen in Figure 9, positioning the subject as described above yields pictures viewed at an angle of 45° to the subject's mid-sagittal plane. This required certain computational procedures to be performed on the data in order to obtain results in a form compatible with other related research efforts.

Following is the subject's own coordinate system:

- origin -- seat reference point
- x axis -- forward positive, anterior-posterior axis
- y axis -- left positive, transverse axis
- z axis -- up positive, vertical axis

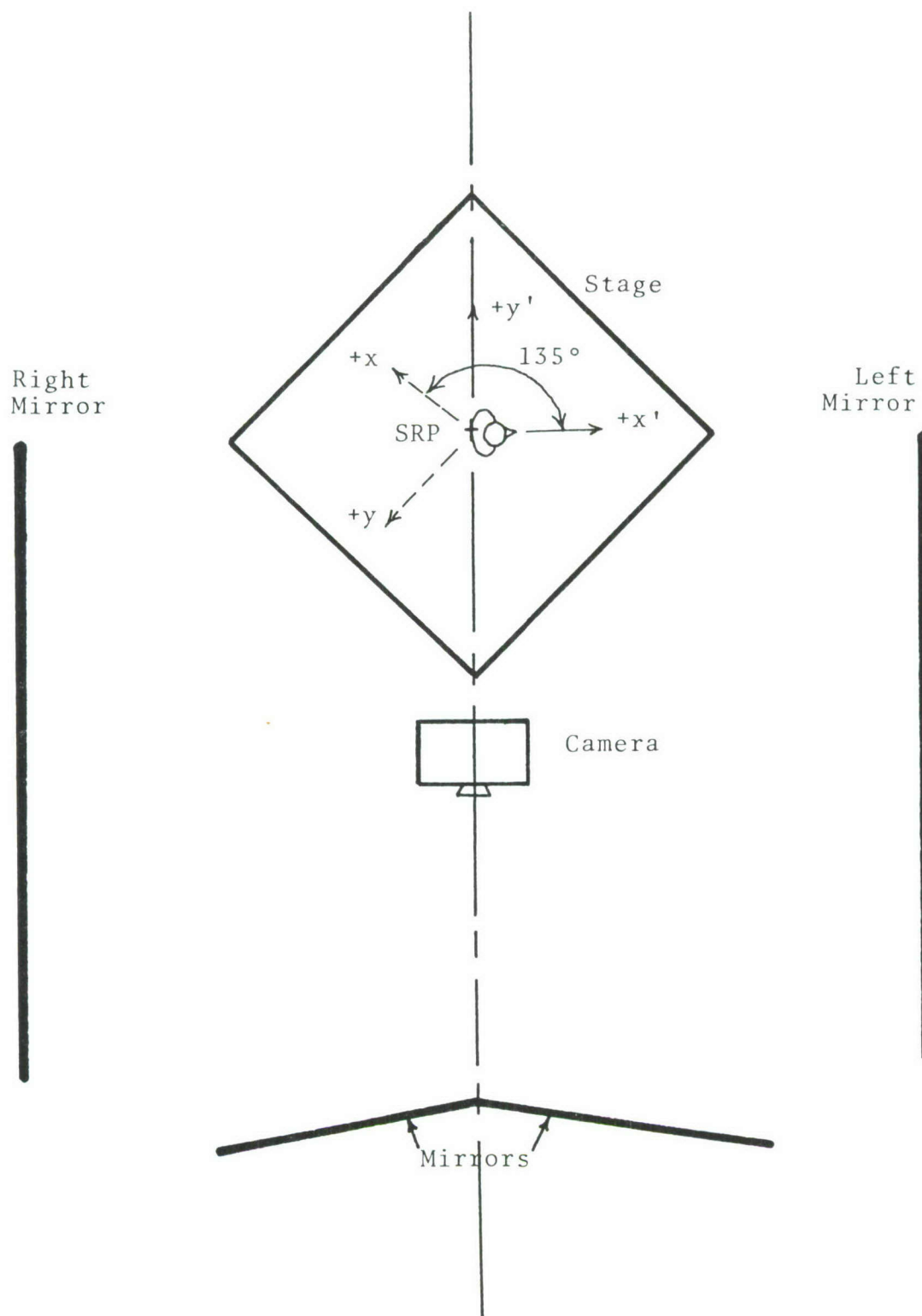


Fig. 9a.

The orientation when subject's right side is toward camera.

x, y Camera-Mirror System Axes
 x', y' Subject's Co-Ordinate System Axes

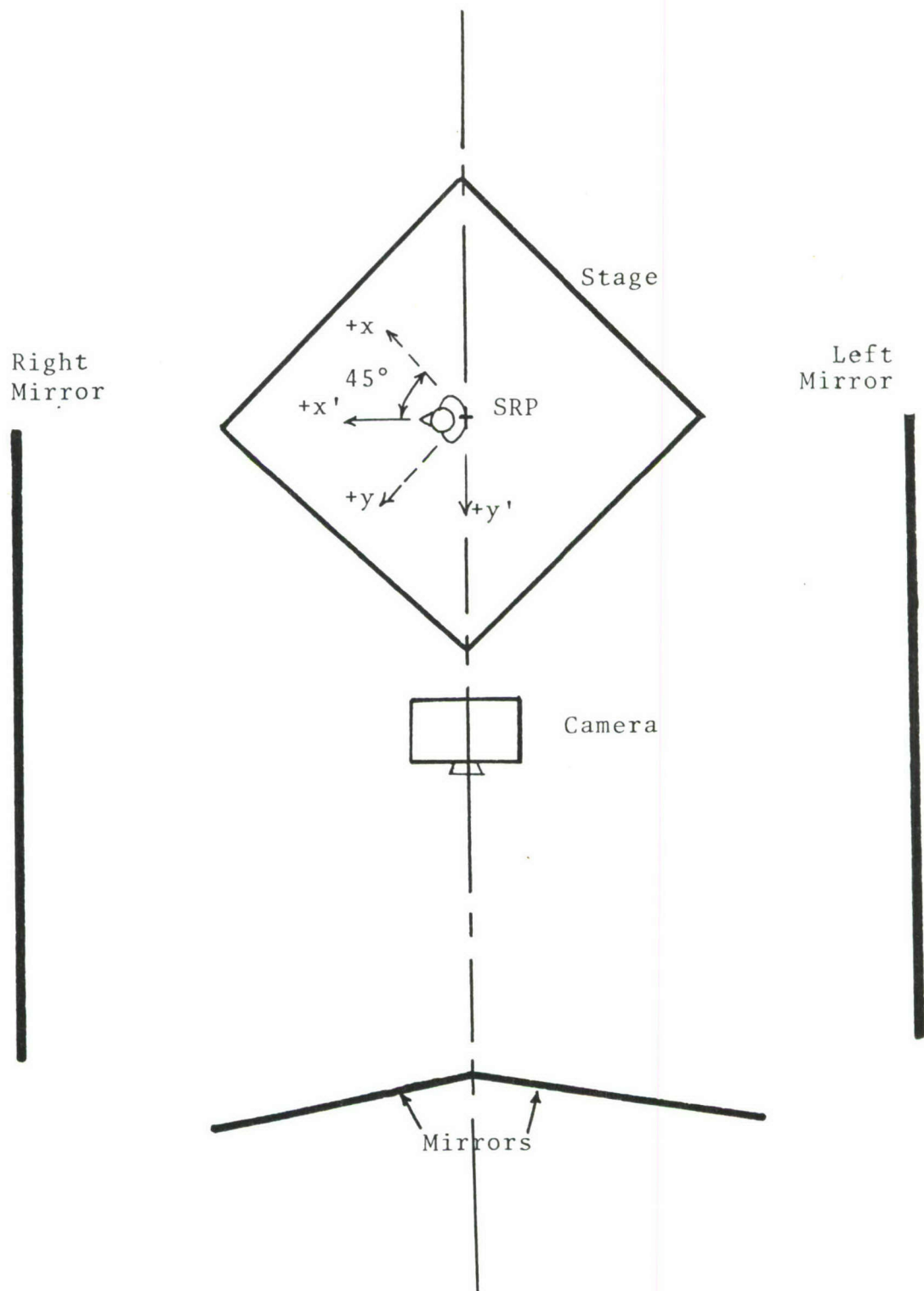


Fig. 9b.

The orientation when subject's left side is toward camera.

x, y Camera-Mirror System Axes
 x', y' Subject's Co-Ordinate System Axes

The coordinates for mirror-camera systems are:

origin -- seat reference point (SRP)

x axis -- view line through right hand side mirror,
away from mirror is positive

y axis -- view line through left hand side mirror,
towards mirror is positive

z axis -- vertical, up is positive

Figure 9 also shows that the two systems of coordinates have common origin and z axis. It is then possible to rotate the mirror-camera system axes about the origin by:

(i) 135° clockwise in the case where the subject's right hand side is toward the camera, or (ii) 45° counterclockwise in the case where the subject's left hand side is toward the camera and obtain the coordinates in terms of the subject's own system of axes.

Since the SRP is not visible in the pictures, a translation of the origin from SRP was also needed for practical reasons. All measurements were taken with an external point as origin. This point had coordinates (6.01, 6.01, 0) with respect to the mirror-camera system of axes. The measurements were then transformed with respect to SRP as the origin. Both the translatory and rotary transformations were carried out at the computational stage.

EXPERIMENTATION AND RECORDING OF MOVEMENTS

The initial step in planning for the experiment involved identifying the following:

1. Seat geometry
2. Controls to be included in the study
3. Movement sequence to be studied
4. Body surface landmarks of interest

Seat Geometry

The subject was seated on the chair without restraints and with both feet resting on the rudder pedals at neutral positions, i.e., 3.5" below and 36.25" in front of SRP (reference). Seat pan was maintained at 6° to horizontal sloping backwards. This is the standard slope of the seat pan provided in most aircraft cockpits in use. However, for back rest, in addition to the standard 13° inclination, two more configurations were chosen. These were 30° and 65° which are typical back rest angles proposed for future conventional and high acceleration cockpits.

Controls

In consultation with the research personnel involved with the COMBIMAN program, the following controls were selected to be considered in this study.

1. Stick control
2. Throttle control
3. Overhead control
4. Panel control
5. Side arm (right) control
6. Hatch release control

Each of the six controls had a different spatial position (with respect to SRP) at the three different back rest angles. These positions are listed in Table 1. Control positions for 13° back angle are standardized and available. In the cases of 30° and 65° back angles, new positions had to be determined. After some trial and error attempts, new positions were chosen on the basis of the following two criteria.

- (i) The controls shall be within the reach envelope of the entire population under consideration.
- (ii) Neither the control nor its supports shall interfere with the anticipated movements and shall, as far as possible, not interfere with camera viewing of the subject.

Movement Sequence

The basic movement for this investigation would originate with one of the upper extremities. For the purposes of this study, a movement is defined as being completed when a hand leaves its initial or starting position, reaches for a specific control (forward movement), and then returns to the starting position (return or reverse movement).

The following two different starting positions were considered in this investigation:

- (a) Right hand on stick and left hand on throttle
- (b) Right hand on side arm and left hand on throttle

TABLE 1
Controller Positions with Respect to
Seat Reference Point in Inches

# Controller	Back Rest Angle		
	13°	30°	65°
1 Stick	12.4 above 20.0 forward in Centerline	15.0 above 20.0 forward In Centerline	Not Applicable
2 Throttle	12.4 above 20.0 forward 10.0 left	12.4 above 18.0 forward 10.0 left	5.0 above 7.0 forward 10.0 left
3 Overhead	47.3 above 0.0 forward 10.0 left	45.0 above 0.0 forward 10.0 left	35.0 above 12.0 rear 10.0 left
4 Panel	23.0 above 24.7 forward 10.0 left	23.0 above 23.0 forward 10.0 left	15.0 above 10.0 forward 10.0 left
5 Side Arm	4.8 above 15.0 forward 13.0 right	4.8 above 13.0 forward 13.0 right	5.0 above 7.0 forward 10.0 right
6 Hatch	23.0 above 12.0 forward 13.0 right	23.0 above 11.0 forward 13.0 right	15.0 above 5.0 rear 13.0 right

When one hand is in motion, the other hand remains at the starting position. One exception to this rule is when the right hand is in motion starting from the control stick. In this case the right hand does not start the movement until the left hand leaves the throttle and takes control of the stick. Also, the movement is completed only when the left hand returns to the throttle after the right hand has taken control of the stick. Thus with this starting position, it is assured that at least one hand is at the stick at all times. Also, starting position "A" is considered irrelevant, at 65° back angle, as the stick was well out of the reach envelope.

Coding System for Movements

In order to identify the movements precisely, a numerical coding system was adopted. A typical code for any movement consists of a four digit number. The left most column would identify the orientation of the subject. The second or next right column would identify the starting position of the hands. The third column would identify the major hand involved in the movement. The fourth column identified the control to which the major hand travels. This coding system is explained in Table 2.

Points of Interest on Human Body

In view of the expected use of the results on this investigation, the following body surface landmarks and/or joints were considered important.

TABLE 2

Movement Coding System

<u>Column #</u>	<u>Code</u>	<u>Description</u>
1	1	Views of Right hand side
	2	Views of Left hand side
2	1	Starting position: R.H. on stick and L.H. on Throttle
	2	Starting position: R.H. on side arm and L.H. on Throttle
3	1	Major movement involves R.H.
	2	Major movement involves L.H.
4	-	Number of control major hand moves to FIRST (From starting position)

Note: A movement is completed only when the hand returns to the starting position identified in Col. 2.

Code Numbers Adopted for Controls

<u>Control #</u>	<u>Control Name</u>
1	Stick
2	Throttle
3	Overhead
4	Panel or Canopy Jettison
5	Side Arm
6	Hatch

1. Nasion. The skin surface point overlying the point on the mid-sagittal plane at the junction of nasal and frontal bones.

2. Cervicale. The skin surface point over the spinous process of the seventh cervical vertebra.

3. Shoulder Joint. In general, the area of attachment and articulation of upper arm with torso. The center of gleno - humeral joint is taken as the center of shoulder joint.

4. Elbow Joint. The joint between upper and forearm. The center of this joint is taken to be the midpoint of a straight line connecting medial epicondyle and radiale.

5. Wrist Joint. The joint between forearm and hand. The center of the joint is taken to be the midpoint of medial lateral axis connecting the styloid processes of ulna and radius.

6. Grip Center. The center of hand grip, which is taken to be the surface (palmar) point lying over III meta-carpal joint.

7. Hip Joint. The area of attachment and articulation of thigh with pelvis. This joint will be represented by the most lateral palpable point on the femoral greater trochanter.

8. Knee Joint. The joint between thigh and lower leg. This joint will be represented by the top most point over the knee of a seated person.

In order to obtain the position of the above landmarks or joint centers during a typical movement, it was decided to

monitor a set of skin surface points on the human body. These skin surface points were identified by attaching suitable targets. Table 3 lists the skin surface points with the corresponding type of target. All skin surface points, except for the knee points, were identified and targets attached while the subject was standing. Knee surface points were located after the subject was seated in order to identify the top most points on right and left knees.

Targets

In order to identify clearly the skin surface points listed in Table 3, two different types of targets were used. The surface target is a simple one, made up of adhesive cloth and vinyl material in black and white and directly attached to the skin.

However, this surface type target could not be used over all the skin landmarks, because during some of the movements, the target was hidden from the camera view. For this reason, it became necessary to employ extension targets at these landmarks.

An extension target consists of a white plastic tube $1/4$ " in diameter and $4\ 1/2$ " long. A black mark $1\ 1/2$ " from one end is made on the tube surface. A piece of foam with double side coated adhesive tape is used to affix the target to the subject. When the target is placed on the body landmark, the free end projects out of the body. With reference to Figure 10, the distance A to B is $1\ 1/2$ " and B to C is 3". When a photograph is made A and B will always be visible since they extend well beyond the body surface. If A and B are seen, then

TABLE 3
List of Skin Surface Landmarks
and the type of Target Used

Point #	Description	Target Type
1.	Nasion	Short* 1:1
2.	Cervicale	Surface
3.	Suprasternale	Short 1:1
4.	Rt. Acromion	Long** 1:2
5.	Lt. Acromion	Long 1:2
6.	Rt. Elbow, Lateral	Short 1:1
7.	Lt. Elbow, Lateral	Short 1:1
8.	Rt. Elbow, Medial	Surface
9.	Lt. Elbow, Medial	Surface
10.	Rt. Wrist, Dorsal	Surface
11.	Lt. Wrist, Dorsal	Surface
12.	Rt. Wrist, Ventral	Surface
13.	Lt. Wrist, Ventral	Surface
14.	Rt. Grip Center, Dorsal	Surface
15.	Lt. Grip Center, Dorsal	Surface
16.	Rt. Grip Center, Palmar	Surface
17.	Lt. Grip Center, Palmar	Surface
18.	Rt. Trochanter	Long 1:2
19.	Lt. Trochanter	Long 1:2
20.	Rt. Knee	Short 1:1
21.	Lt. Knee	Short 1:1

*Short 1:1 refers to 2" long target.

**Long 1:2 refers to 4 1/2" long target.

Double side coated
adhesive tape

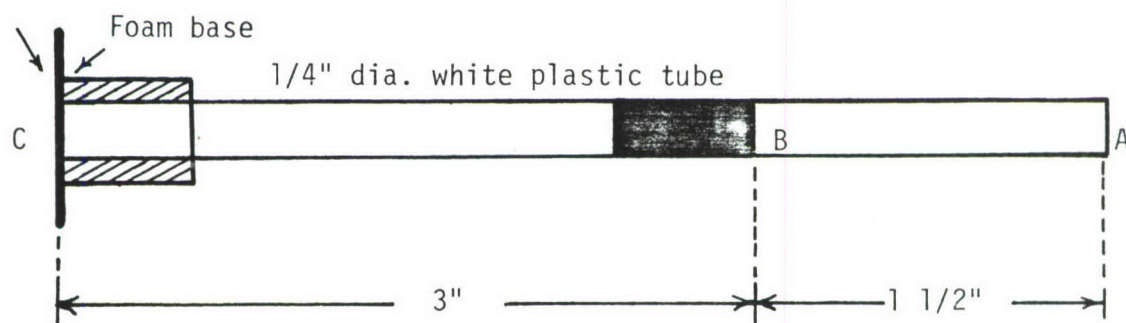


Figure 10. Extension Target (Long 1:2)

C will be along the same vector AB at a distance of 3" from B. This target is identified as a long (1:2 ratio) target. Figure 10 shows a long target and the corresponding dimensions. Table 3 presents the information regarding the locations on the body and the types of targets used. The necessary computational procedures required to determine the surface point location from the information available from extension targets, were incorporated in the computer program.

Subjects

Twenty young, healthy, male volunteer subjects were employed as subjects for this investigation. All were naive subjects and had no aircraft piloting experience. However, the subjects were given enough practice time to acquaint themselves with the location of controls and the movements to be executed. If during the recording of any movement, some fumbling by the subject was noticed by the experimenter, then this particular movement was repeated and re-recorded on film.

All the subjects performed the movements without any of the restraints or encumbrances of normal flight suits. They were nude except for a small brief. Subjects were selected to represent the US Air Force pilot population in height and weight. These and other selected anthropometric dimensions of the subject were measured. The subject anthropometric information is shown in Table 4.

Experimental Procedure

A set of test pictures was made to determine the exact

TABLE 4

ANTHROPOMETRIC MEASUREMENTS OF SUBJECTS

I.D. #		Subject Number						
		1	2	3	4	5	6	7
		03	04	05	06	07	08	09
Age	years	19	26	23	21	21	20	20
Stature	inches	67.01	69.21	69.33	71.81	71.73	68.54	67.84
Weight	lbs.	130.07	154.21	172.14	184.47	190.53	121.59	134.80
Sitting height	inches	32.24	33.74	34.96	35.95	35.79	36.50	36.34
Sitting knee height	inches	20.95	21.45	21.93	22.28	22.17	20.47	20.83
Sitting acromial ht.	inches	20.55	22.01	22.48	23.31	24.09	23.90	24.53
Shoulder-elbow length	inches	14.45	15.28	14.88	15.00	14.88	13.78	13.47
Buttock-knee length	inches	22.91	24.06	23.43	24.96	24.29	21.73	21.18
Acromion-radiale length	inches	13.66	14.09	13.50	13.94	14.21	13.35	12.60
Radiale-stylion length	inches	9.96	10.28	9.84	10.67	10.35	9.76	10.08
Forearm grip length	inches	14.33	14.29	13.70	14.69	14.17	13.82	14.09
Bi-acromion breadth	inches	15.83	15.28	16.69	15.51	16.06	15.24	13.82

Note: I.D. # refers to the identification number used during filming.

TABLE 4 (Continued)
ANTHROPOMETRIC MEASUREMENTS OF SUBJECTS

I.D. #		Subject Number							
		8	9	10	11	12	13	14	16
Age	years	21	21	21	21	21	18	19	
Stature	inches	71.50	75.63	66.61	64.53	74.61	72.44	69.69	
Weight	lbs.	192.18	223.46	176.87	132.49	199.78	160.24	165.53	
Sitting height	inches	35.39	36.50	34.17	33.78	36.58	35.47	35.00	
Sitting knee height	inches	22.56	24.37	20.32	18.86	23.54	22.91	21.89	
Sitting acromial ht.	inches	22.84	24.09	22.09	23.62	23.86	21.61	22.32	
Shoulder-elbow length	inches	15.20	15.20	13.07	13.07	15.91	15.35	14.29	
Buttock-knee length	inches	24.57	26.97	23.31	21.46	26.61	25.71	24.37	
Acromion-radiale length	inches	14.17	14.45	12.17	11.97	14.45	13.94	13.19	
Radiale-stylion length	inches	10.63	11.34	9.92	9.29	11.18	10.91	9.96	
Forearm grip length	inches	14.84.	15.43	13.94	12.95	16.02	14.80	14.61	
Bi-acromion breadth	inches	16.30	17.01	15.63	13.62	15.16	15.35	16.14	

NOTE: I.D. # refers to the identification number used during filming.

TABLE 4 (Continued)
ANTHROPOMETRIC MEASUREMENTS OF SUBJECTS

	I.D. #		Subject Number							
			15	16	17	18	19	20	20	02
Age		years	21	22	20	20	22	22		
Stature		inches	68.82	73.98	71.54	74.21	67.91	70.55		
Weight		lbs.	164.98	193.50	169.27	288.55	132.49	169.93		
Sitting height		inches	34.21	36.85	36.26	37.60	34.76	34.80		
Sitting knee height		inches	20.95	23.62	21.73	23.54	20.95	22.48		
Sitting acromial ht.		inches	21.26	23.35	23.27	25.35	22.36	22.56		
Shoulder-elbow length		inches	14.21	15.55	15.00	15.75	13.98	14.76		
Buttock-knee length		inches	23.94	25.00	24.61	26.22	22.28	25.12		
Acromion-radiale length		inches	12.80	14.13	13.86	14.21	13.23	13.78		
Radiale-stylion length		inches	9.69	11.10	10.55	11.42	9.88	11.38		
Forearm grip length		inches	13.86	15.55	14.17	15.67	13.82	15.71		
Bi-acromion breadth		inches	16.65	17.24	16.22	16.34	15.00	16.18		

NOTE: I.D.# refers to the identification number used during filming.

camera setting for optimum negative quality. Based on this, the following settings were used throughout this study: $f/8.0$, $1/30$ sec. and 10 frames/sec. The following procedure was followed in recording the movements on film.

The above settings were checked before any series of pictures were taken. Focusing and alignment of the camera were also checked prior to any series. A large dial chronometer (1 division= $1/100$ sec.) and a wooden frame carrying plastic numbers of the movement code and the subject number were placed within the task area so that they were visible in the photograph.

When the subject arrived at the laboratory, he was advised about the procedure to be followed, the aim of the experiment, and his duties in detail. Then he filled out a questionnaire of personal information. After this, the subject was told to remove all his clothing except a small brief. All the relevant skin surface points (such as acromion, radiale, etc.) were identified by palpating and an X mark was made using a marking pen on each of these locations.

Next, all the necessary anthropometric dimensions were measured using an anthropometer and calipers. These measurements were immediately recorded. The targets were then attached on the surface of his body at proper locations.

The rotatable platform was properly positioned and the chair was adjusted to proper back angle. Then the subject was seated centrally on the chair with his buttocks all the way

back to the backrest. He was also told to plant his feet firmly on the foot rest with the in-steps of his shoes on rudder controls. He was told to sit straight at all times and not to slump forward or sideways, except when necessary to accomplish a movement.

Next the controllers were adjusted to the proper positions. The subject was then permitted to practice some movements and acquaint himself with the orientation and position of each of the controls. He was also told to perform these movements at his "natural" speed. As mentioned earlier, enough practice time was allowed for the subject to attain familiarity with the task.

Meanwhile, the camera and strobe system were made ready for filming. Recording the movement on film was accomplished automatically whenever the subject moved his hand away from the starting position. This was achieved by means of proper electrical circuits connecting controller switches and the camera. Illumination in the room was kept at a low level so that the negatives would not show any "blurs" due to residual lighting. Each subject performed a total of 60 movements. During filming, the subject had a number of rest breaks while seated on the chair. These were the periods required to make the necessary adjustments for each back angle and to reload the camera. On the average, it was found that a subject spent about 3 hours in the laboratory to complete the entire sequence of movement recording.

The sequence of movement for a given back angle and subject orientation was determined randomly. For a subject, the sequence of back angles was also determined randomly. Figures 11A through 11X show, at intervals of one-tenth of a second, the sequence of motion as recorded for a typical movement involving both right and left hands. Figures 11A to 11M show the forward phase and 11N to 11X show the return phase of the movement.

Data Extraction and Computations

Exposed film rolls containing records of subject movement were processed at the Technical Photo Service at Wright-Patterson Air Force Base. Negatives were directly used in the projection and digitizing system described earlier (Section 3.3) to obtain the x, y, z coordinates of selected landmarks. A number of paid student volunteers were employed to carry out this phase of the study. In order to decrease the individual variations in data extraction practices, each student was trained for at least one week using a standardized procedure. At this stage of the investigation, two additional body landmarks or points were added to the list of the 21 landmarks mentioned in Table 3. For simplicity, they were called shoulder centers, but in reality being the locations of right and left gleno-humeral joint centers, as estimated to the best ability of the digitizer operator. A number of sketches of human

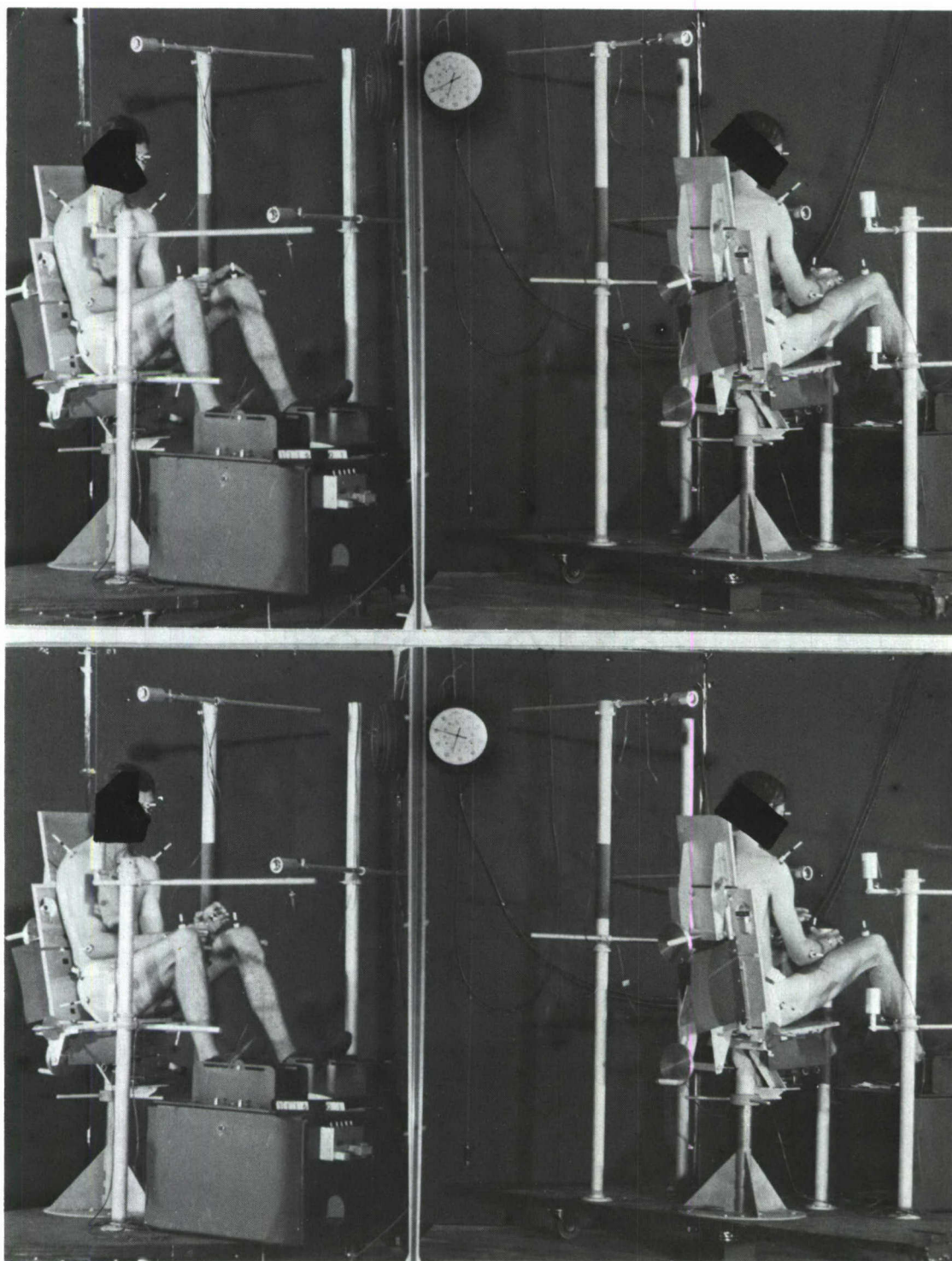
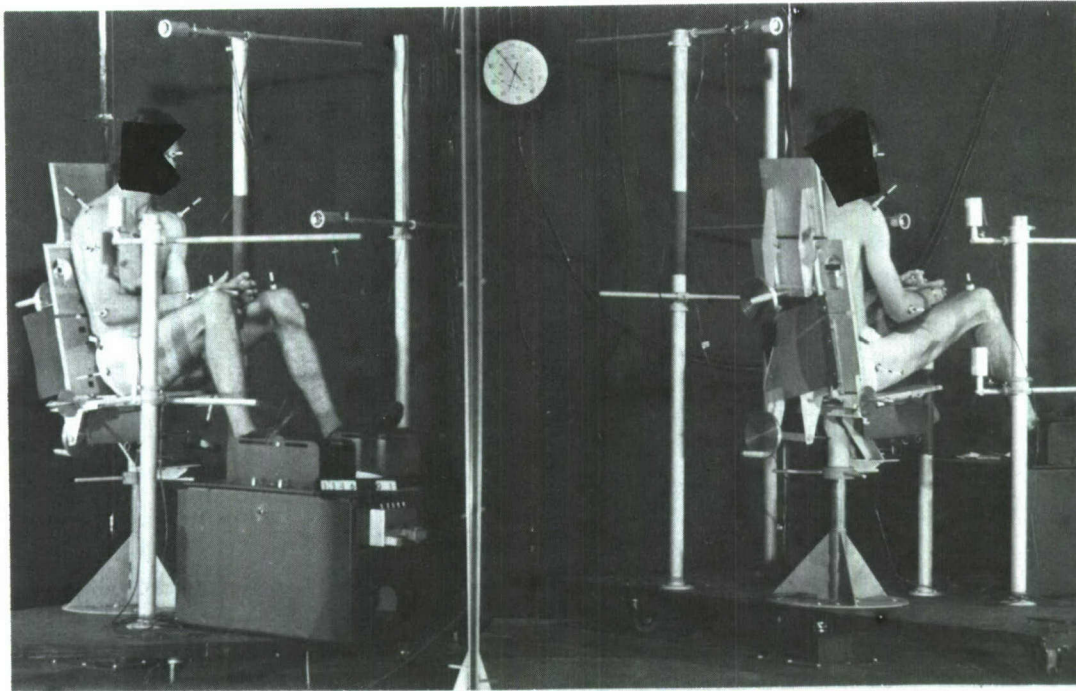


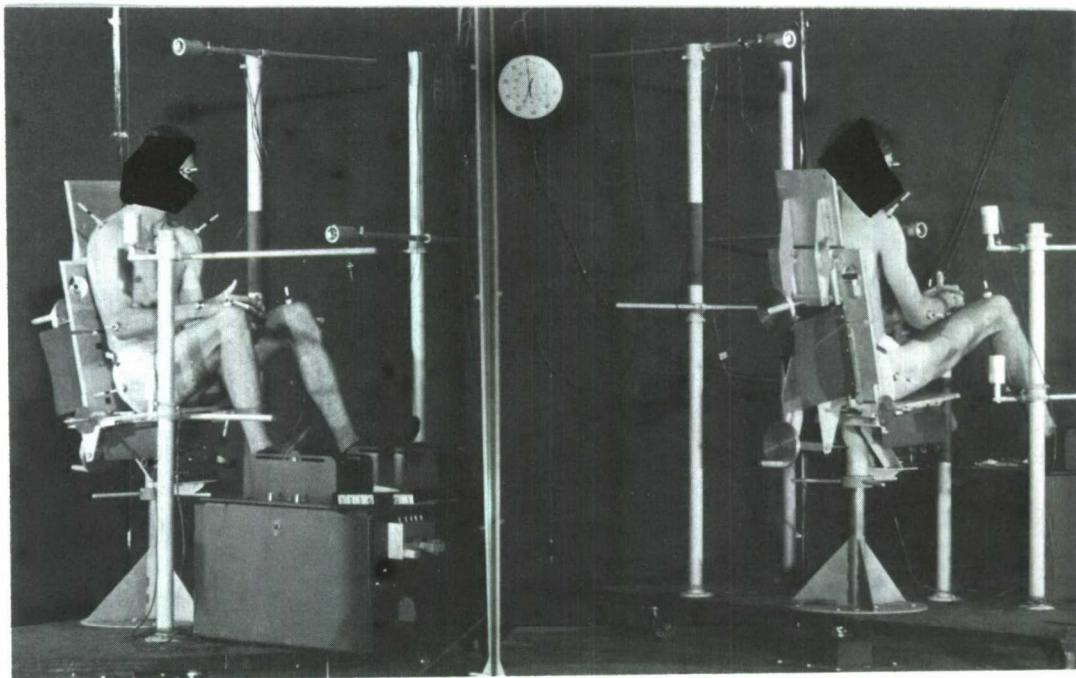
Fig. 11 A typical movement sequence

A - Forward Phase, 0.1 sec. after start

B - Forward Phase, 0.2 sec. after start



C

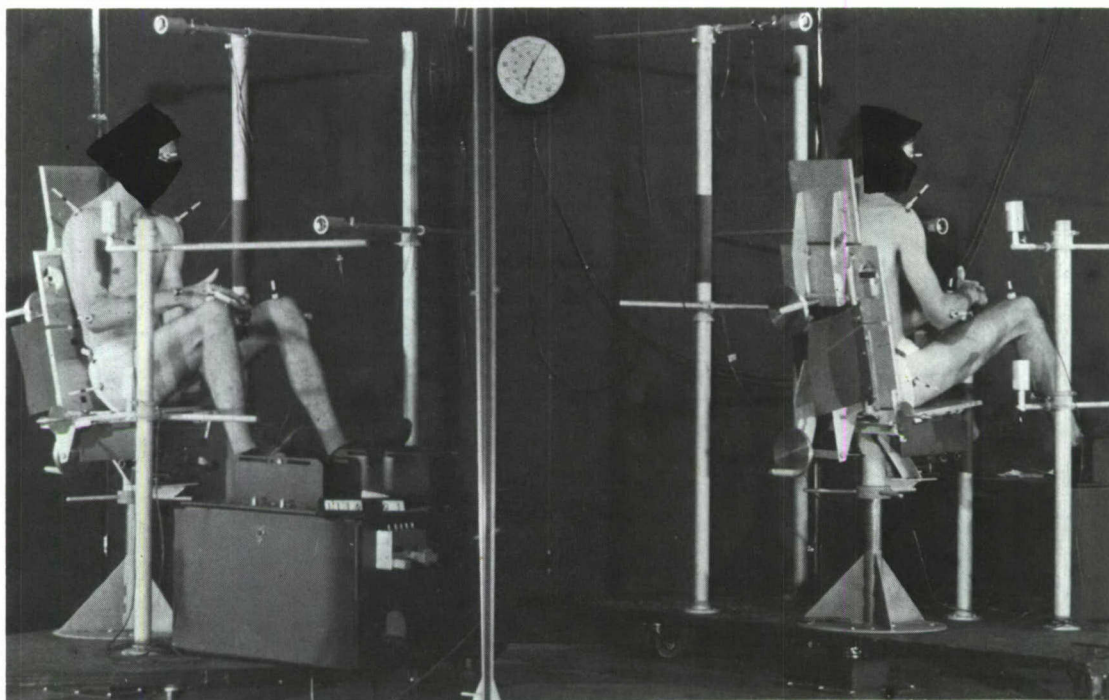


D

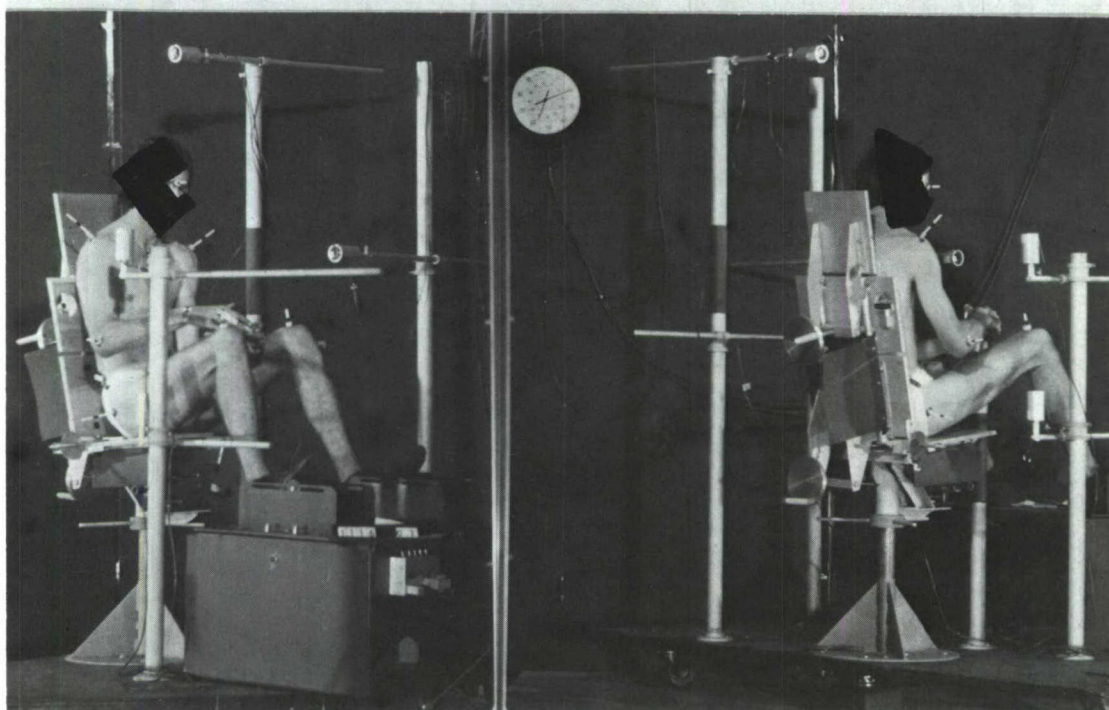
Fig. 11 (continued) A typical movement sequence

C - Forward Phase, 0.3 sec. after start

D - Forward Phase, 0.4 sec. after start



E

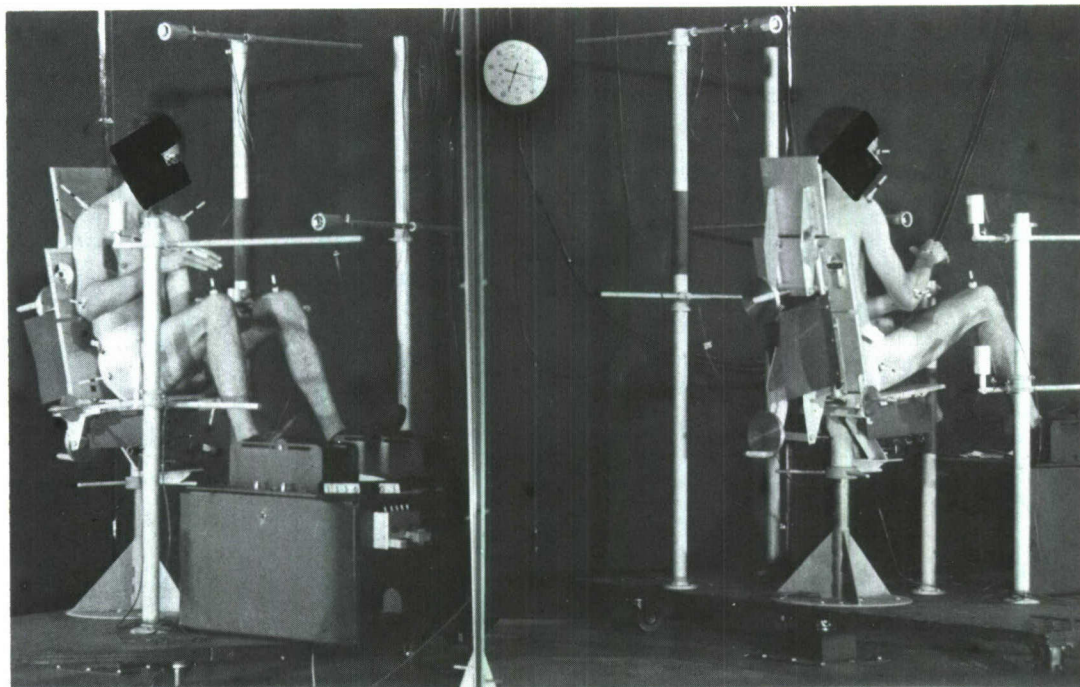


F

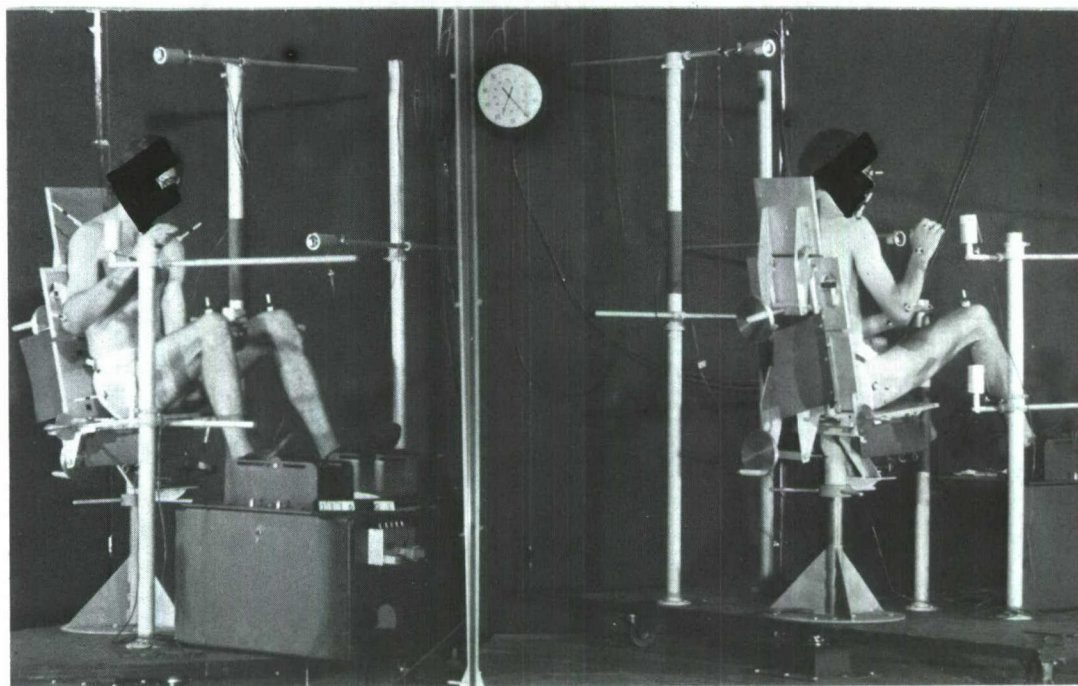
Fig. 11 (continued) A typical movement sequence

E - Forward Phase, 0.5 sec. after start

F - Forward Phase, 0.6 sec. after start



G

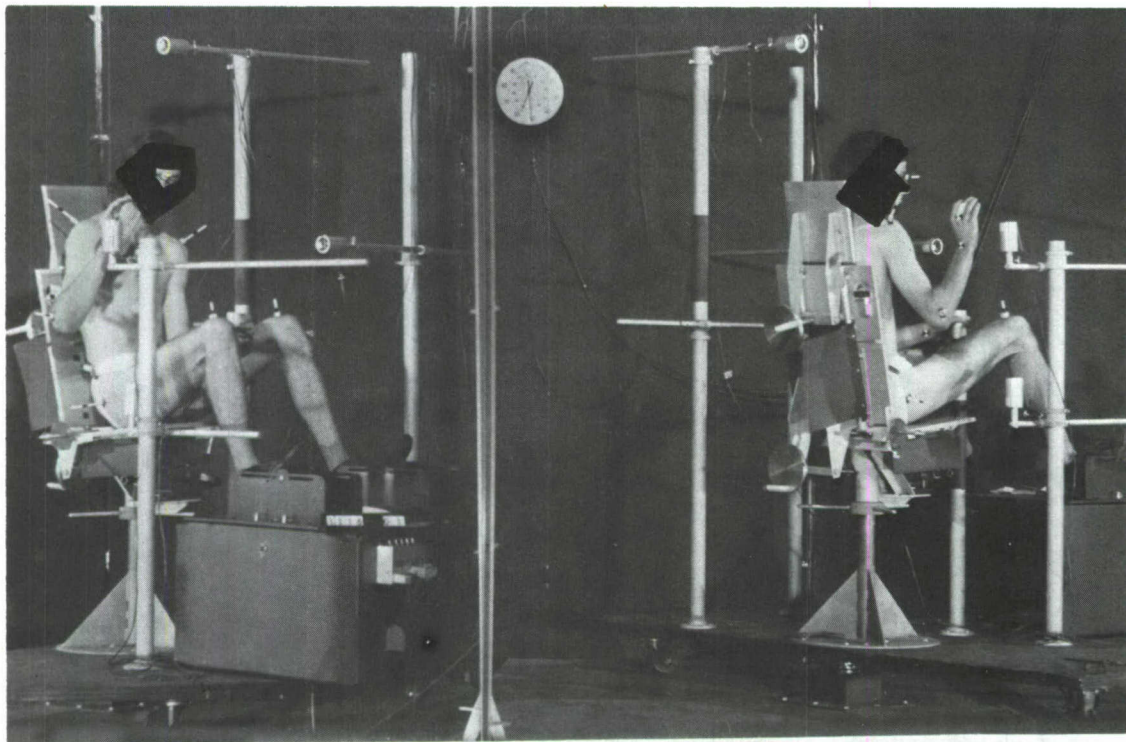


H

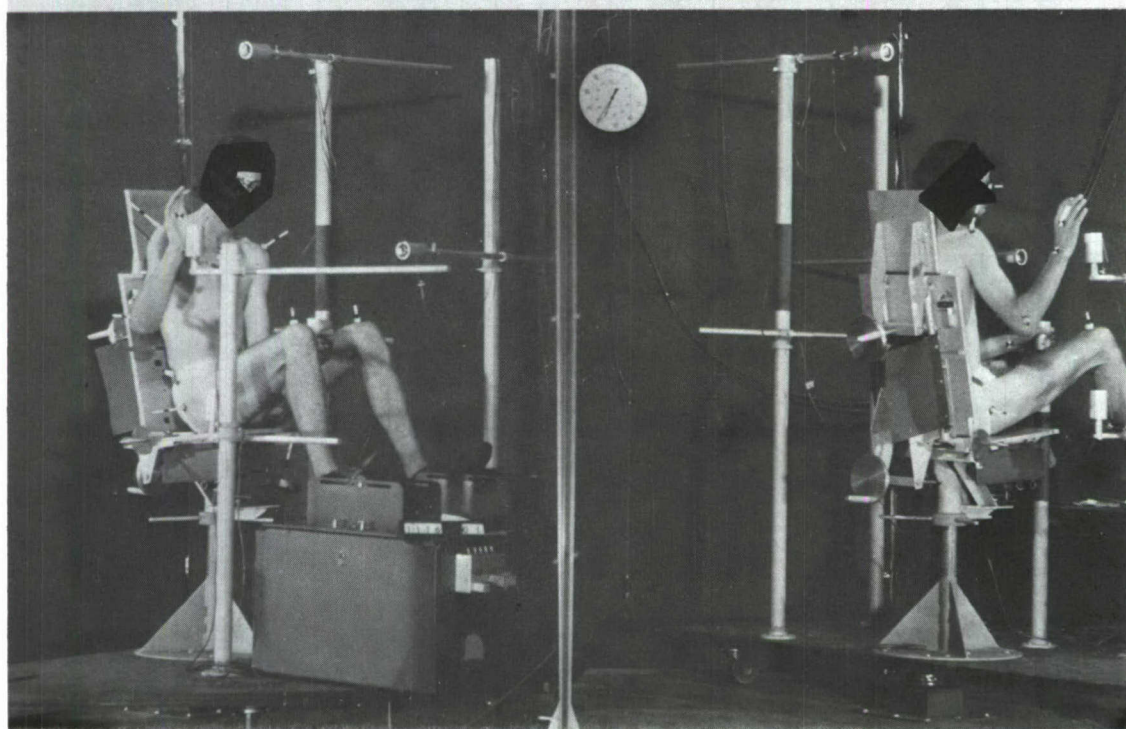
Fig. 11 (continued) A typical movement sequence

G - Forward Phase, 0.7 sec. after start

H - Forward Phase, -0.8 sec. after start



I

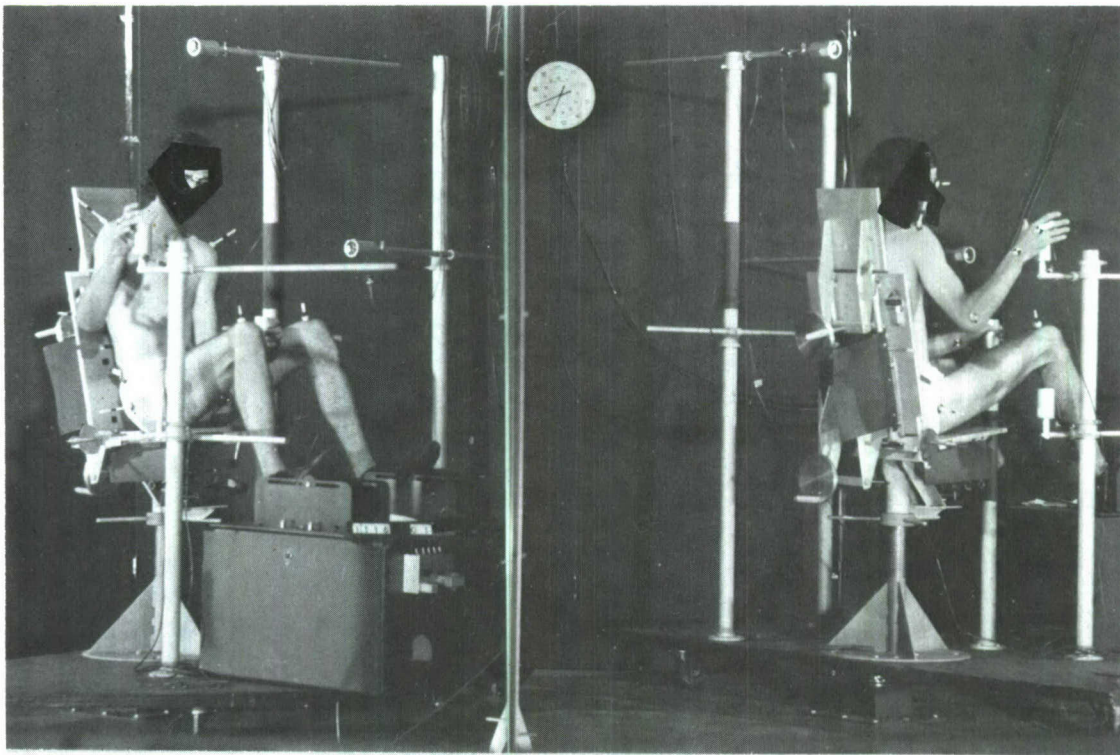


J

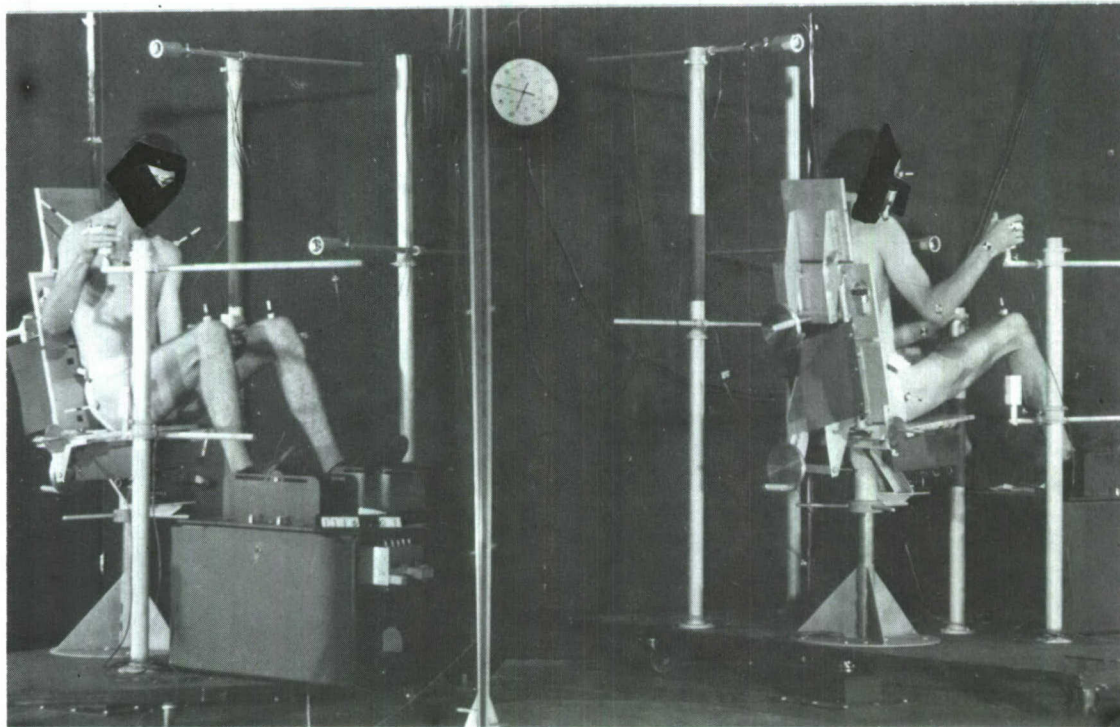
Fig. 11 (continued) A typical movement sequence

I - Forward Phase, 0.9 sec. after start

J - Forward Phase, 1.0 sec. after start



K



L

Fig. 11 (continued) A typical movement sequence

K - Forward Phase, 1.1 sec. after start

L - Forward Phase, 1.2 sec. after start

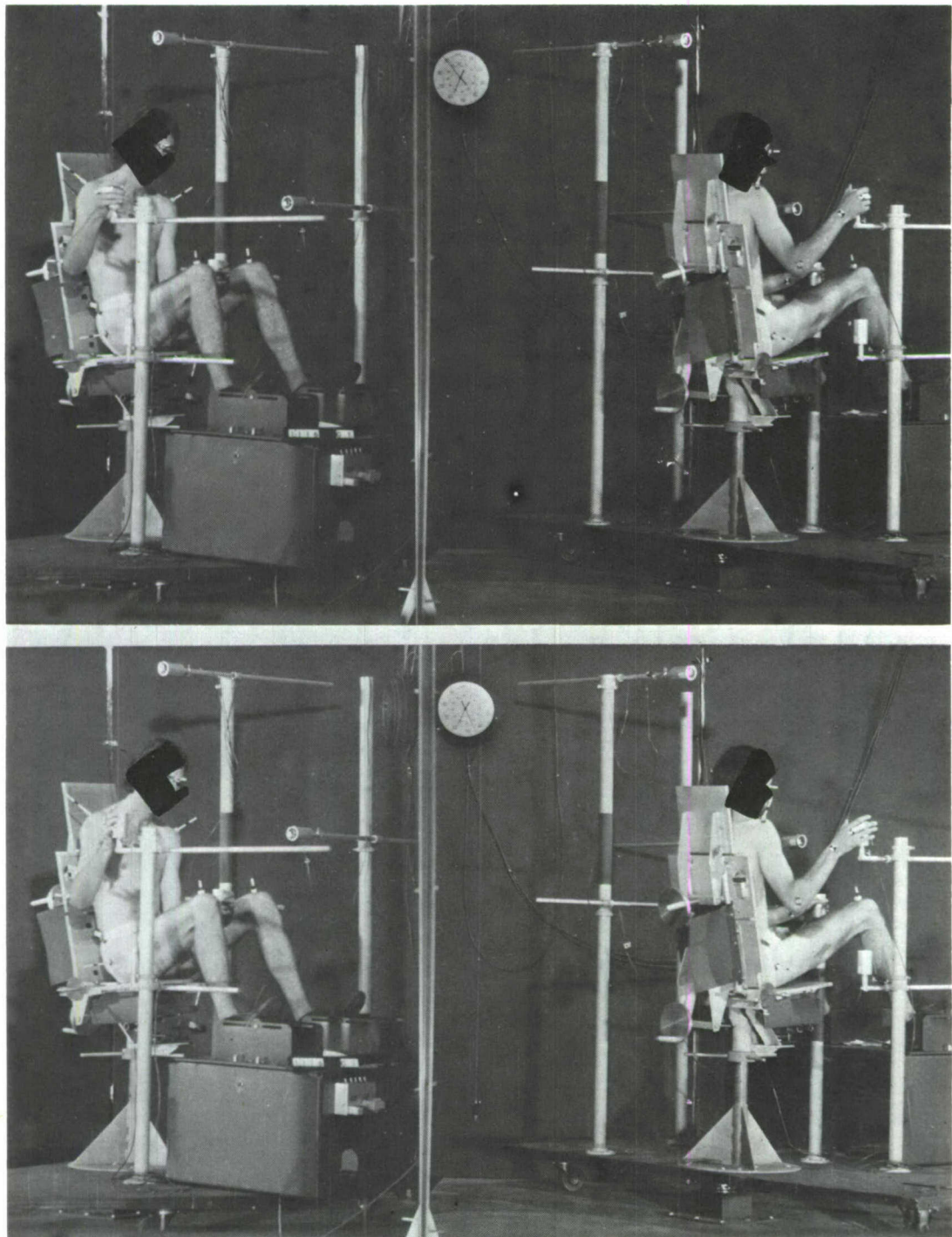
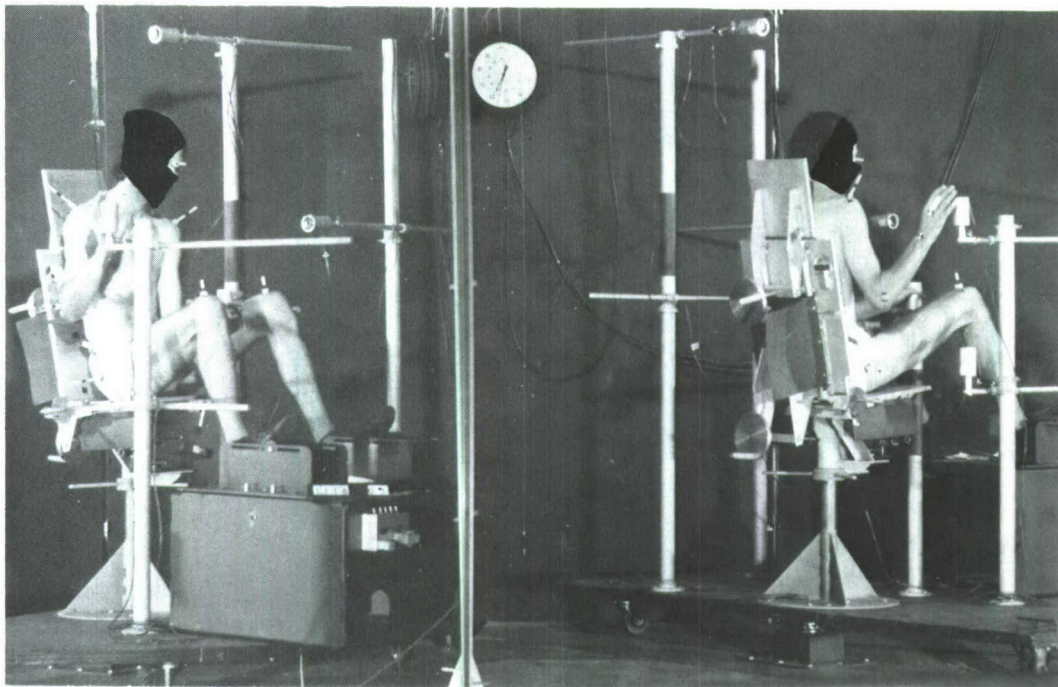


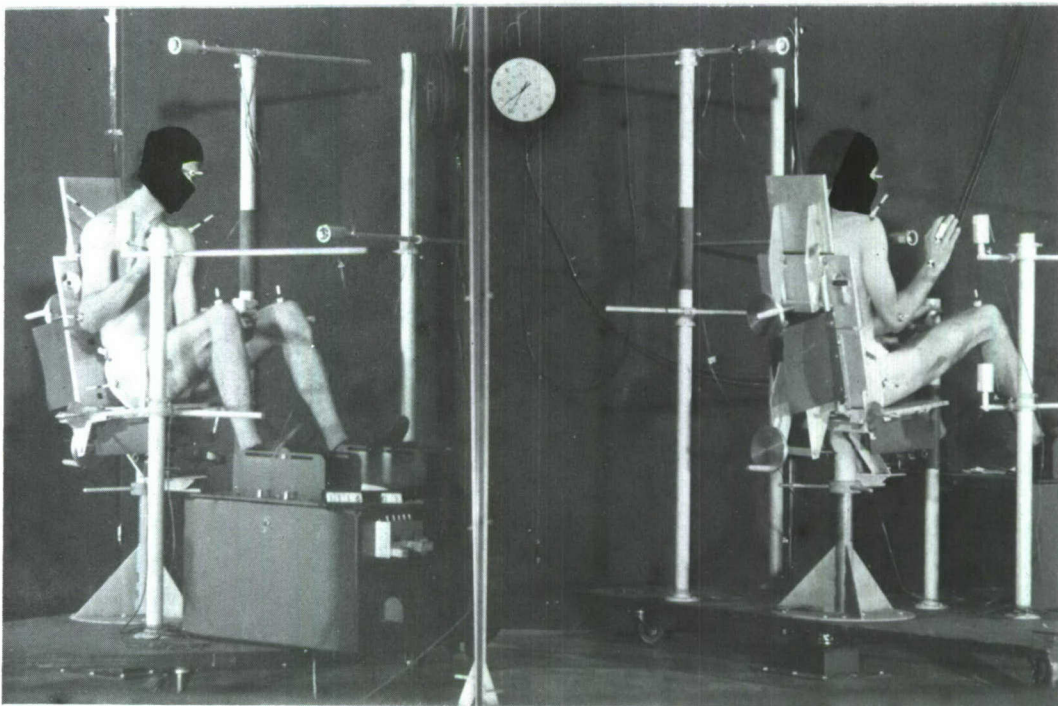
Fig. 11 (continued) A typical movement sequence

M - Forward Phase, 1.3 sec. after start

N - Return Phase, 0.1 sec. after start of
return movement



0

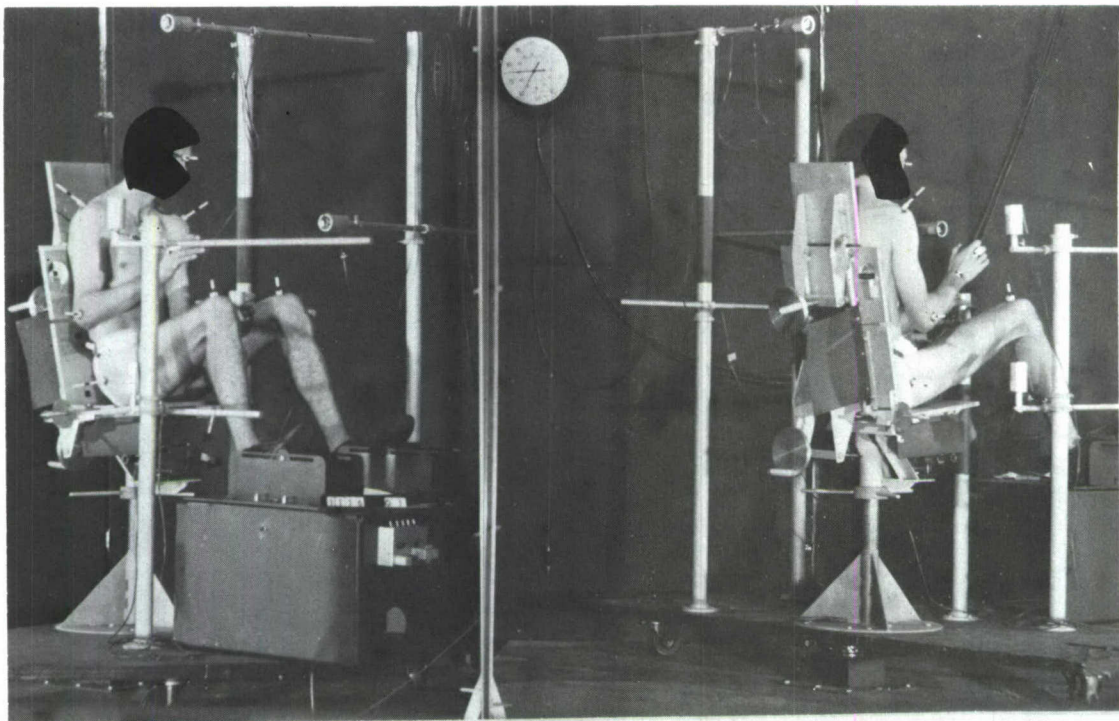


P

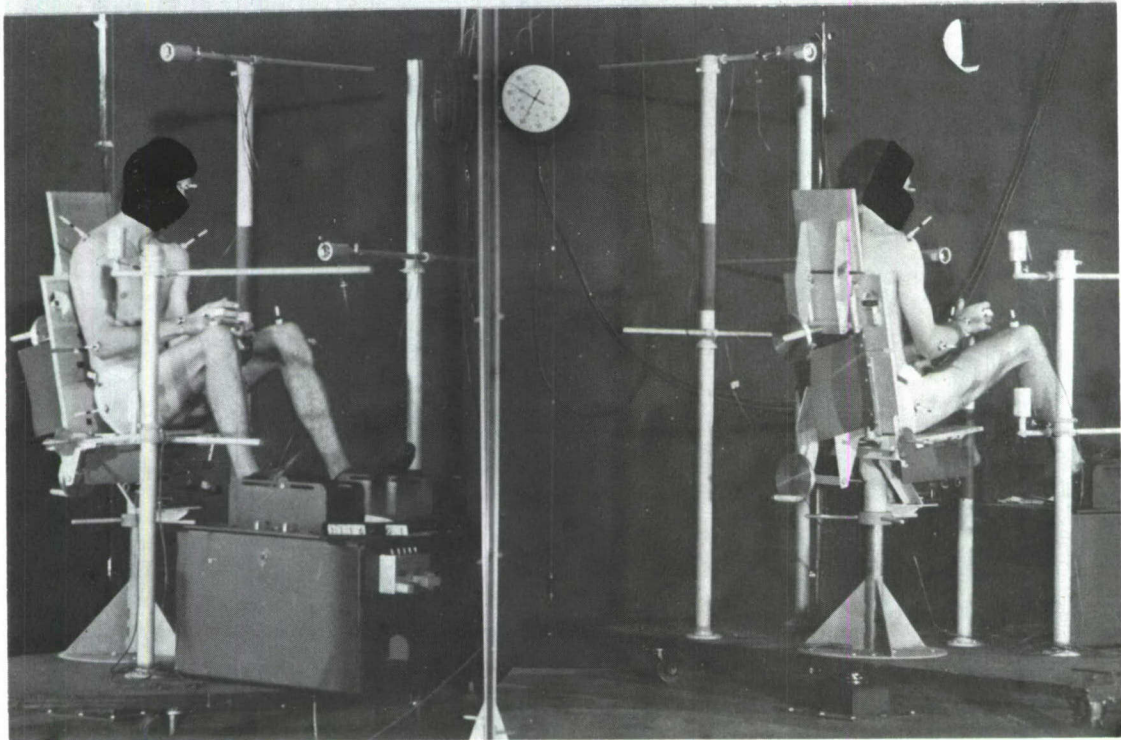
Fig. 11 (continued) A typical movement sequence

0 - Return Phase, 0.2 sec. after start

P - Return Phase, 0.3 sec. after start



Q

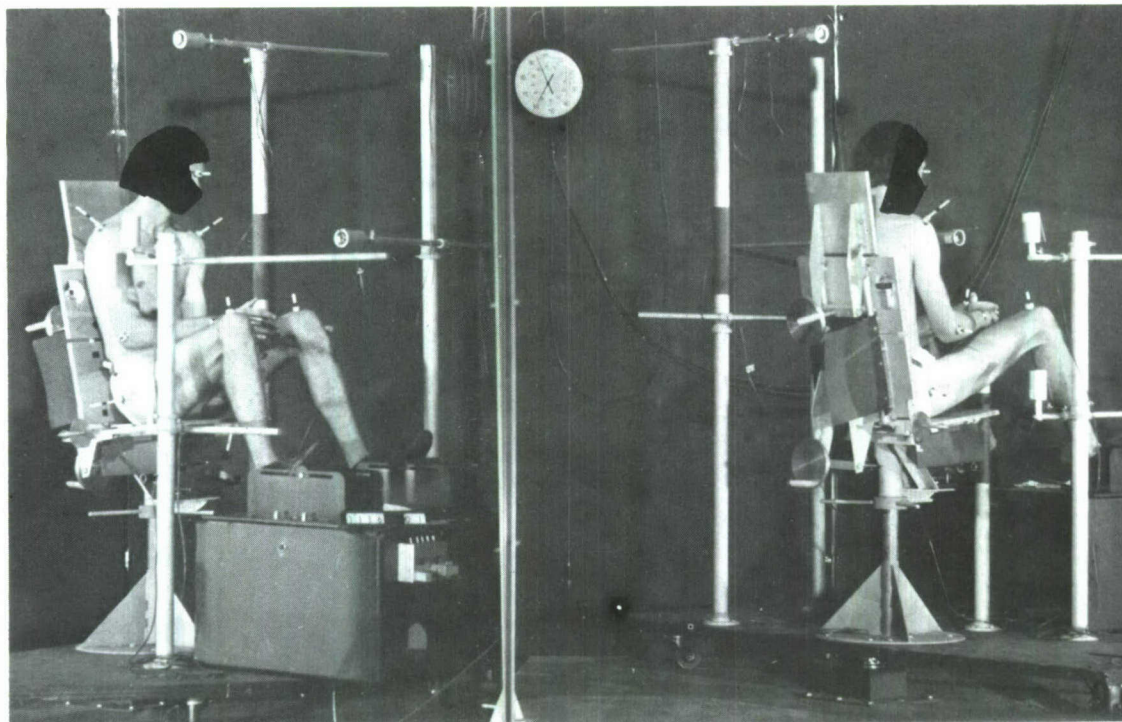


R

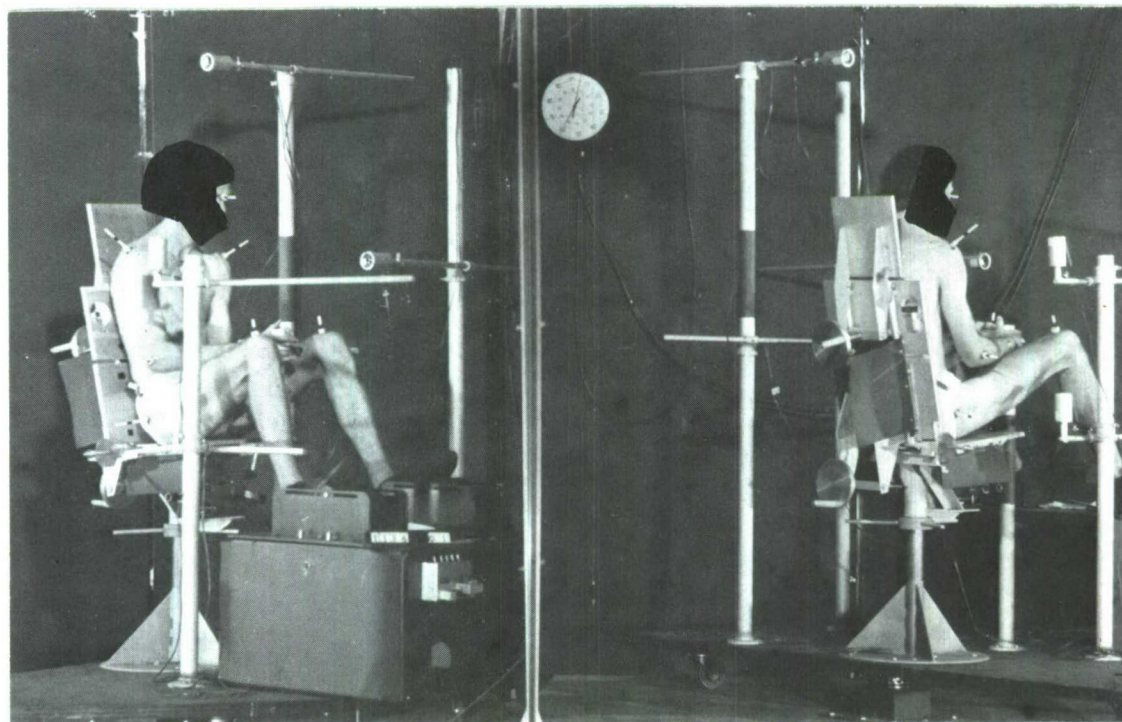
Fig. 11 (continued) A typical movement sequence

Q - Return Phase, 0.4 sec. after start

R - Return Phase, 0.5 sec. after start



S

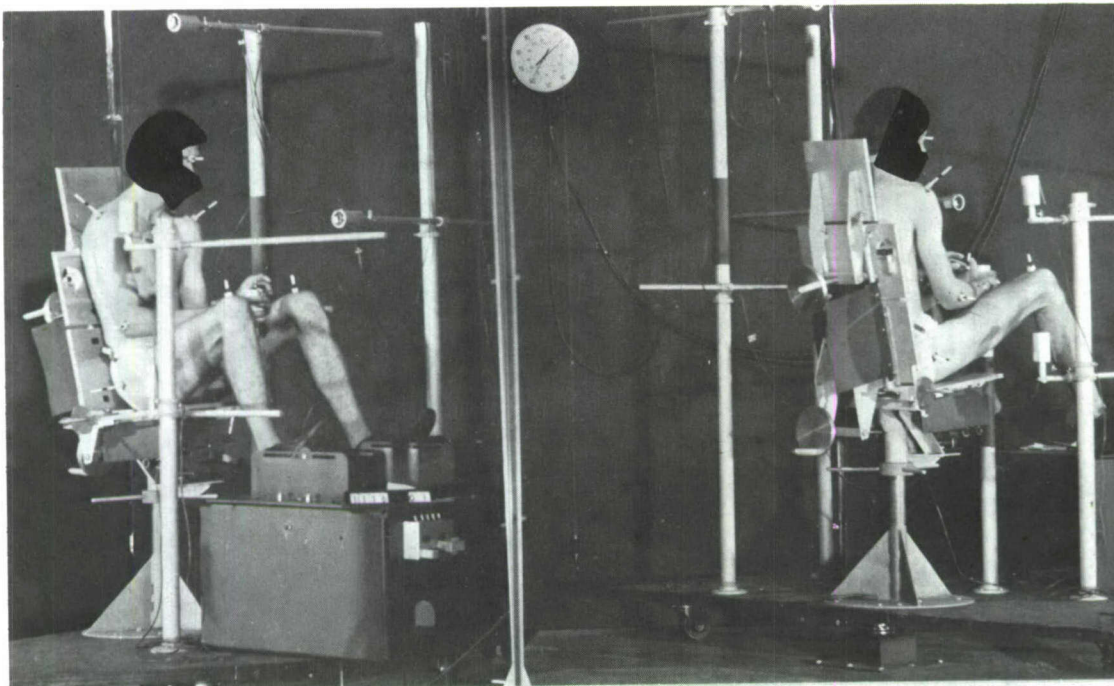


T

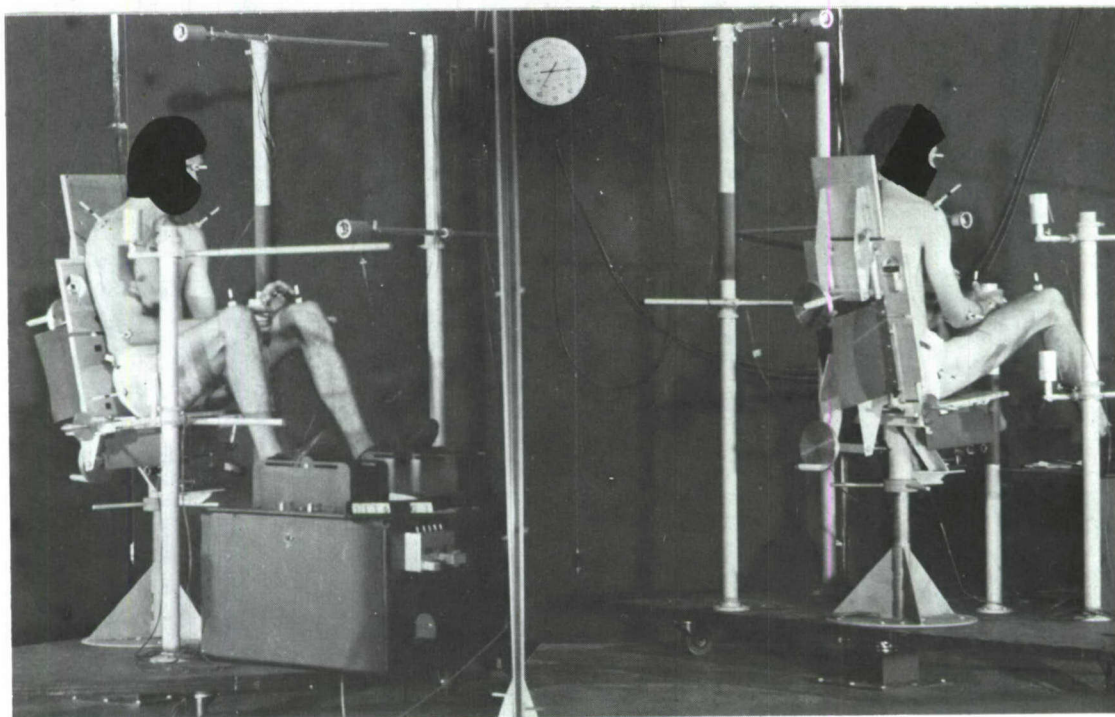
Fig. 11 (continued) A typical movement sequence

S - Return Phase, 0.6 sec. after start

T - Return Phase, 0.7 sec. after start



U

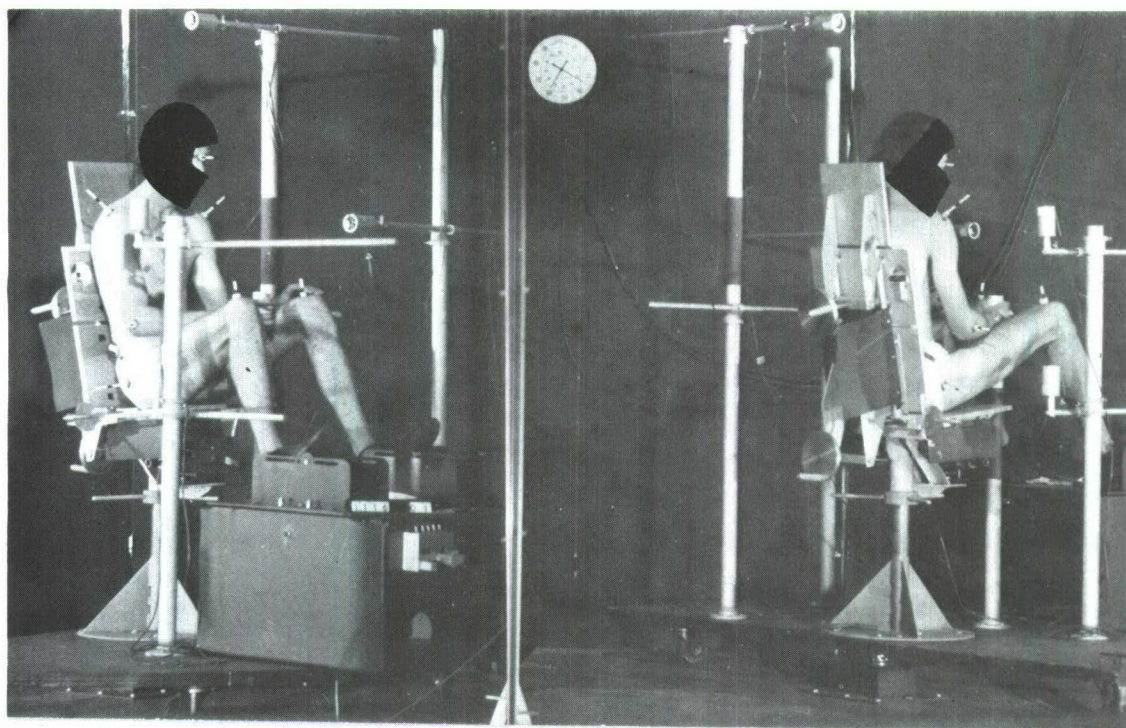


V

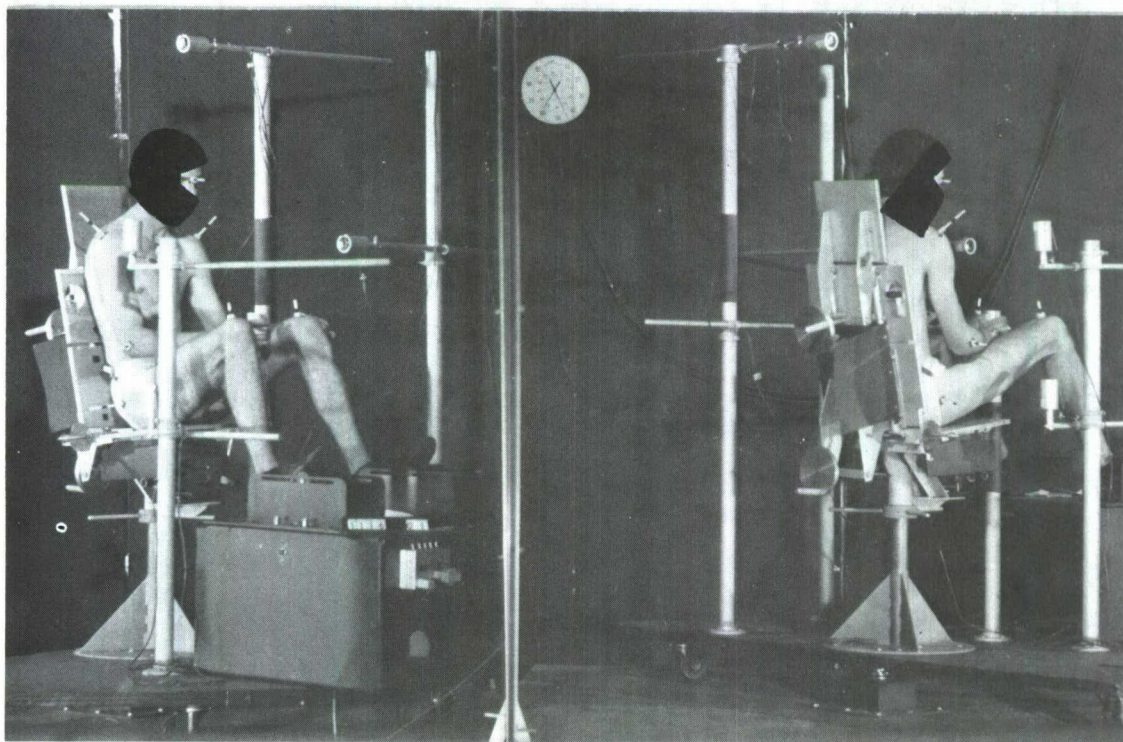
Fig. 11 (continued) A typical movement sequence

U - Return Phase, 0.8 sec. after start

V - Return Phase, 0.9 sec. after start



W



X

Fig. 11 (continued) A typical movement sequence

W - Return Phase, 1.0 sec. after start

X - Return Phase, completion after 1.1 sec. after start

body showing different upper extremity configurations with locations of shoulder centers marked were made available to the digitizer operators to help in making good and uniform estimates.

The information output from the digitizer was first converted, wherever necessary, to correspond to skin surface points. This procedure was necessary for all points marked by extension type targets. The next step was to convert the digitizer measurements into real-world measurements or coordinates with a known system of axes. The final step was to convert the measurements thus obtained into coordinates of specific body points in relation to the standard system with SRP as origin. The computer program written in FØRTRAN language to carryout the above computations is reported in Appendix A.

RESULTS

The results presented in the following sections are based on data gathered from only 7 of the 20 subjects used. This decision was made after it became apparent that analyzing the data from 20 subjects would be an unusually large task requiring more data extraction time than was available. These seven subjects (about one-third of the original sample size) were chosen based on their weight and stature to represent, as closely as possible, the U.S. Air Force population. The relevant anthropometric characteristics of these seven subjects are shown in Table 4 (subject numbers 1 through 7).

A comparison of the means and standard deviations of these anthropometric measurements of the seven subjects with those of the student/pilot population of the Air Force as determined in 1967 is presented in Table 5.

A cursory analysis of the anthropometric data shows that the subject sample (n=7) used compares favorably with the 1967 U.S.A.F. Survey (student pilots) in all the anthropometric variables considered for this study. Using Chi-square tests, it can be concluded that the standard deviations for the subject sample did not significantly differ at 5 percent level from those of the 1967 survey. Also t-tests performed on mean values did not show any significant differences at 0.05 level for stature, weight, sitting, knee height, sitting acromial height, shoulder-elbow height, buttock knee length, elbow-grip length and bi-acromial breadth. Mean values of age, sitting height and radiale-styilion length were not significantly different at 0.02 level and those of acromial-radiale length were not significantly different at 0.01 level. The results of the Chi-square and t-test are given in Table 6.

The initial set of results for the paths of movements was obtained in a graphic form representing the real world coordinates of the locations of the various body landmarks at 0.1 second intervals. This was made using a CALCOMP plotter integrated with a CDC 6600 computer. Such sets of graphic data were very useful in identifying any gross errors made during earlier data reduction and computational stages. One

TABLE 5
COMPARISON OF SUBJECT SAMPLE WITH PILOT POPULATION*
(Sample Size = 7)

Anthropometric Variables		Present study		1967 USAF Survey	
		\bar{x}	σ_x	\bar{x}	σ_x
Age	years	21.42	2.27	24.03	2.84
Stature	inches	69.37	1.69	69.88	2.28
Weight	lbs.	154.20	25.60	170.00	20.80
Sitting height	inches	35.08	1.46	36.73	1.18
Sitting knee height	inches	21.34	1.10	21.97	0.94
Sitting acromial height	inches	22.99	1.30	23.94	1.10
Shoulder-elbow length	inches	14.57	0.67	14.09	0.63
Buttock-knee length	inches	23.23	1.26	23.74	0.98
Acromion-radiale length	inches	13.62	0.51	12.99	0.63
Radiale-stylian length	inches	10.12	0.31	10.63	0.55
Elbow grip length	inches	14.17	0.31	13.90	0.59
Bi-acromial breadth	inches	15.47	0.83	16.02	0.79

*A Review of Anthropometric Data of German Air Force and United States Air Force Flying Personnel 1967-1968, Edited by H. J. Grunhofer and G. Kroh, AGARD-AG-205, 1975.

Table 6

RESULTS OF STATISTICAL TESTS ON SUBJECT'S ANTHROPOMETRIC VARIABLES

Anthropometric Variables	Test on Standard Deviation			Test on Mean	
	χ^2	χ^2 0.025,6	χ^2 0.975,6	t	t 0.025,6
Age	3.833	14.449	1.237	3.042*	2.447
Stature	3.296	14.449	1.237	0.0798	2.447
Weight	9.089	14.449	1.237	1.633	2.447
Sitting height	9.185	14.449	1.237	2.990*	2.447
Sitting knee height	8.216	14.449	1.237	1.515	2.447
Sitting Acromial height	8.380	14.449	1.237	1.933	2.447
Shoulder-elbow length	6.786	14.449	1.237	1.896	2.447
Buttock-knee length	9.918	14.449	1.237	1.071	2.447
Acromion-radiale length	3.932	14.449	1.237	3.268**	2.447
Radiale-stylion length	1.906	14.449	1.237	4.353*	2.447
Elbow-grip length	1.656	14.449	1.237	2.304	2.447
Bi-acromial breadth	6.623	14.449	1.237	1.753	2.447

*Significant at 0.05 level but not at 0.02 level

**Significant at 0.05 level but not at 0.01 level

such set of graphic data showing the paths of movement of the various body landmarks under a specific combination of seat configuration and control location is presented in Figure 12. While the usual path of movement of a body segment is a smooth curve, straight line combinations are often employed. This can be seen in Figure 12. Similar graphical representation of paths of movement were obtained for all the movements performed by each of the seven subjects. The individual graphic data sets along with the supporting tabular data have been deposited with the Crew Station Integration Branch of Human Engineering Division Aerospace Medical Research Laboratory. Due to the large amount of data generated, they are not included in this report.

Figure 12 shows the spatial coordinates for the various body landmarks at successive intervals of 0.10 seconds. The upper extremity can now be represented by a series of stick diagrams to show its movement. This is obtained by connecting the grip center, wrist center, elbow center and shoulder center locations for each frame. Figure 13 shows such a series of diagrams constructed during the forward movement of the right hand from the side arm controller to the overhead control as performed by Subject #3. The various limb configurations of the same subject during return movement, i.e., from overhead to side arm controller, are presented in Figure 14. In both these figures the time interval between succeeding configurations is 0.1 second. The total time taken for upward

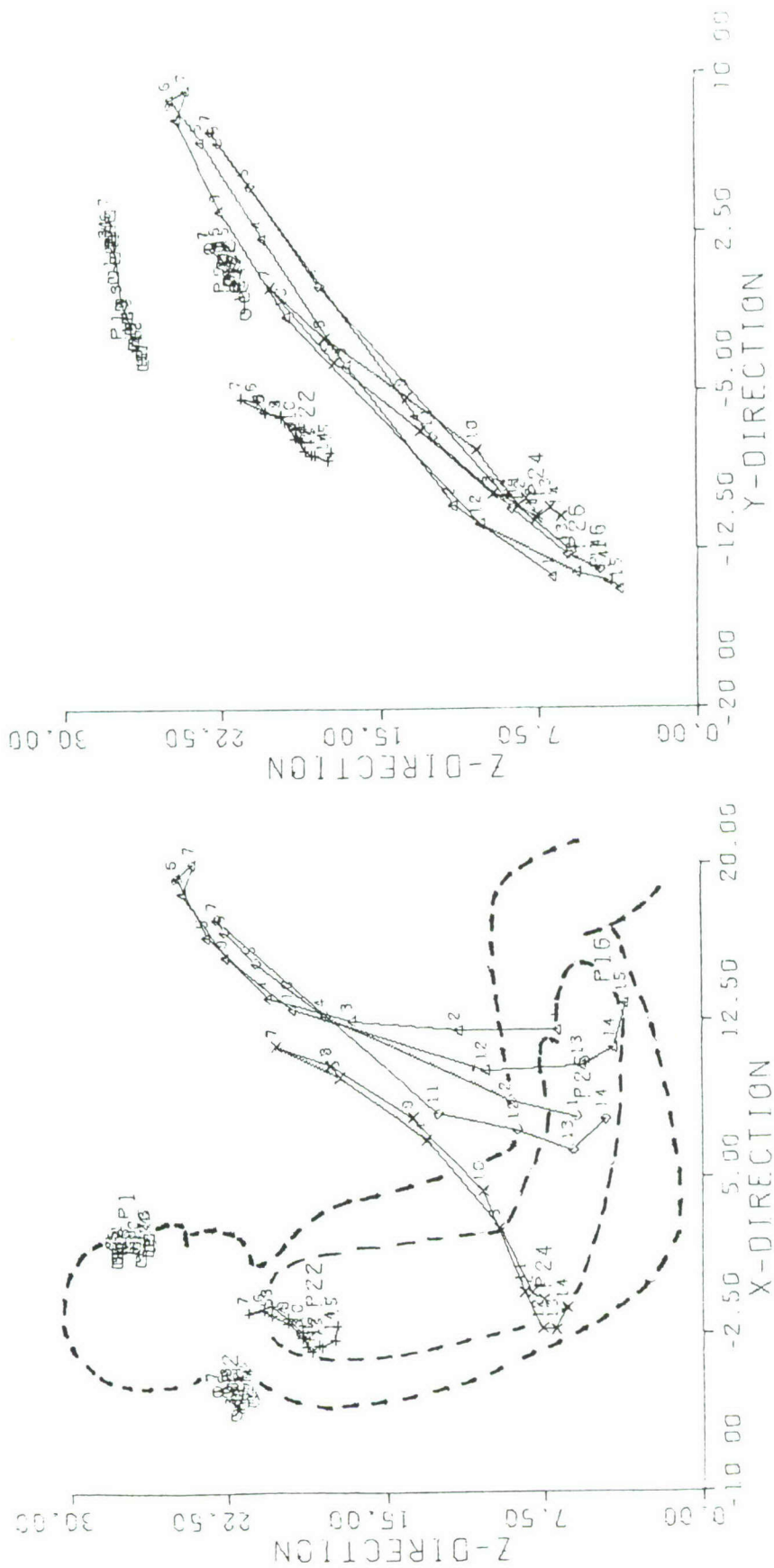


Figure 12. Paths of movement of certain selected body landmarks during right hand movement from side arm controller to panel release and return. Back rest angle = -30° ; Subject #4.
 □ - Nasion; ● - Right elbow center; △ - Right grip center; × - Right shoulder center; + - Right wrist center; ◆ - Right wrist center.

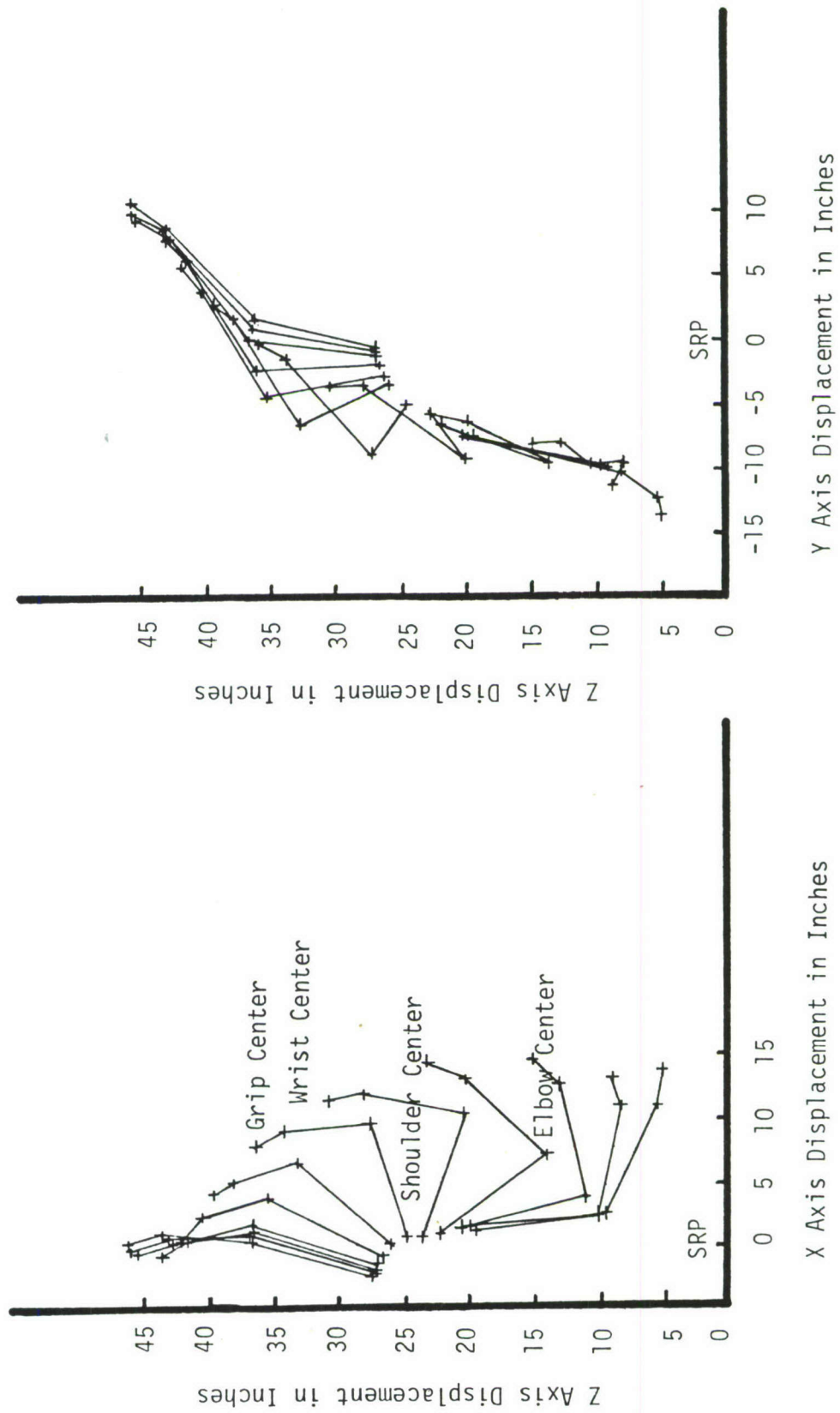


Figure 13. Stick diagrams of right upper extremity when right hand moves from side arm controller to overhead controller at 13° back angle. Subject #3

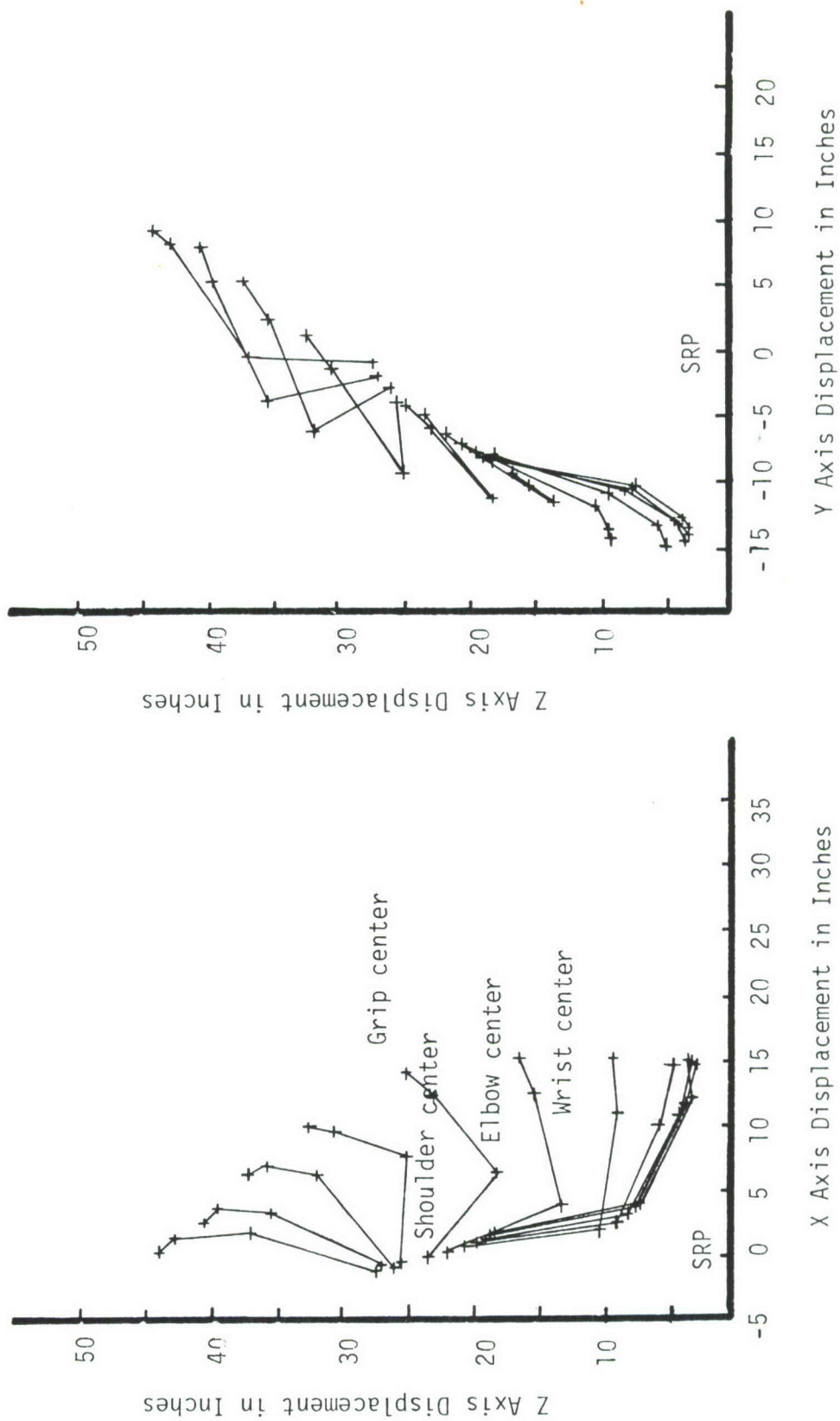


Figure 14. Stick diagrams showing right upper extremity when right hand moves back to stick controller from overhead controller at 13° back angle. Subject #3

movement was 1.2 seconds and that for return movement was 1.1 seconds. Figures 15 through 19 show the spatial locations, at 0.1 second time intervals, respectively, of grip center, wrist center, elbow center, shoulder center and nasion, respectively, during these same movements. It can be observed that the paths of grip center (Figure 15) and wrist center (Figure 16), while displaced in space from each other, exhibit a general similarity in pattern. They seemed to differ in pattern only when the hand is near a control. This is because of the necessity to effect a wrist rotation in order to orient the hand properly with respect to the control. In general, it can be said that during large phases of the movement very little movement is noticed at the wrist joint.

A note of explanation is needed for Figure 19 showing nasion for subject #3. In this figure, the starting points of forward and return paths are displaced farther from the rest of the points on the curves. This is because the photographic system was synchronized with hand controller and a considerable amount of head movement usually preceded the hand release of the controller. Thus a segment of head movement was not recorded at all. This is the reason for the observed wide gap between the assumed starting position and the first recorded position in the paths shown in Figure 19.

Paths of Movement

The data gathered on the seven subjects were pooled and further analyzed to obtain the statistical average or mean

- . - . - . Forward Movement
 - - - - - Return Movement

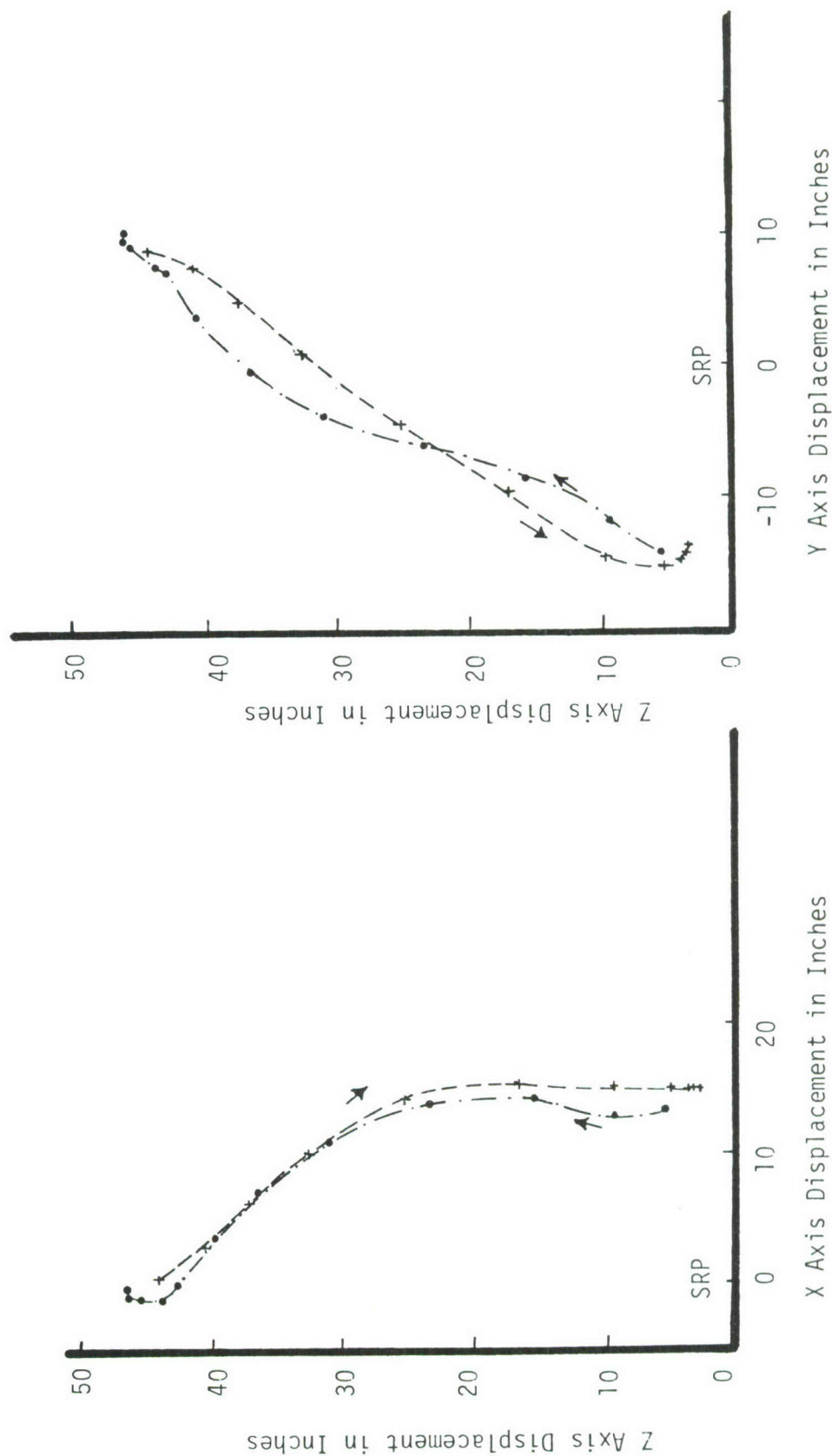


Figure 15. Paths of movement for right hand grip center during forward and return movement starting from side arm controller to overhead controller at 13° back angle.
 Subject #3

--- Forward Movement

-.-.- Return Movement

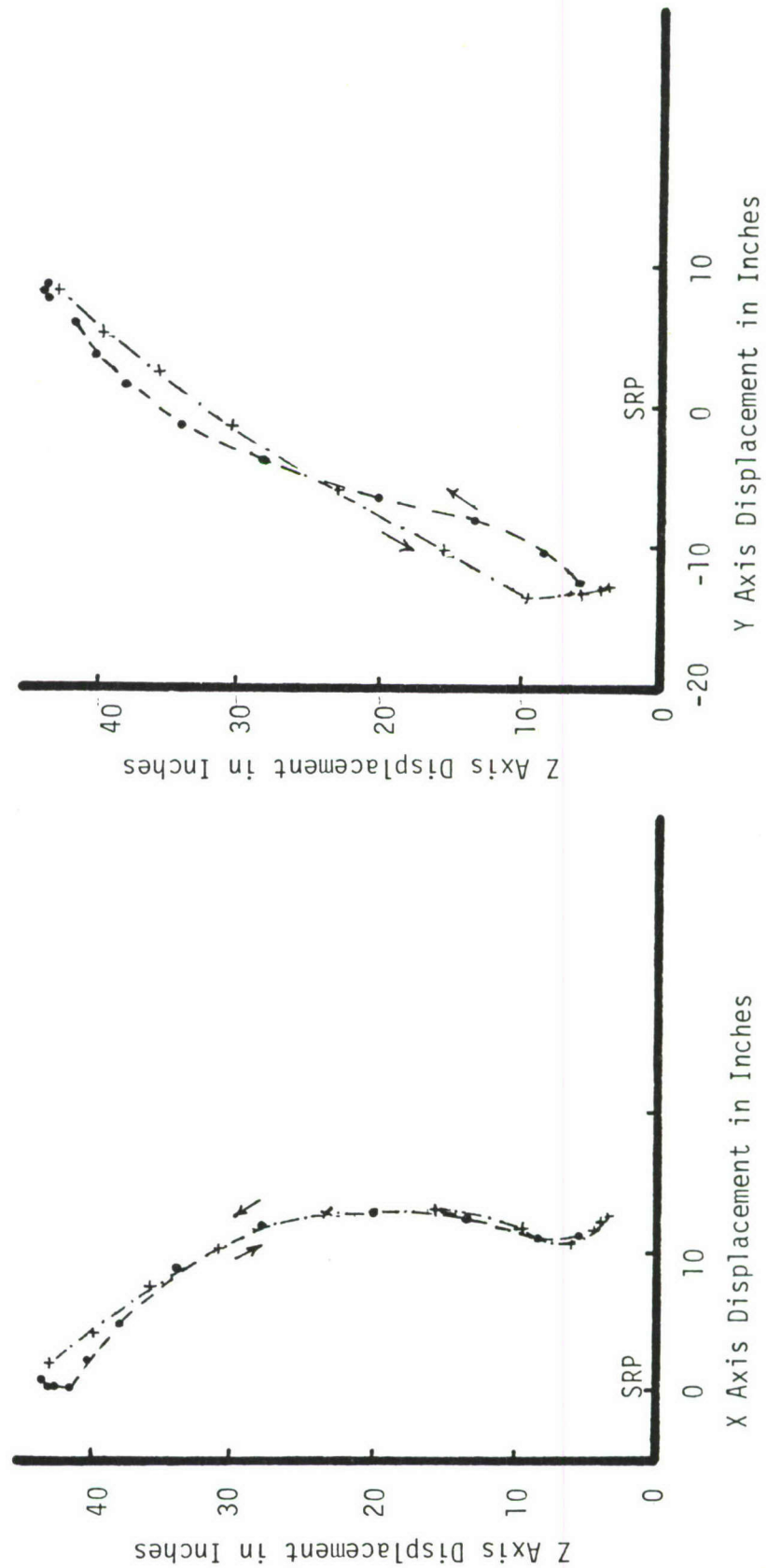


Figure 16. Path of movement of the right wrist joint center for forward and return movement starting from side arm controller to overhead controller at 13° back angle. Subject #3

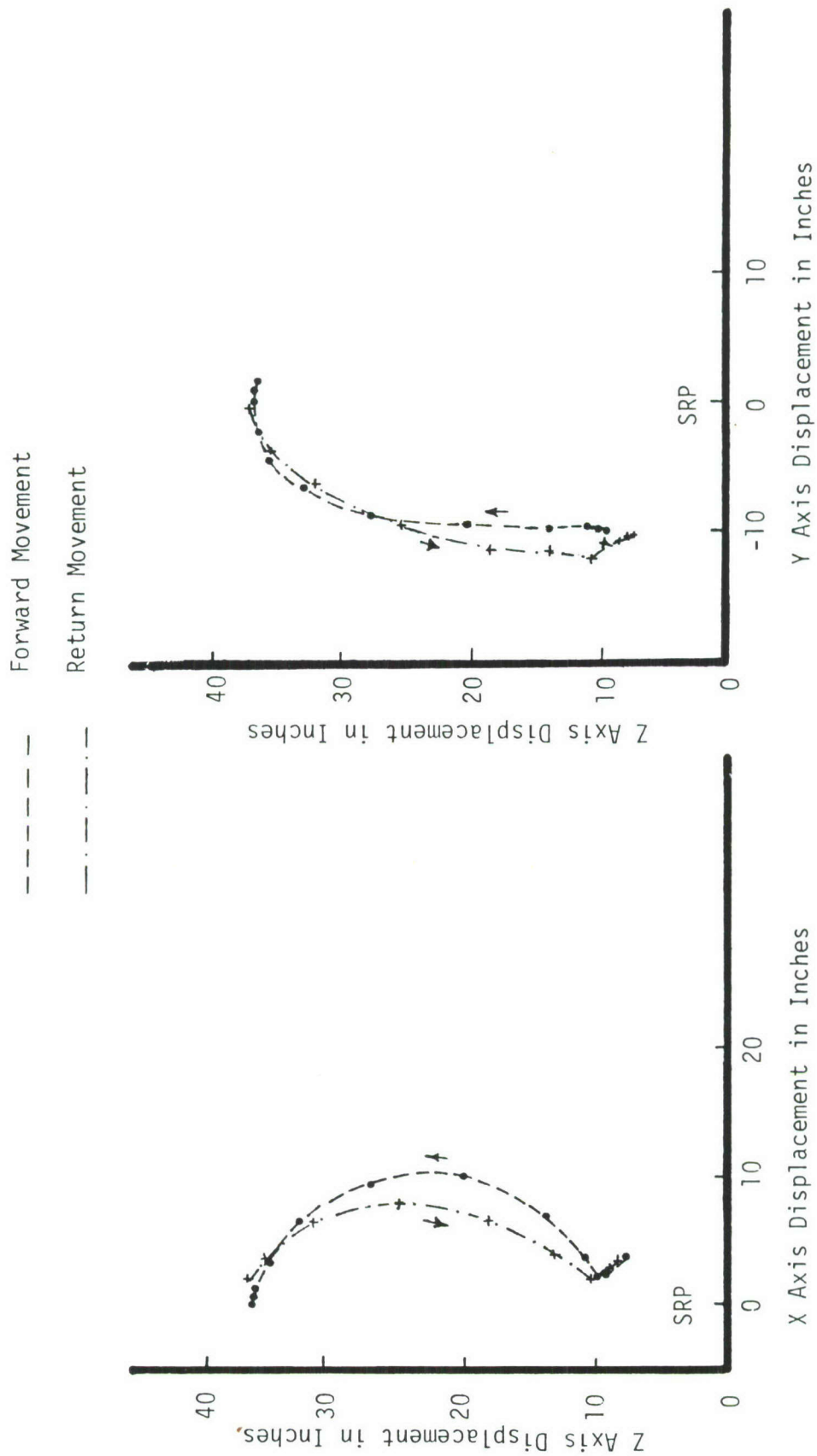


Figure 17. Path of movement of right elbow joint center for forward and return movement starting from side arm controller to overhead controller at 13° back angle. Subject #3

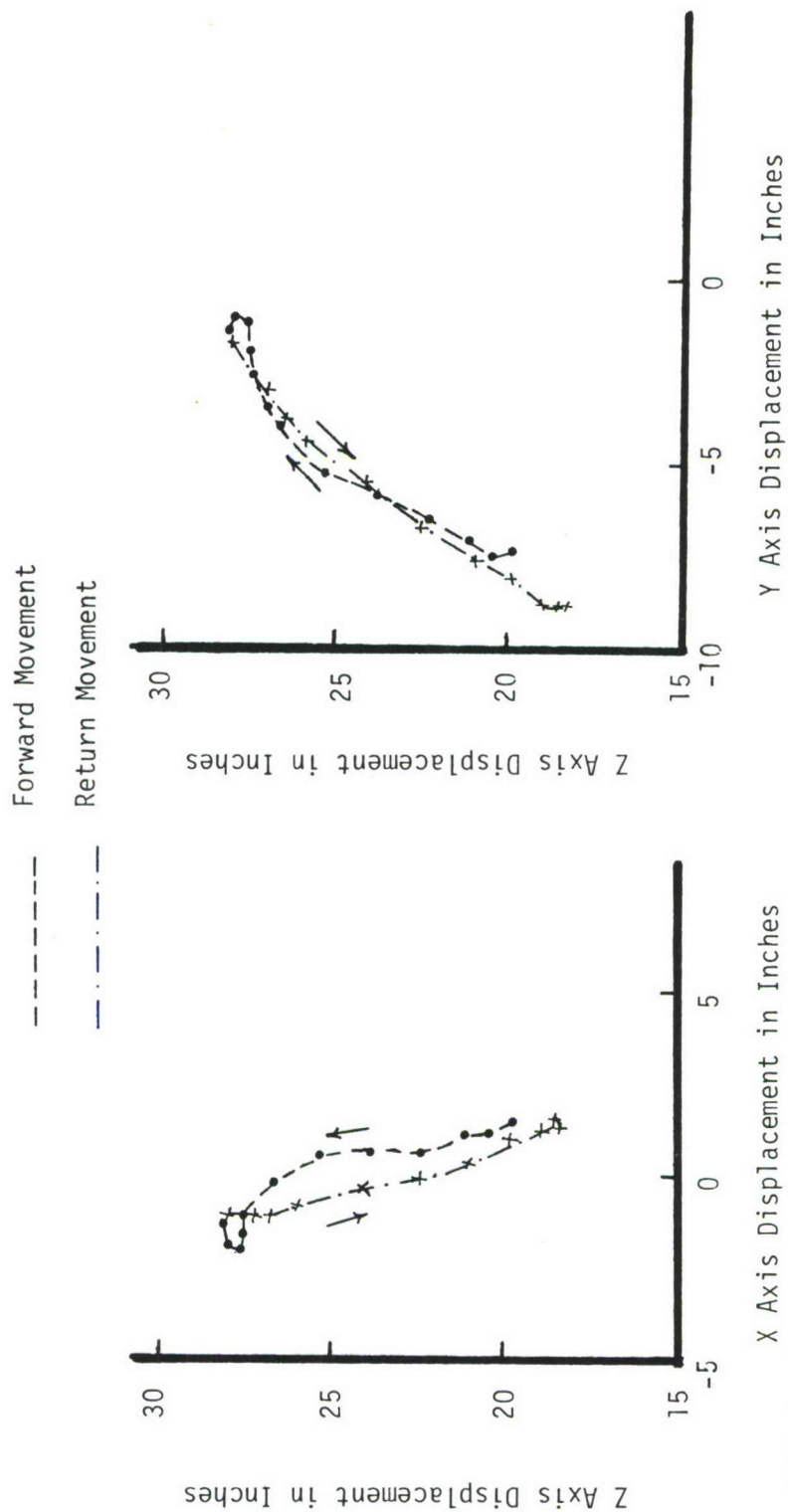


Figure 18. Path of movement of shoulder joint center. Forward and return movement starting from side arm controller to overhead controller at 13° back angle. Subject #3.

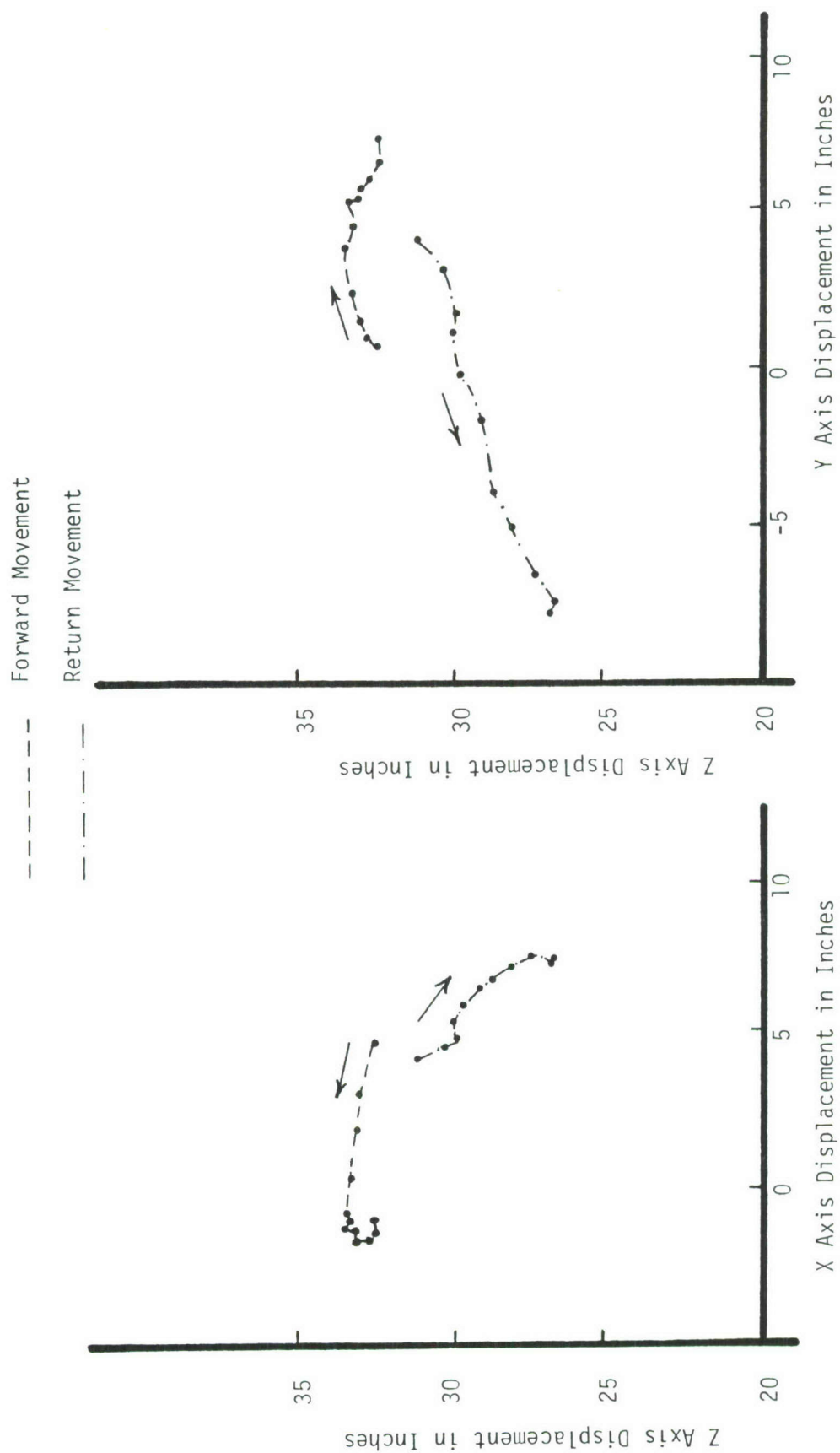


Figure 19. Paths of movement of nasion for forward and return movement starting from side arm controller to overhead controller using right hand at 13° back rest. Subject #3

paths of movement. The objective was to obtain three-dimensional limits of the paths of movement. Normally, it will be expected that the path of movement of any joint center, for a given set of starting and ending controller positions, would fall within these three-dimensional limits during the entire movement. Thus, the most probable path for a given joint center will be defined by a path represented by the average or mean path of movement and a set of three-dimensional limits. The three-dimensional limits themselves, will be varying over the length of the mean path.

For the statistical analyses, where average displacement profiles and stick diagrams were made, the movement time for each subject was divided into 10 equal periods. Under these conditions, it was possible to consider the X, Y, and Z coordinates for each landmark at 10 equal time intervals during the movement expressed as a percentage of the total movement time. Since movement time varied between subjects, it was essential to use the above described procedure to obtain the movement data excluding the effects of the speed of movement.

The first frame of recorded pictures represents the position exactly 0.10 second after the start of the movement. For the purpose of this analysis it was assumed that the starting position from one controller was identical to the ending or movement completing position towards the same control for any given joint center location.

The limb configurations for forward and return phases of the movement between side arm controller and overhead controller at 13° , back rest angles are presented in Figures 20 and 21. These configurations are based on averaged locations of the various joint centers. They are comparable to those presented in Figures 13 and 14 for Subject #5. The forward phase of the movement is further represented as individual joint center movements in Figures 22 through 26. In these figures, in addition to the mean or average path, the actual paths of movements of two selected subjects are also presented. One of the subjects (#5) is large, about 80th percentile for stature and weight and the second, Subject #1, is small, about 10th percentile of stature and weight of the Air Force population. No limb dimensions were considered. From Figures 22 and 23, it can be seen that Subject #5 effected a very different path from others. No explanation can be given for this deviation.

Figures 27 and 28 show stick diagrams for forward movement between side arm controller and overhead controller at 30° and 65° back rest angles, respectively. In comparing Figures 20, 27 and 28, it must be noted that control location has been changed according to Table 1.

Displacement-Time Relationships

From a COMBIMAN input viewpoint, it is also useful to look at the results of this investigation as displacement-time profiles along the coordinate axes. Figures 29 through 32 present this kind of information for various joint centers as the right hand moves from side arm controller to overhead

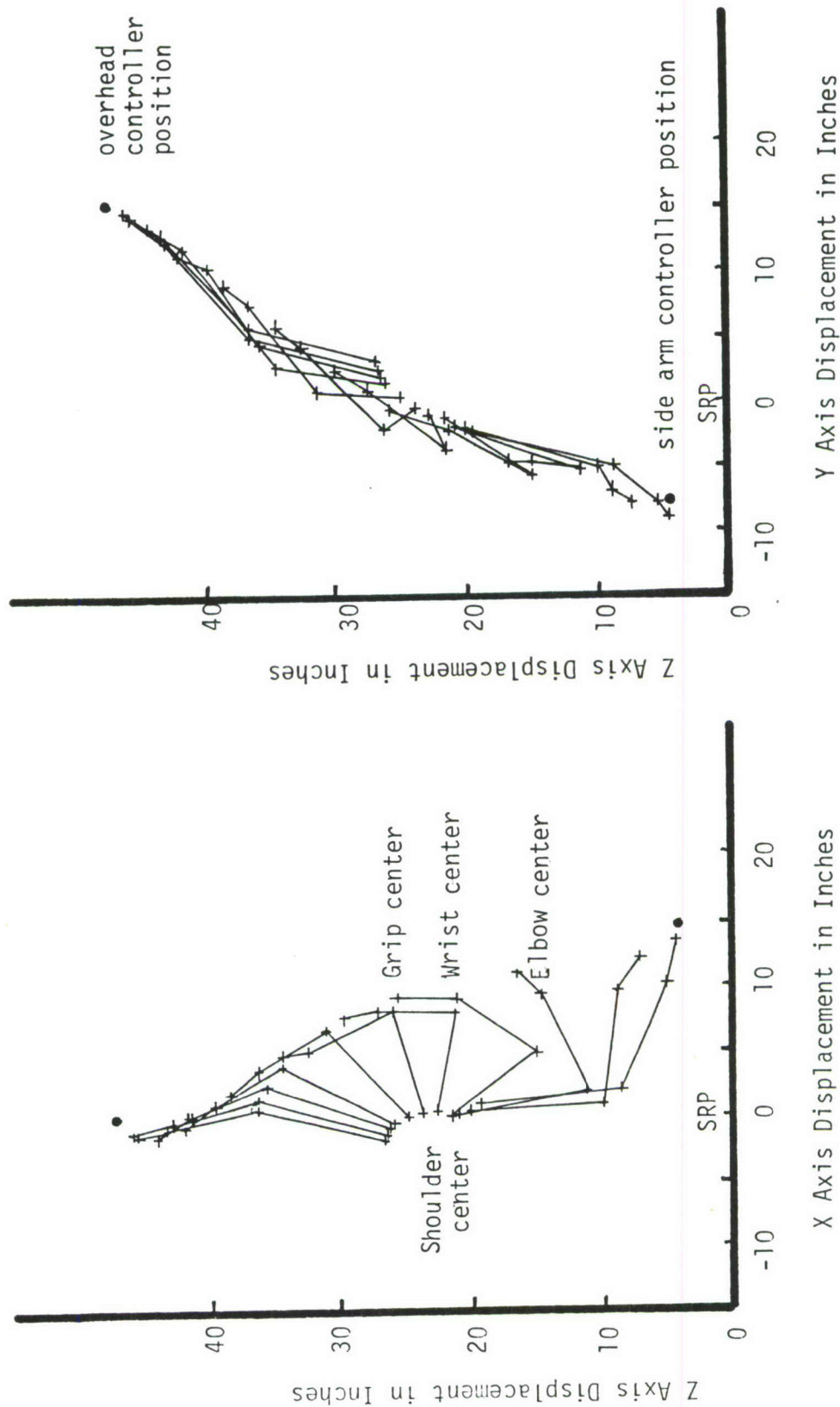


Figure 20. Stick diagrams of right upper extremity (shoulder, elbow, wrist and grip centers) at time intervals of 1/10th the average total movement time. Movement made from side arm controller to overhead controller at 13° back angle -- average for 7 subjects.

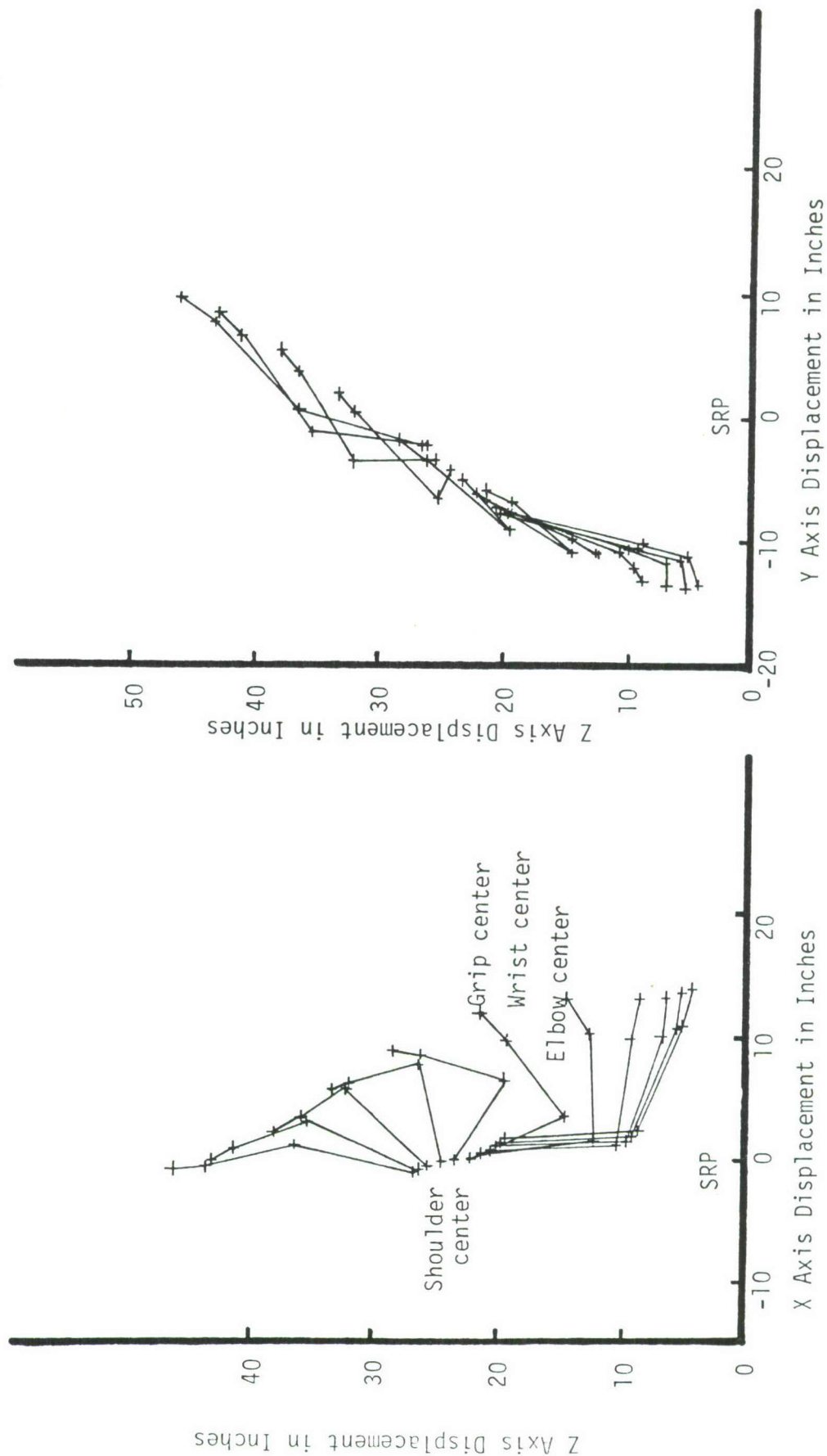


Figure 21. Stick diagrams of right upper extremity (shoulder, elbow, wrist, and grip centers) at time intervals of 1/10th of average total movement time. Movement made from overhead controller to side arm controller at 13° back angle -- average for 7 subjects.

--- Average of Seven Subjects
 --- Subject #1 - 10th Percentile
 --- Subject #5 - 80th Percentile

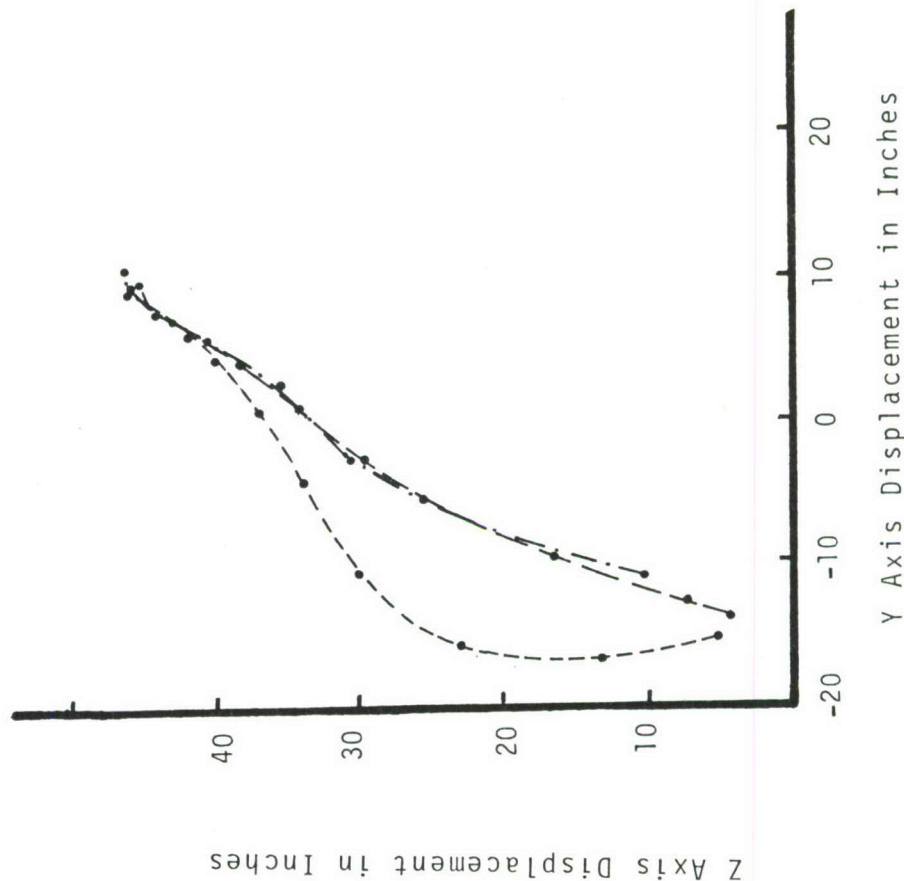
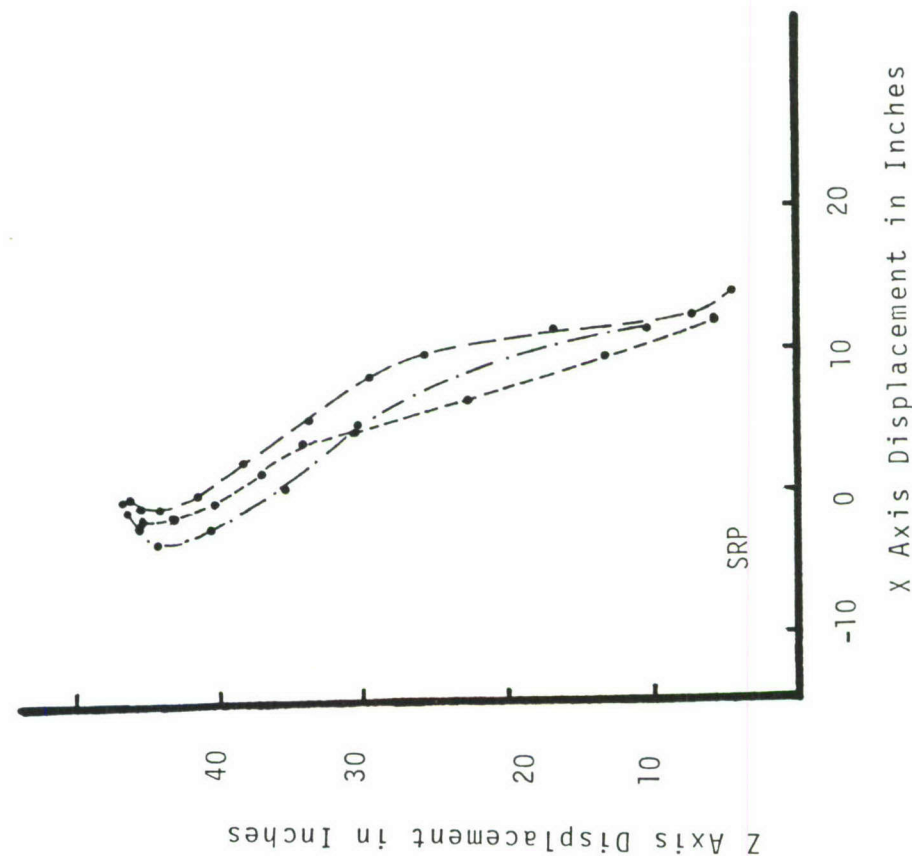


Fig. 22. Right Hand Grip Center Paths of Movement from Side
 Arm Controller to Overhead Controller at 13° Back
 Angle for Subjects 1 and 5 vs. the Average Path for
 all Seven Subjects.

— — — — — Average of 7 subjects

- . - . - . - . Subject #1 - 10th Percentile

- - - - - Subject #5 - 80th Percentile

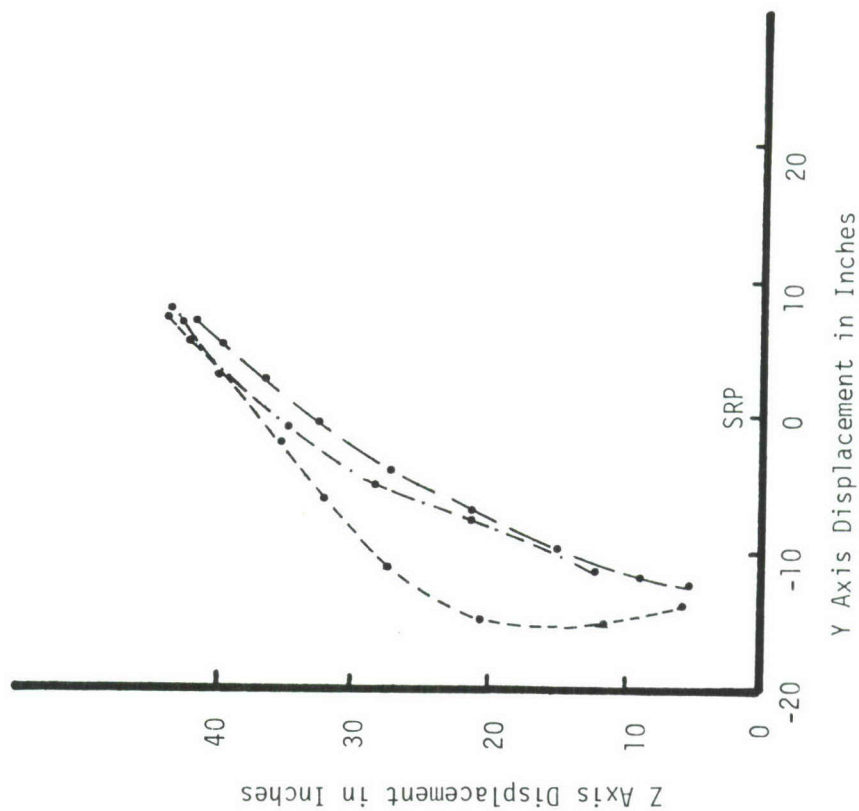
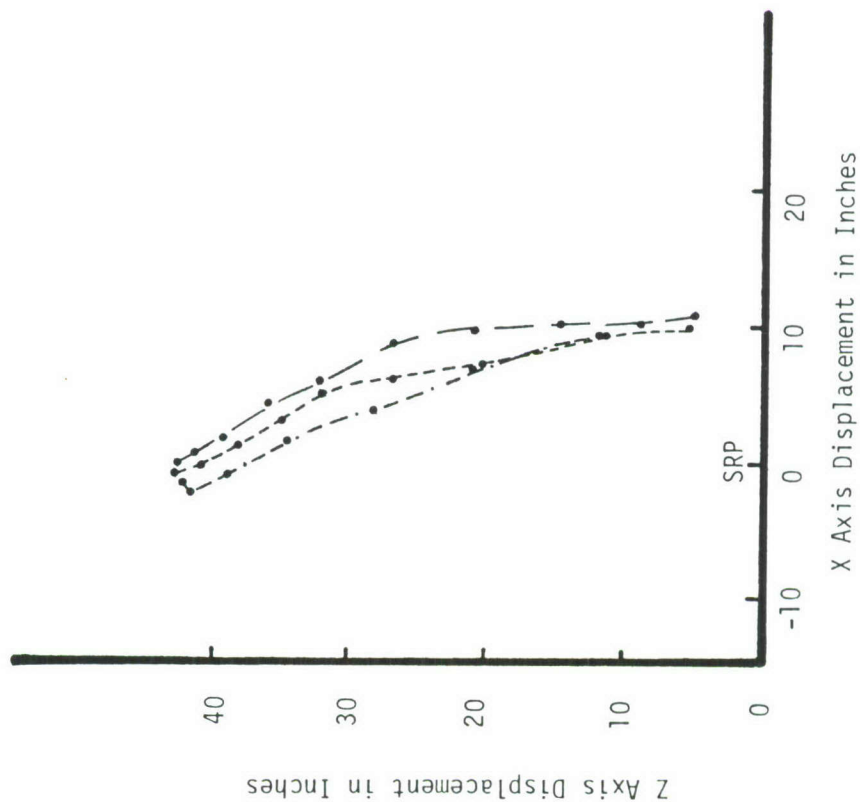


Figure 23. Right wrist center path of movement from side arm controller to overhead controller at 13° back angle for subject #1 and 5 vs. the average path for all 7 subjects.

--- Average 7 subjects
 - - - Subject #1 - 10th Percentile
 - - - Subject #5 - 80th Percentile

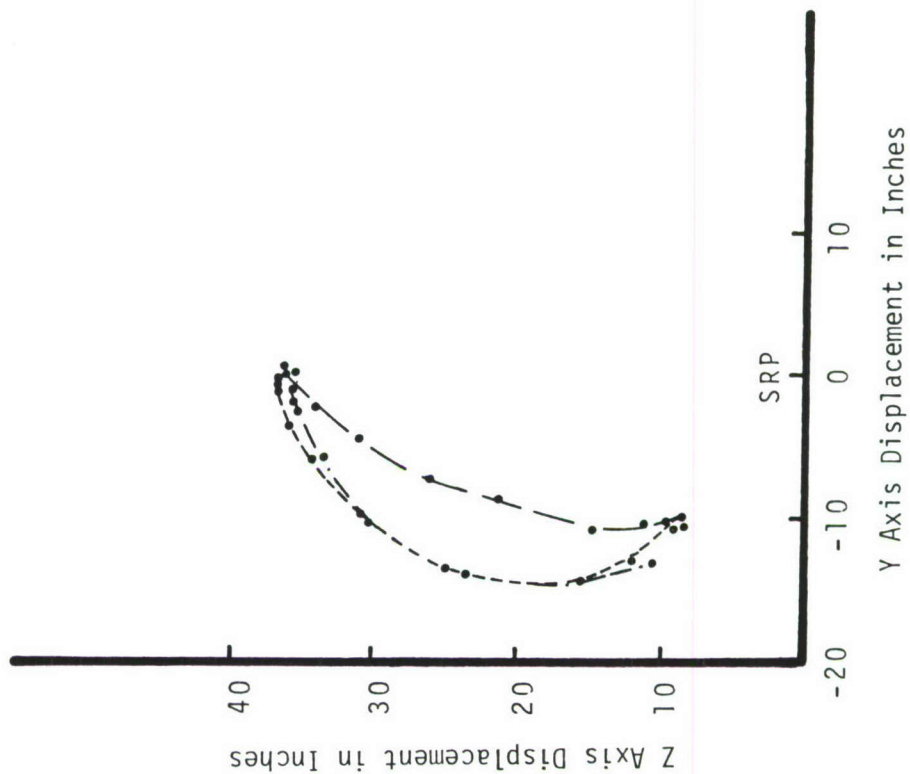
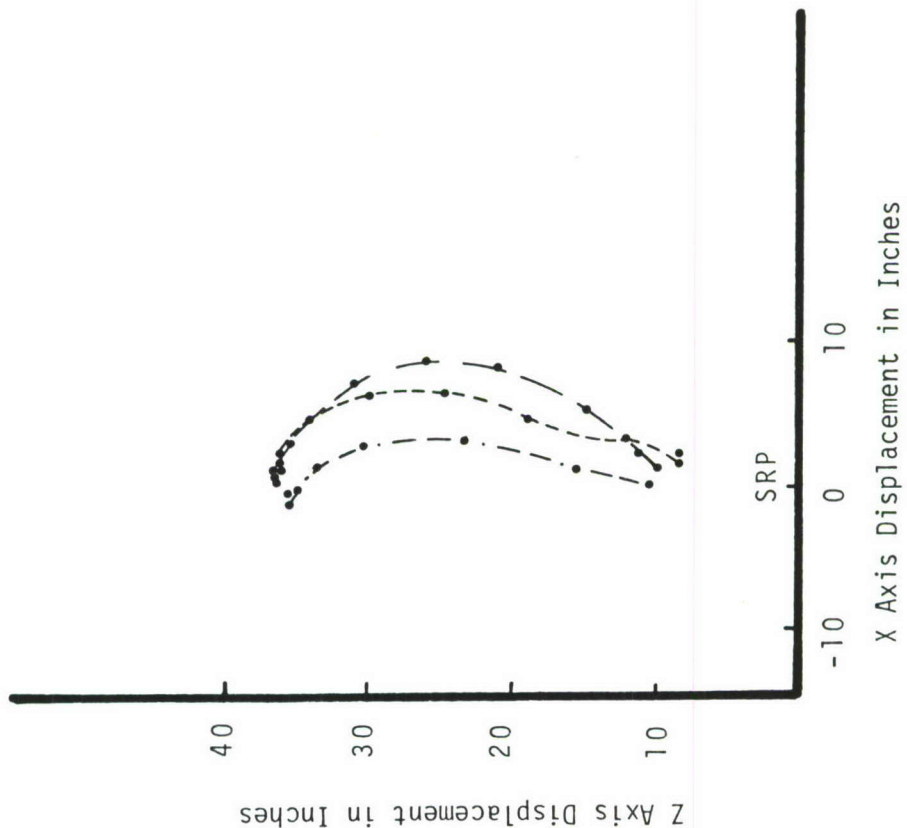


Figure 24. Right elbow joint center paths of movement from side arm controller to overhead controller at 13° back angle for subjects 1 and 5 vs. the average path for all 7 subjects.

—•— Average of 7 subjects
 —+— Subject # 5- 80th Percentile
 —○— Subject # 1- 10th Percentile

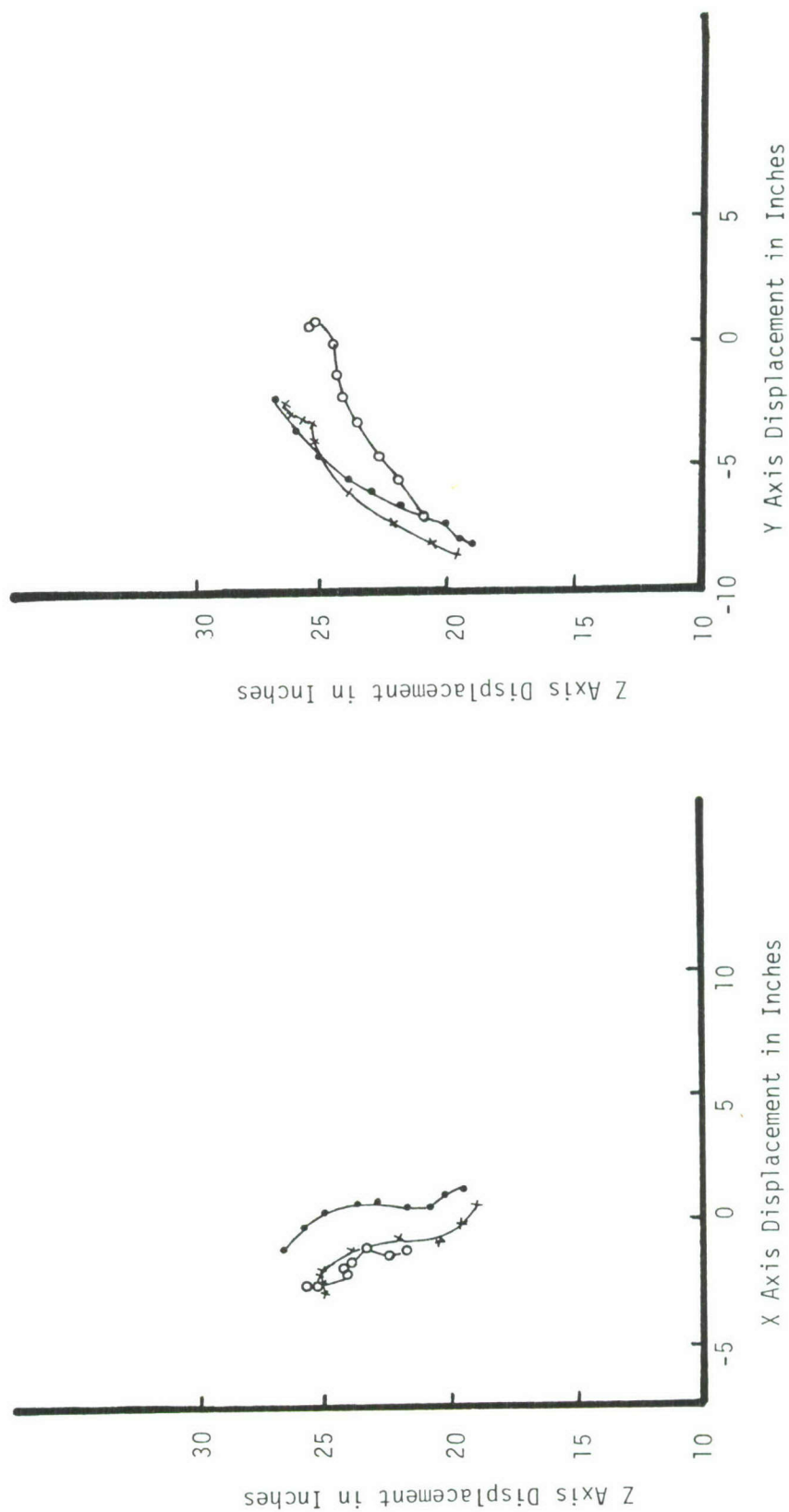


Figure 25. Right shoulder joint center path of movement from side arm controller to overhead controller at 13° back angle for subjects #1 and 5 vs. the average path for all 7 subjects.

- Average of 7 Subjects
- +— Subject #5 - 80th Percentile
- Subject #1 - 10th Percentile

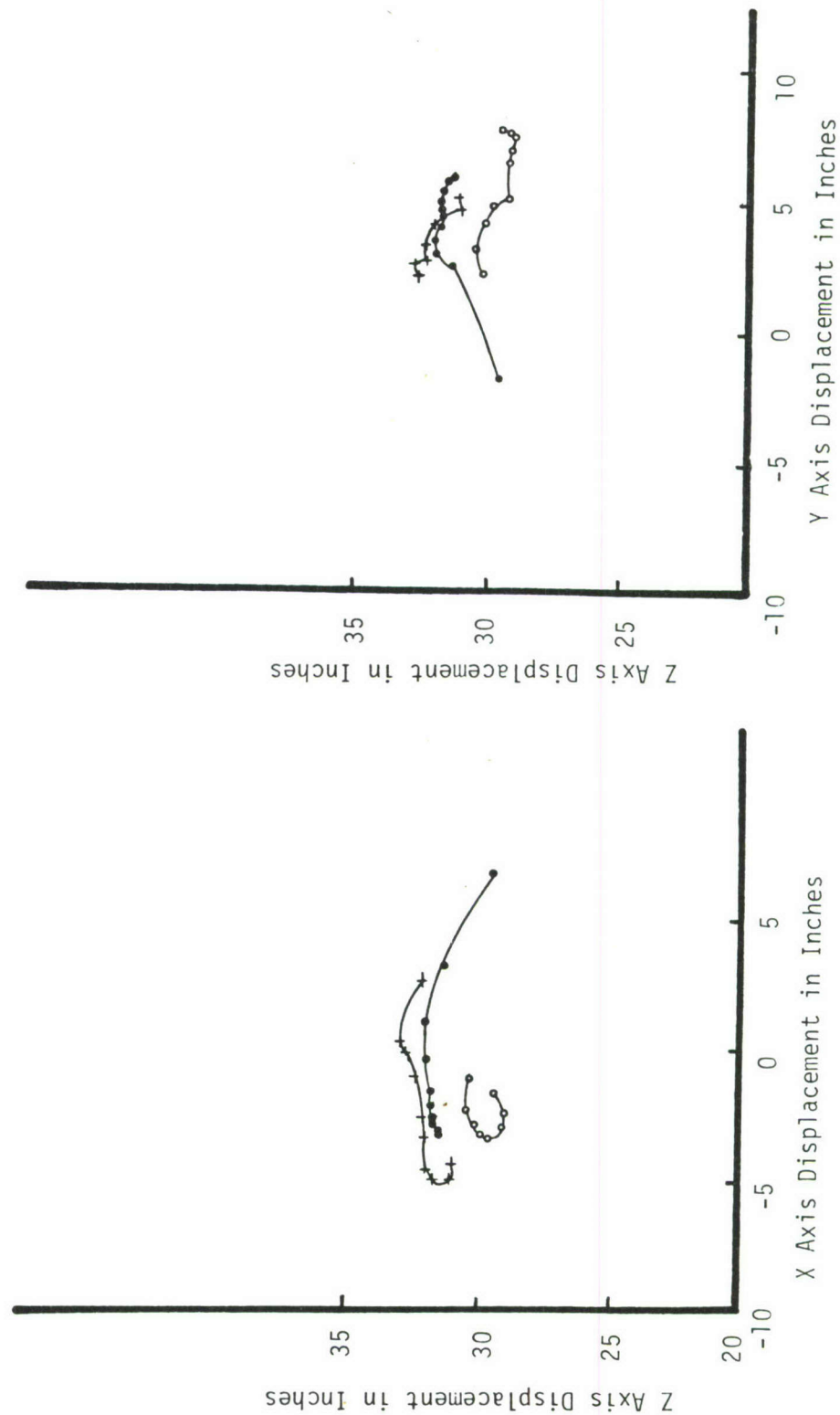


Figure 26. Path of movement of nasion when right hand moves from side arm controller to overhead controller at 13° back angle.

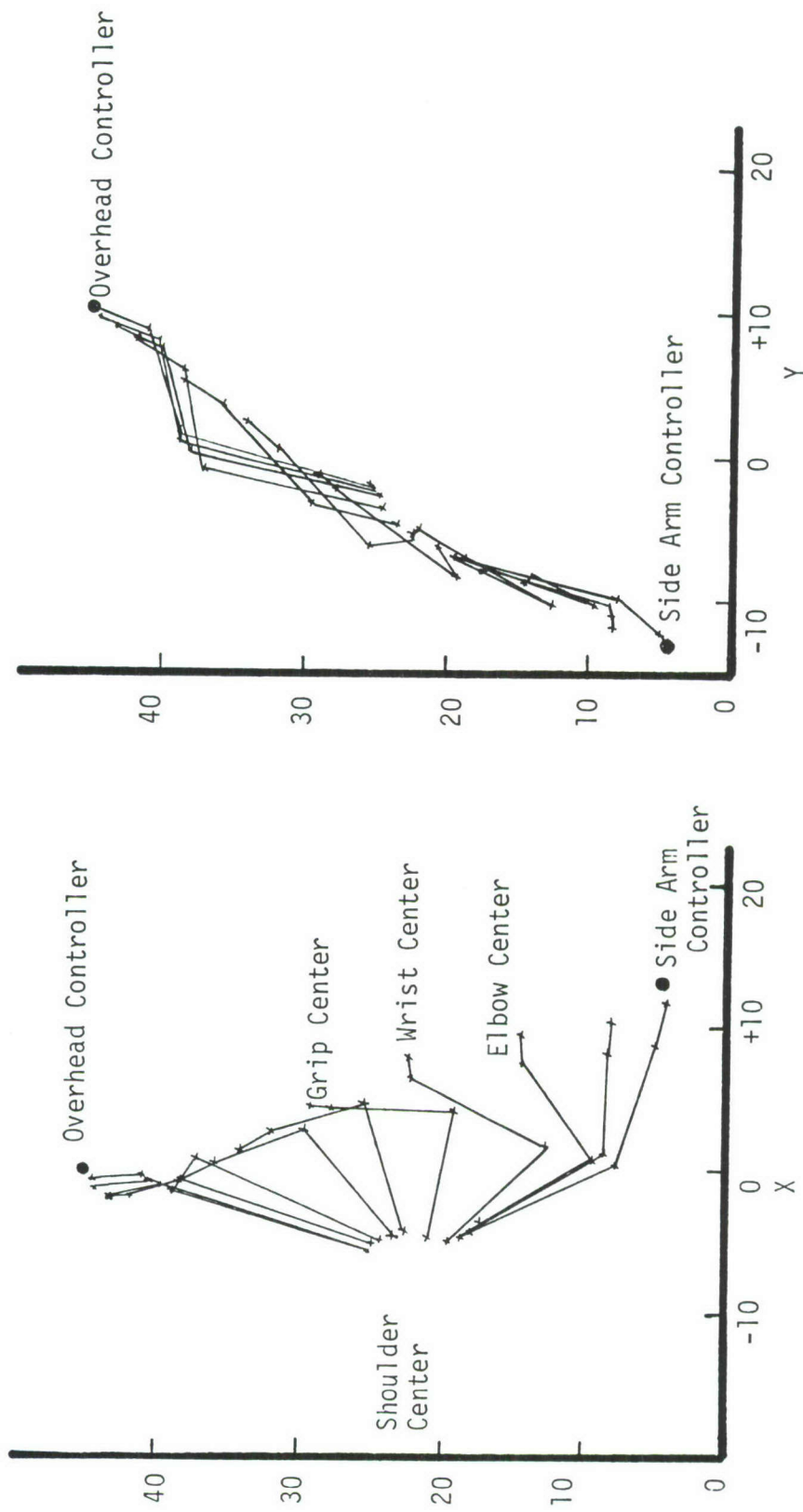


Figure 27. Stick diagram describing forward movement from side arm controller to overhead controller at 30° back angle.-- average for 7 subjects.

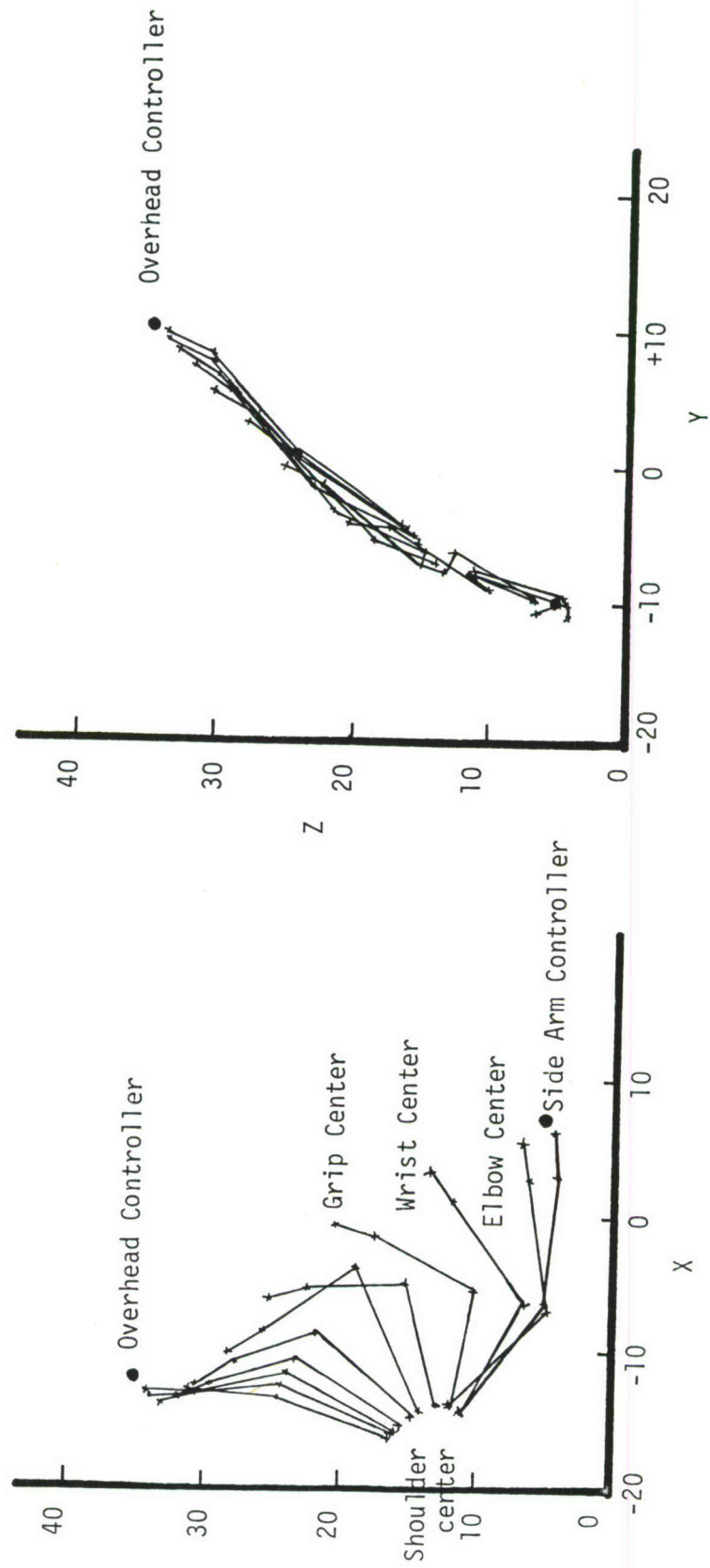


Figure 28. Stick diagrams describing forward movement from side arm controller to overhead controller at 65° back angle -- average for 7 subjects.

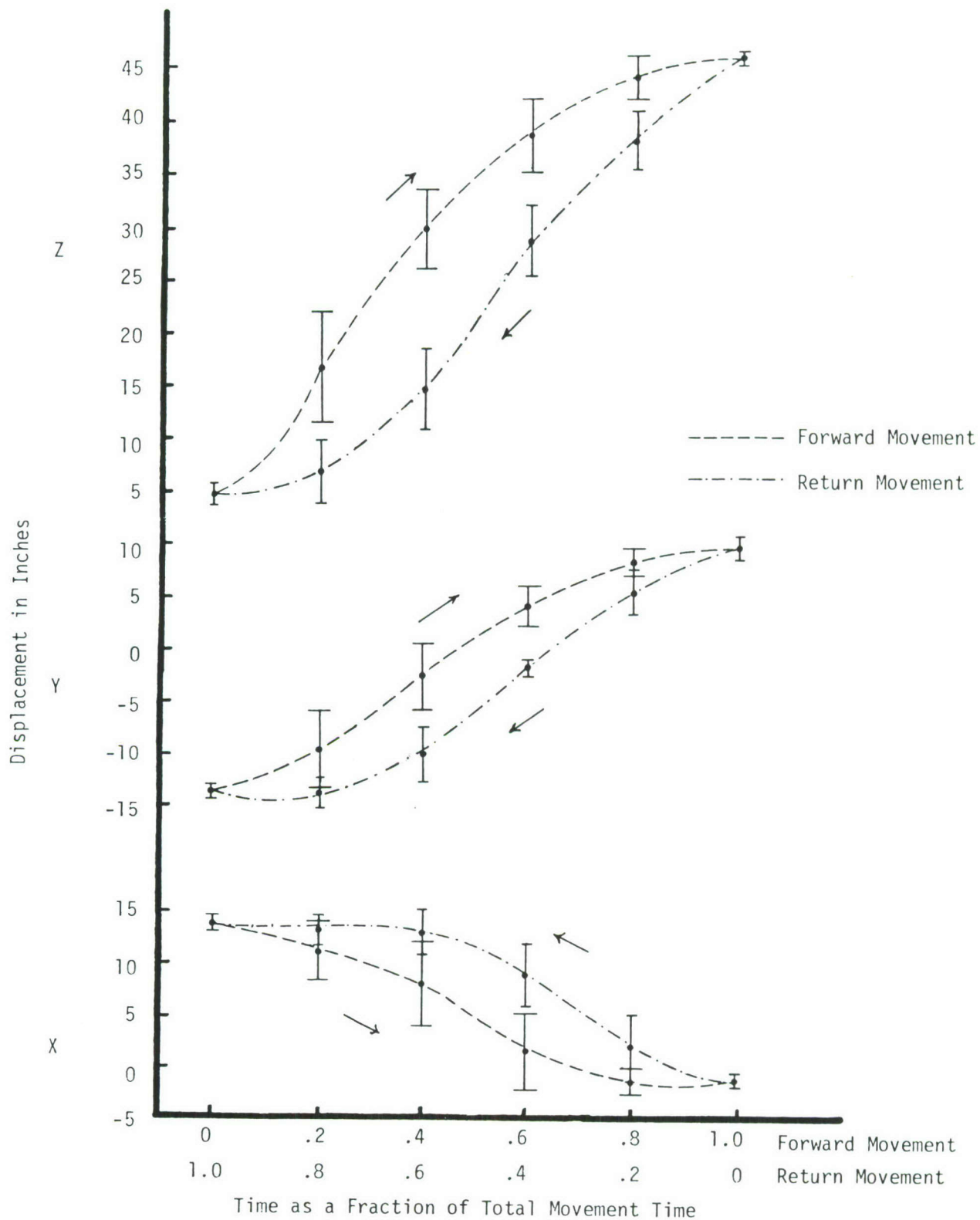


Figure 29. Displacement time relationship for right hand grip center for forward and return movement starting from side arm controller to overhead controller at 13° back angle

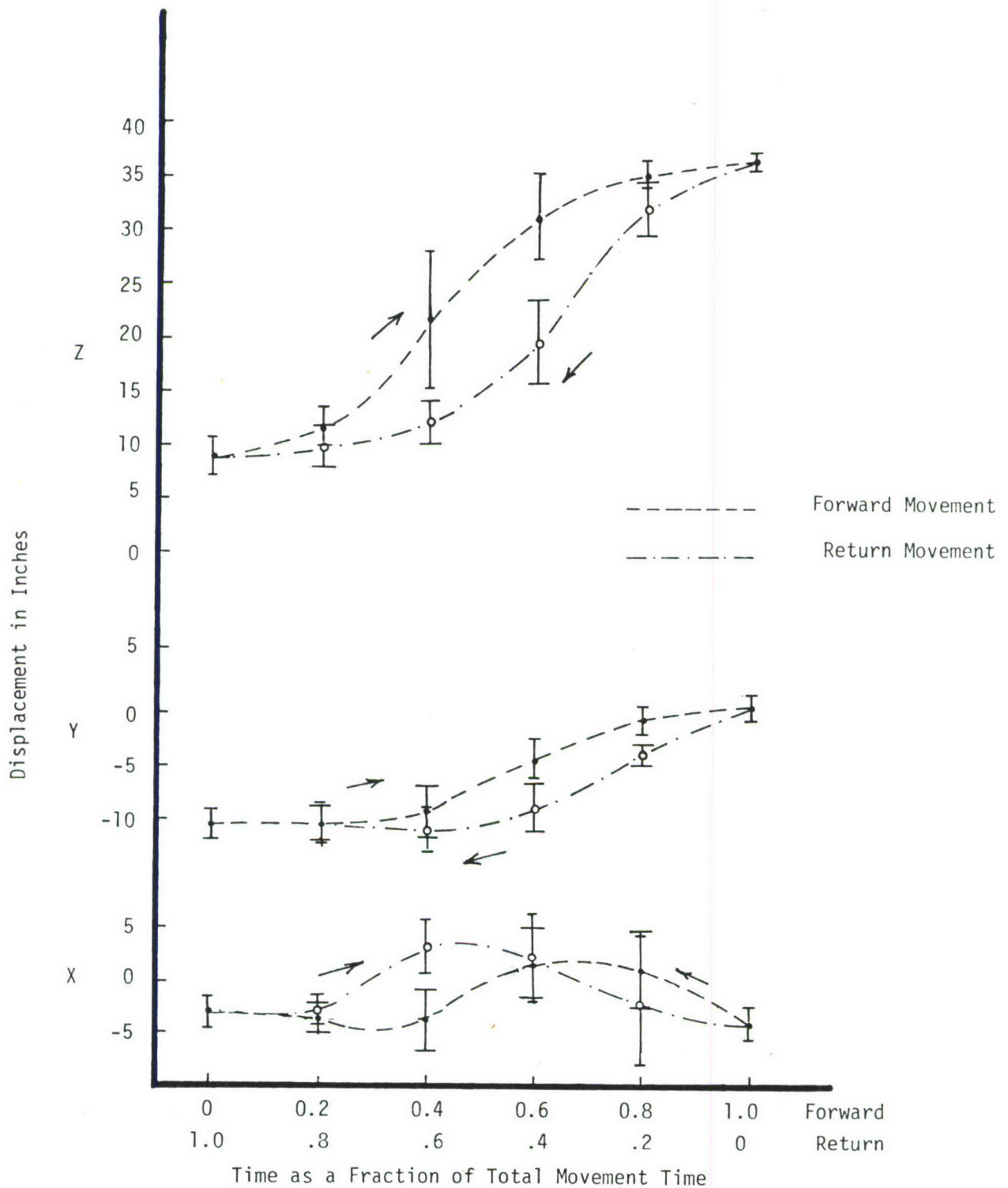


Figure 30. Displacement-time relationship for right elbow joint center for forward and return movement starting from side arm controller to overhead controller at 13° back angle.

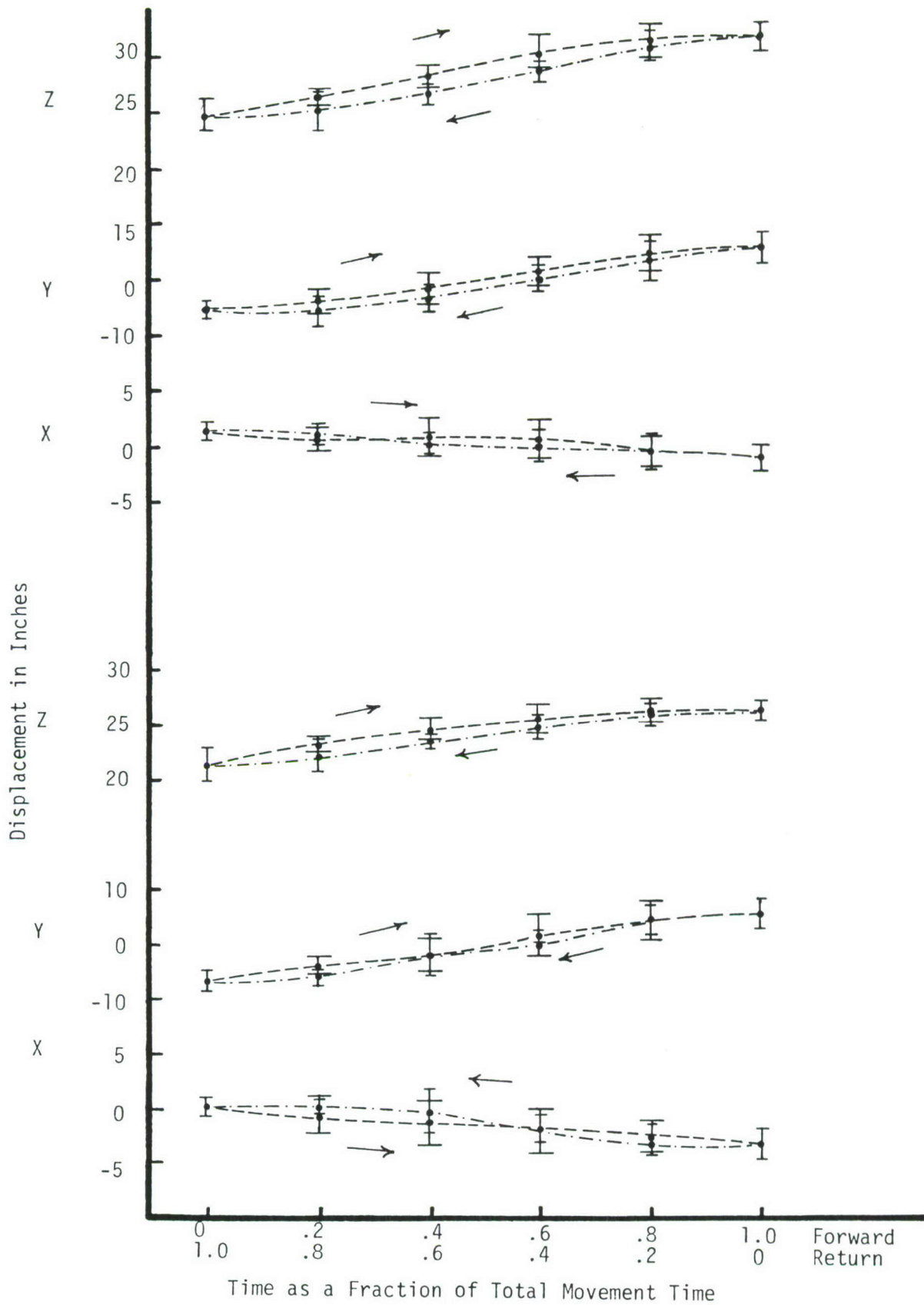


Fig. 31 Displacement time relationship for right shoulder joint center (top) and right acromion (bottom) for forward and return movement starting from side arm controller to overhead controller at 13° back angle

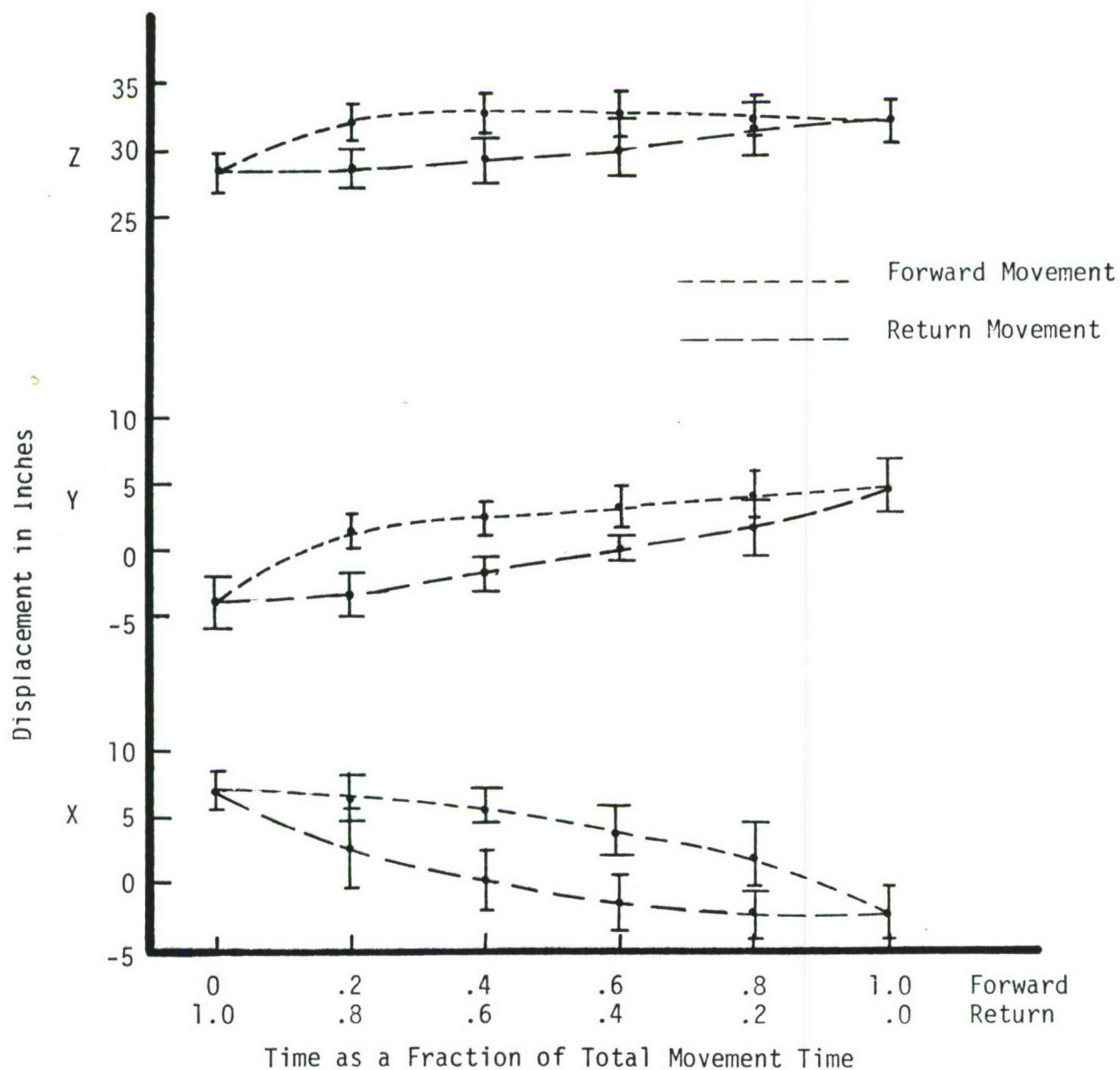


Figure 32. Displacement-time relationship for nasion for forward and return movement starting from side arm controller to overhead controller at 13° back angle

controller. (This is the same movement presented in the earlier section involving Figures 12 through 26.)

Grip center (Figure 29). The grip center moved about 43 inches along z axis, 23 inches along y axis and 15 inches along x axis. Thus, displacement along z axis was the major component. This fact is suspected to contribute to the wider difference between the profiles of forward and return movements along z axis than the same along the other two axes. Additionally the larger variations from the average path along z axis than the other two axes can also be partly attributed to this. A second factor believed to be contributing to the later effect is the variations in segment lengths among the subjects.

The larger variations over the middle part of the displacement curves than the end parts are due to the fact that nearer a controller, the movement becomes more controlled and slower in speed.

The rate of displacement on leaving a controller is seen to be higher than that when approaching a control. Rate of displacement over the middle part of the movement is observed to be significantly higher than the same at either ends.

Elbow center (Figure 30). Elbow displacement profiles along z and y axes look similar in pattern to those of grip center. However, x axis displacement profile is very different. This is because in order to reach for the overhead controller, at a height of more than 47 inches above seat level, the

initially semiflexed elbow has to extend out (forward) while being raised upwards. And then, the fact that the overhead controller is at 0 inches from SRP along x axis (forward), makes it necessary for the elbow to move backwards while maintaining an extended position. Thus an approximately bell-shaped curve is generated for the profile. The return movement profile is similar to forward profile except that it is displaced (phase shift) along the time axis. This is because releasing and moving away from the overhead controller is achieved relatively faster than moving towards and grasping the same controller.

Shoulder center (Figure 31). The shoulder joint is one of the most complex joints in the human skeletal system, both anatomically and kinesiology. The joint itself is really composed of three different joints (Dempster, 1955). Hence, any attempt in analyzing and isolating the various joint movements can be complicated. For the purpose of this study, the gleno-humeral joint center was chosen as the joint center representing shoulder movement. Additionally acromion was chosen as a reference landmark to be used in following the paths of movement of shoulder joint. Hence, Figure 31 contains the displacement profiles of the right acromion and right shoulder center.

A point to bear in mind here is that the apparent final movement of the shoulder joint center of acromion is the resultant of the movement necessary to effect the distal

extremity motions plus any displacements of the trunk and the neck found necessary from visual and comfort points of view. It can be observed that while at the start of the forward motion the acromion is above the shoulder center along z axis (as can be reasonably expected) at the end of the movement the shoulder center is located slightly above the acromion. This is partly due to the fact that as the upper extremity moves upwards, acromion moves slightly backwards and drops down somewhat in order to facilitate the upward swing of the humeral head. Also there is an artifact introduced as the surface marker for acromion slides downwards due to stretching of the skin over the area under consideration.

Nasion/head movement (Figure 32). The head displacement profiles have to be studied carefully bearing in mind that the first part of the movement was never recorded as it preceeded the hand movement activating the recording system.

During the forward movement of the hand, head moves upwards a little bit only initially, but continues to tilt to the left and backwards till the overhead controller is sighted and grasped by the moving hand. A very similar pattern but in reverse can be noticed during return movement. The head drops down only initially but continues to tilt to the right and forward till the hand movement is completed.

Statistical summaries of displacement-time relationship.
Complete statistical summaries for each body landmark are given

in Appendix B. In addition, several displacement-time relationships are graphed for quick reference (Figure A-3 through Figure A-22).

APPENDIX A

COMPUTER PROGRAM DOCUMENTATION

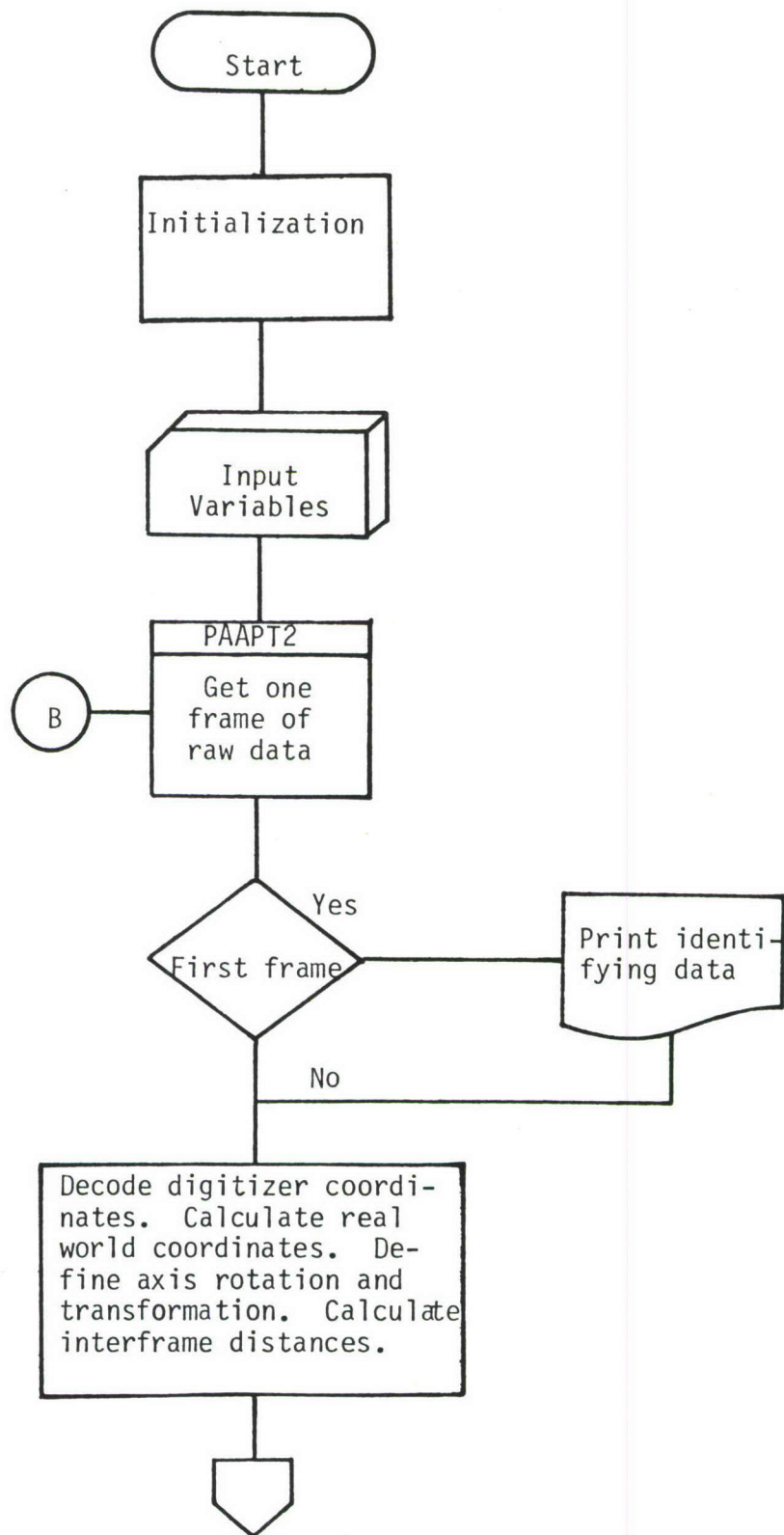


Fig. A-1 Flow Chart for Computer Program employed in obtaining real-world coordinates from digitizer data

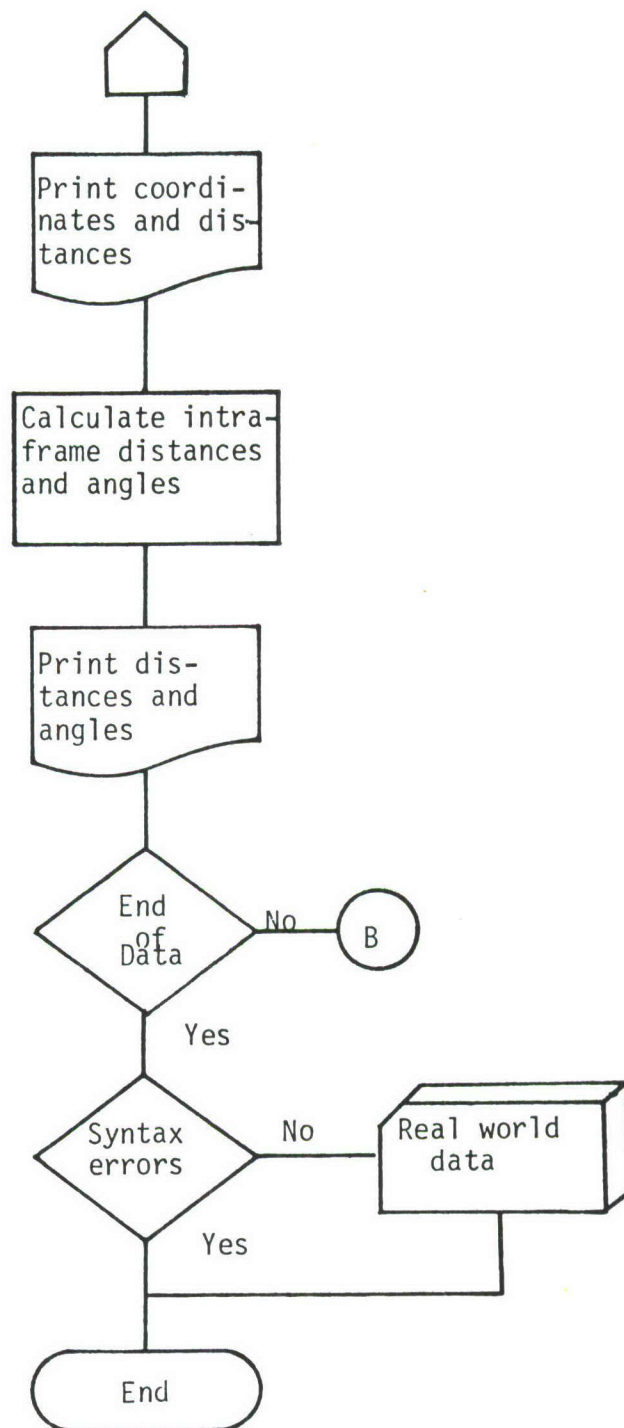


Fig. A-1 (Continued)

```

0001      REAL XYZ(3,30),XYZ(3,30)
0002      REAL CD(30)

0003      INTEGER ID1(200),ID2(200),IX1(30),IX2(30),IX3(30),IX4(30),Y4(30)
0004      INTEGER XI(30),YI(30),X2(30),Y2(30),X3(30),Y3(30),X4(30),Y4(30)
0005      INTEGER TARGET(30)
0006      DATA TARGET/30*0/
0007      INTEGER IAL1(200),IAL2(200)
0008      INTEGER PFLG(30),SFLG(30)
0009      INTEGER ICNT(30)

C
C  INITIALIZATION AND VALIDATE
C
0010      READ(5,1001) F1,D1,F2,D2,SC,NP,NS,RX,RY,RZ,IX,TY,TZ,TOL
0011      WRITE(6,1002) F1,D1,F2,D2,SC,NP,NS,RX,RY,RZ,IX,TY,TZ,TOL
0012      IF(F1.GT.0.0.AND.F1.LT.1000.0) GO TO 100
0013      WRITE(6,2001) F1
0014      F1=1.0
0015      100 IF(D1.GT.0.0.AND.D1.LT.1000.0) GO TO 110
0016      WRITE(6,2002) D1
0017      D1=1.0
0018      110 IF(F2.GT.0.0.AND.F2.LT.1000.0) GO TO 120
0019      WRITE(6,2003) F2
0020      F2=1.0
0021      120 IF(D2.GT.0.0.AND.D2.LT.1000.0) GO TO 125
0022      WRITE(6,2004) D2
0023      D2=1.0
0024      125 CONTINUE
0025      130 IF(NP.GT.1.AND.NP.LT.31) GO TO 140
0026      WRITE(6,2010) NP
0027      NP=30
0028      140 IF(NS.GE.1.AND.NS.LT.41) GO TO 141
0029      WRITE(6,2006) NS
0030      NS=40
0031      141 READ(5,1007) NT,(TARGET(I),I=1,NT)
0032      WRITE(5,1008)
0033      WRITE(6,1014) (I,TARGET(I),I=1,NT)

C
C....READ PUNCH FLAG
C      0 = NO PUNCH
C      1 = PUNCH OF REAL WORLD DATA FOR PLOT
C
C....READ THETA
C      WHERE THETA IS THE ANGLE OF AXES ROTATION IN RADJANS
C
0034      READ(5,1013) IPNC4,THETA,NA,ND
0035      WRITE(5,1022) THETA,NA,ND
0036      COSTH=COS(THETA)
0037      SINTH=SIN(THETA)
0038      IF(NA.GE.0.AND.NA.LT.201) GO TO 142
0039      WRITE(6,2014) NA
0040      NA=0
0041      142 IF(NA.LE.0) GO TO 150
0042      READ(5,1017) (IA1(I),I=1,IAL1),IAL2(1)
0043      WRITE(6,1023)
0044      DO 144 I=1,NA
0045      WRITE(5,1215) I,IA1(I),IAL2(I)
0046      IF(IA1(I).GT.0.AND.IAL1(I).LE.NP) GO TO 143

```

```
0347 WRITE(5,2015) I,IA2(I) 00420000
0348 IAL(I)=1 00430000
0349 143 IF(IA2(I).GT.O.AND.IA2(I).LE.NP) GO TO 144 00440000
0350 WRITE(5,2015) I,IA2(I) 00450000
0351 IAL(I)=NP 00460000
0352 144 CONTINUE 00470000
0353 150 IF(IND.OE.O.AND.ND.(LY-201) GO TO 151 00480000
0354 WRITE(6,2011) ND 00490000
0355 ND=0 00500000
0356 151 IF(ND.LE.O) GO TO 170 00510000
0357 READ(5,1010) (IOL(I),ID2(I),I=1,ND) 00520000
0358 WRITE(6,1021) 00530000
0359 DO 153 I=1,ND 00540000
0360 WRITE(5,1011) I,ID1(I),ID2(I) 00550000
0361 IF(ID1(I).GT.O.AND.ID1(I).LE.NP) GO TO 152 00560000
0362 WRITE(5,2012) I,ID1(I) 00570000
0363 ID1(I)=1 00580000
0364 152 IF(IP2(I).GT.O.AND.ID2(I).LE.NP) GO TO 153 00590000
0365 WRITE(5,2013) I,ID2(I) 00600000
0366 ID2(I)=NP 00610000
0367 153 CONTINUE 00620000
0368 170 IF(IOL.GT.O.O) GO TO 180 00630000
0369 WRITE(5,2003) IOL 00640000
0370 IOL=1.O 00650000
0371 180 CONTINUE 00660000
0372 TX1=(TX*F1)/(OI-TV) 00670000
0373 TX1=(TX*F1)/(OI-TV) 00680000
0374 TX2=(TX*F2)/(O2-TX) 00690000
0375 TX2=(TX*F2)/(O2-TX) 00700000
0376 DO 192 I=1,NP 00710000
0377 COLI=0.O 00720000
0378 DO 192 J=1,3 00730000
0379 PX2(J,I)=C.O 00740000
0380 190 JSUB=-1 00750000
0381 JSUB=-1 00760000
0382 JMOVE=-1 00770000
0383 JANG=-1 00780000
0384 JANG=-1 00790000
0385 IANG1=0 00800000
0386 IANG2=0 00810000
0387 IANG3=0 00820000
0388 LINE=55 00830000
0389 MAX=0 00840000
0390 IECNT=0 00850000
C
C MAIN LOOP - LOOPS ONCE PER VIEW-PAIR
C
C
C ZERO OUT ARRAYS
C 200 DO 202 I=1,NP
0391 TX1(I)=0 00860000
0392 TX1(I)=0 00870000
0393 TX1(I)=0 00880000
0394 TX2(I)=0 00890000
0395 TX2(I)=0 00900000
0396 TX1(I)=1 00910000
0397 TX2(I)=1 00920000
0398 TX3(I)=1 00930000
0399 TX4(I)=1 00940000
0400 TX1(I)=1 00950000
```



```

0101 Y2(1)=-1 01033500
0102 Y3(1)=-1 01034000
0103 Y4(1)=-1 01034500
0104 PFLG(1)=0 01035000
0105 ICH(1)=0 01035100
0106 SFLG(1)=0 01035110
0107 202 CONTINUE 01040000
0108 IC=3 01045000
C 01050000
C 01051000
C 01052000
C 01053000
0109 CALL PAAPT2(NP,ISUB,ISEQ,X1,Y1,X2,Y2,X3,Y3,X4,Y4,MOVE,IANG,SFLG, 01054000
X MAX,IECNT) 01054100
0110 IF(IISUB.EQ.-1) GO TO 400 01060000
0111 IF (IPNCH.EQ.1.AND.ISEQ.EQ.1) WRITE (2) ISUB,MOVE,ISEQ,IANG 01065000
0112 IF(JSUB.EQ.ISUB) GO TO 210 01070000
0113 IF(LINE.LT.55) GO TO 204 01080000
0114 LINE=0 01090000
0115 WRITE(6,1003) 01100000
0116 204 LINE=LINE+1 01110000
0117 WRITE(6,1003) ISUB 01120000
0118 JSUB=ISUB 01130000
0119 GO TO 220 01140000
0120 21) IF (JMOVE.EQ.MOVE) GO TO 205 01141000
C 01141100
C 01141200
C 01141300
C 01141400
C 01141500
C 01141600
0121 220 CONTINUE 01141650
0122 JMOVE=MOVE/10000 01142000
0123 IF (LINE.LT.55) GO TO 206 01143000
0124 LINE=0 01144000
0125 WRITE (5,1009) 01145000
0126 LINE=LINE+1 01146000
0127 WRITE (6,1015) MOVE 01147000
C JMOVE=MOVE 01148000
0128 GO TO 207 01150000
0129 205 IF (JSEQ.EQ.ISEQ) GO TO 221 01151000
0130 IF (MAX.NE.ISEQ) GO TO 207 01152000
0131 IF (LINE.LT.55) GO TO 201 01153000
0132 LINE=0 01154000
0133 WRITE (5,1009) 01155000
0134 201 LINE=LINE+1 01156000
0135 WRITE (6,1004) ISEQ 01157000
0136 JSEQ=ISEQ 01158000
0137 207 IF (LINE.LT.55) GO TO 215 01160000
0138 LINE=0 01170000
0139 WRITE (6,1003) 01180000
0140 LINE=LINE+1 01190000
0141 WRITE (6,1004) ISEQ 01200000
0142 JSEQ=ISEQ 01210000
0143 221 IF(IJANG.EQ.IANG) GO TO 223 01220000
0144 IF(LINE.LT.55) GO TO 222 01230000
0145 LINE=J 01240000
0146 WRITE(6,1003) 01250000
0147 LINE=LINE+1 01260000
0148 IANG=IANG/10000 01270000

```

```

0149 JANG2=(IANG-IANG1*10000)/100 01280000
0150 JANG3=MOD(IANG,100) 01290000
      C...WRITE ANGLE NUMBER 01295000
0151 WRITE(6,1015) IANG1,IANG2,IANG3 01300000
0152 JANG=IANG 01310000
      C 01310100
      C 01310200
      C 01310300
      C 01310400
      C 01310405
      C 01310410
      C 01310420
      C 01310430
      C 01310440
      C 01310500
      C 01310600
      C 01310700
      C 01310800
      C 01310900
      C 01311000
      C 01311010
      C 01311020
      C 01311030
      C 01311040
      C 01311100
      C 01311200
      C 01311300
      C 01311400
      C 01311500
      C 01315000
      C 01315050
      C 01315060
      C 01315070
      C 01315100
      C 01315150
      C 01315200
      C 01315250
      C 01315500
      C 01315550
      C 01315600
      C 01315650
      C 01315700
      C 01316000
      C 01317000
      C 01318000
      C 01319000
      C 01320000
      C 01330000
      C 01340000
      C 01350000
      C 01360000
      C 01370000
      C 01370100
      C 01370200
      C 01370201
      C 01370210
      C 01370220
      C 01370230

0153 C 223 DO 217 I=1,NP
      C...DETERMINE LEFT AND RIGHT SKIN POINTS
0154 IF (X1(I).GE.5000) X1(I)=X1(I)-10000
0155 IF (X2(I).GE.5000) X2(I)=X2(I)-10000
0156 IF (Y1(I).GE.5000) Y1(I)=Y1(I)-10000
0157 IF (Y2(I).GE.5000) Y2(I)=Y2(I)-10000
0158 DX=X1(I)-X2(I)
0159 DY=Y1(I)-Y2(I)
0160 DX=DX*TARGET(I)
0161 DY=DY*TARGET(I)
0162 IX1(I)=X2(I)-DX
0163 IY1(I)=Y2(I)-DY
0164 IF (X3(I).GE.5000) X3(I)=X3(I)-10000
0165 IF (X4(I).GE.5000) X4(I)=X4(I)-10000
0166 IF (Y3(I).GE.5000) Y3(I)=Y3(I)-10000
0167 IF (Y4(I).GE.5000) Y4(I)=Y4(I)-10000
0168 DX=X3(I)-X4(I)
0169 DY=Y3(I)-Y4(I)
0170 DX=DX*TARGET(I)
0171 DY=DY*TARGET(I)
0172 IX2(I)=X4(I)-DX
0173 IY2(I)=Y4(I)-DY

      C
      C...SET FLAGS WHERE NECESSARY
      C
0174 IF (IX1(I).NE.-1.AND.IY1(I).NE.-1) GO TO 214
0175 PELG(I)=1
0176 IX1(I)=0
0177 IY1(I)=0
0178 IF (IX2(I).NE.-1.AND.IY2(I).NE.-1) GO TO 219
0179 PELG(I)=1
0180 IX2(I)=0
0181 IY2(I)=0
0182 219 CONTINUE
0183 IF (IX1(I).EQ.0.AND.IX2(I).EQ.0.AND.IY1(I).EQ.0.AND.IY2(I).EQ.0)
      C X PELG(I)=1
      C 217 CONTINUE
      C
0184 C...CALCULATE REAL WORLD COORDINATES
      C
      C DO 250 I=1,NP
      C
      C 0185 C CALCULATE POINTS FOR JOINT CENTER
      C
      C POINTS USED IN CALCULATING JOINT CENTER
      C 6,8 -- 24
      C 7,9 -- 25

```

```

0186      C      10,12-- 26      01370240
0187      C      11,13-- 27      01370250
0188      C      11,13-- 27      01370290
0189      IF (1,LT,24) GO TO 218
0190      IF (1,LT,26) I1I=1/4*MOD(I,4)
0191      IF (1,GT,25) I1I=1/4*MOD(I,4)+2
0192      JJJE=I1I+2
0193      IF (PFLG(I1I).EQ.1.OR.PFLG(IJJJ).EQ.1) GO TO 250
0194      PFLG(I)=0
0195      DO 215 K=1,3
0196      216 XYZ(K,I)=(XYZ(K,I1I)+XYZ(K,IJJJ))/2
0197      IF (LINE.LT.55) GO TO 213
0198      LINE=0
0199      WRITE (6,1009)
0200      213 LINE=LINE+1
0201      WRITE (5,1032) I,(XYZ(K,I),K=1,3)
0202      IC=IC+1
0203      ICNT(IC)=1
0204      GO TO 238
0205      C      PROCESS COORDINATES FOR POINTS 1 - 23
0206      C      218 IF (PFLG(I1I).EQ.1) GO TO 250
0207      C      C....DEFINE TRANSFORMATION
0208      C      IF IMOVE=1 OR IMOVE=2
0209      C      TX1 IS ADDED TO X-COORDINATE, AFTER DIGITIZER X-COORDINATE
0210      C      IS INVERSED
0211      C      TX1 IS ADDED TO Y-COORDINATE
0212      C      C....
0213      C      IX1(I)=-IX1(I)
0214      C      X11 - LEFT SIDE X COORDINATE
0215      C      X11=FLOAT(IX1(I))*SC*O.CO4*TX1
0216      C      C....Y11 - LEFT SIDE Z COORDINATE
0217      C      Y11=FLOAT(IY1(I))*SC*O.CO4*TY1
0218      C      C....X12 - RIGHT SIDE Y COORDINATE
0219      C      X12=FLOAT(IX2(I))*SC*O.CO4*TX2
0220      C      C....Y12 - RIGHT SIDE Z COORDINATE
0221      C      Y12=FLOAT(IY2(I))*SC*O.CO4*TY2
0222      C      XYZ(I1I)=X11*(F2*O1-X12*O2)/(F1*F2*X11*X12) + RX
0223      C      XYZ(I2I)=X12*(F1*O2-X11*O1)/(F1*F2*X11*X12) + RY
0224      C      Z1=Y11*(F1*O2-X11*O1)/(F1*F2*X11*X12) + RZ
0225      C      Z2=Y12*(F2*O1-X12*O2)/(F1*F2*X11*X12) + RZ
0226      C      XYZ(I3I)=(Z1+Z2)/2.0
0227      C      C....ROTATE AXIS THETA RADIAN
0228      C      XTEP=XYZ(I1I)*COSTH-XYZ(I2I)*SINTH
0229      C      XYZ(I2I)=XYZ(I1I)*SINTH+XYZ(I2I)*COSTH
0230      C      XYZ(I1I)=XTEP
0231      C      CALCULATE INTERFRAME DISTANCES
0232      C      DX=0.0
0233      C      0216
0234      C
0235      C
0236      C
0237      C
0238      C
0239      C
0240      C
0241      C
0242      C
0243      C
0244      C
0245      C
0246      C
0247      C
0248      C
0249      C
0250      C
0251      C
0252      C
0253      C
0254      C
0255      C
0256      C
0257      C
0258      C
0259      C
0260      C
0261      C
0262      C
0263      C
0264      C
0265      C
0266      C
0267      C
0268      C
0269      C
0270      C
0271      C
0272      C
0273      C
0274      C
0275      C
0276      C
0277      C
0278      C
0279      C
0280      C
0281      C
0282      C
0283      C
0284      C
0285      C
0286      C
0287      C
0288      C
0289      C
0290      C
0291      C
0292      C
0293      C
0294      C
0295      C
0296      C
0297      C
0298      C
0299      C
0300      C
0301      C
0302      C
0303      C
0304      C
0305      C
0306      C
0307      C
0308      C
0309      C
0310      C
0311      C
0312      C
0313      C
0314      C
0315      C
0316      C
0317      C
0318      C
0319      C
0320      C
0321      C
0322      C
0323      C
0324      C
0325      C
0326      C
0327      C
0328      C
0329      C
0330      C
0331      C
0332      C
0333      C
0334      C
0335      C
0336      C
0337      C
0338      C
0339      C
0340      C
0341      C
0342      C
0343      C
0344      C
0345      C
0346      C
0347      C
0348      C
0349      C
0350      C
0351      C
0352      C
0353      C
0354      C
0355      C
0356      C
0357      C
0358      C
0359      C
0360      C
0361      C
0362      C
0363      C
0364      C
0365      C
0366      C
0367      C
0368      C
0369      C
0370      C
0371      C
0372      C
0373      C
0374      C
0375      C
0376      C
0377      C
0378      C
0379      C
0380      C
0381      C
0382      C
0383      C
0384      C
0385      C
0386      C
0387      C
0388      C
0389      C
0390      C
0391      C
0392      C
0393      C
0394      C
0395      C
0396      C
0397      C
0398      C
0399      C
0400      C
0401      C
0402      C
0403      C
0404      C
0405      C
0406      C
0407      C
0408      C
0409      C
0410      C
0411      C
0412      C
0413      C
0414      C
0415      C
0416      C
0417      C
0418      C
0419      C
0420      C
0421      C
0422      C
0423      C
0424      C
0425      C
0426      C
0427      C
0428      C
0429      C
0430      C
0431      C
0432      C
0433      C
0434      C
0435      C
0436      C
0437      C
0438      C
0439      C
0440      C
0441      C
0442      C
0443      C
0444      C
0445      C
0446      C
0447      C
0448      C
0449      C
0450      C
0451      C
0452      C
0453      C
0454      C
0455      C
0456      C
0457      C
0458      C
0459      C
0460      C
0461      C
0462      C
0463      C
0464      C
0465      C
0466      C
0467      C
0468      C
0469      C
0470      C
0471      C
0472      C
0473      C
0474      C
0475      C
0476      C
0477      C
0478      C
0479      C
0480      C
0481      C
0482      C
0483      C
0484      C
0485      C
0486      C
0487      C
0488      C
0489      C
0490      C
0491      C
0492      C
0493      C
0494      C
0495      C
0496      C
0497      C
0498      C
0499      C
0500      C
0501      C
0502      C
0503      C
0504      C
0505      C
0506      C
0507      C
0508      C
0509      C
0510      C
0511      C
0512      C
0513      C
0514      C
0515      C
0516      C
0517      C
0518      C
0519      C
0520      C
0521      C
0522      C
0523      C
0524      C
0525      C
0526      C
0527      C
0528      C
0529      C
0530      C
0531      C
0532      C
0533      C
0534      C
0535      C
0536      C
0537      C
0538      C
0539      C
0540      C
0541      C
0542      C
0543      C
0544      C
0545      C
0546      C
0547      C
0548      C
0549      C
0550      C
0551      C
0552      C
0553      C
0554      C
0555      C
0556      C
0557      C
0558      C
0559      C
0560      C
0561      C
0562      C
0563      C
0564      C
0565      C
0566      C
0567      C
0568      C
0569      C
0570      C
0571      C
0572      C
0573      C
0574      C
0575      C
0576      C
0577      C
0578      C
0579      C
0580      C
0581      C
0582      C
0583      C
0584      C
0585      C
0586      C
0587      C
0588      C
0589      C
0590      C
0591      C
0592      C
0593      C
0594      C
0595      C
0596      C
0597      C
0598      C
0599      C
0600      C
0601      C
0602      C
0603      C
0604      C
0605      C
0606      C
0607      C
0608      C
0609      C
0610      C
0611      C
0612      C
0613      C
0614      C
0615      C
0616      C
0617      C
0618      C
0619      C
0620      C
0621      C
0622      C
0623      C
0624      C
0625      C
0626      C
0627      C
0628      C
0629      C
0630      C
0631      C
0632      C
0633      C
0634      C
0635      C
0636      C
0637      C
0638      C
0639      C
0640      C
0641      C
0642      C
0643      C
0644      C
0645      C
0646      C
0647      C
0648      C
0649      C
0650      C
0651      C
0652      C
0653      C
0654      C
0655      C
0656      C
0657      C
0658      C
0659      C
0660      C
0661      C
0662      C
0663      C
0664      C
0665      C
0666      C
0667      C
0668      C
0669      C
0670      C
0671      C
0672      C
0673      C
0674      C
0675      C
0676      C
0677      C
0678      C
0679      C
0680      C
0681      C
0682      C
0683      C
0684      C
0685      C
0686      C
0687      C
0688      C
0689      C
0690      C
0691      C
0692      C
0693      C
0694      C
0695      C
0696      C
0697      C
0698      C
0699      C
0700      C
0701      C
0702      C
0703      C
0704      C
0705      C
0706      C
0707      C
0708      C
0709      C
0710      C
0711      C
0712      C
0713      C
0714      C
0715      C
0716      C
0717      C
0718      C
0719      C
0720      C
0721      C
0722      C
0723      C
0724      C
0725      C
0726      C
0727      C
0728      C
0729      C
0730      C
0731      C
0732      C
0733      C
0734      C
0735      C
0736      C
0737      C
0738      C
0739      C
0740      C
0741      C
0742      C
0743      C
0744      C
0745      C
0746      C
0747      C
0748      C
0749      C
0750      C
0751      C
0752      C
0753      C
0754      C
0755      C
0756      C
0757      C
0758      C
0759      C
0760      C
0761      C
0762      C
0763      C
0764      C
0765      C
0766      C
0767      C
0768      C
0769      C
0770      C
0771      C
0772      C
0773      C
0774      C
0775      C
0776      C
0777      C
0778      C
0779      C
0780      C
0781      C
0782      C
0783      C
0784      C
0785      C
0786      C
0787      C
0788      C
0789      C
0790      C
0791      C
0792      C
0793      C
0794      C
0795      C
0796      C
0797      C
0798      C
0799      C
0800      C
0801      C
0802      C
0803      C
0804      C
0805      C
0806      C
0807      C
0808      C
0809      C
0810      C
0811      C
0812      C
0813      C
0814      C
0815      C
0816      C
0817      C
0818      C
0819      C
0820      C
0821      C
0822      C
0823      C
0824      C
0825      C
0826      C
0827      C
0828      C
0829      C
0830      C
0831      C
0832      C
0833      C
0834      C
0835      C
0836      C
0837      C
0838      C
0839      C
0840      C
0841      C
0842      C
0843      C
0844      C
0845      C
0846      C
0847      C
0848      C
0849      C
0850      C
0851      C
0852      C
0853      C
0854      C
0855      C
0856      C
0857      C
0858      C
0859      C
0860      C
0861      C
0862      C
0863      C
0864      C
0865      C
0866      C
0867      C
0868      C
0869      C
0870      C
0871      C
0872      C
0873      C
0874      C
0875      C
0876      C
0877      C
0878      C
0879      C
0880      C
0881      C
0882      C
0883      C
0884      C
0885      C
0886      C
0887      C
0888      C
0889      C
0890      C
0891      C
0892      C
0893      C
0894      C
0895      C
0896      C
0897      C
0898      C
0899      C
0900      C
0901      C
0902      C
0903      C
0904      C
0905      C
0906      C
0907      C
0908      C
0909      C
0910      C
0911      C
0912      C
0913      C
0914      C
0915      C
0916      C
0917      C
0918      C
0919      C
0920      C
0921      C
0922      C
0923      C
0924      C
0925      C
0926      C
0927      C
0928      C
0929      C
0930      C
0931      C
0932      C
0933      C
0934      C
0935      C
0936      C
0937      C
0938      C
0939      C
0940      C
0941      C
0942      C
0943      C
0944      C
0945      C
0946      C
0947      C
0948      C
0949      C
0950      C
0951      C
0952      C
0953      C
0954      C
0955      C
0956      C
0957      C
0958      C
0959      C
0960      C
0961      C
0962      C
0963      C
0964      C
0965      C
0966      C
0967      C
0968      C
0969      C
0970      C
0971      C
0972      C
0973      C
0974      C
0975      C
0976      C
0977      C
0978      C
0979      C
0980      C
0981      C
0982      C
0983      C
0984      C
0985      C
0986      C
0987      C
0988      C
0989      C
0990      C
0991      C
0992      C
0993      C
0994      C
0995      C
0996      C
0997      C
0998      C
0999      C
1000      C

```



```

0217      NY=0.0      01572000
0218      NZ=0.0      01573000
0219      CD=0.0      01574000
0220      IF (ISEQ.EQ.1) GO TO 232
0221      IF (PAYZ(1,1).EQ.0..AND.PXYZ(2,1).EQ.C..AND.PXYZ(3,1).EQ.0..)
          X GO TO 232
0222      DX=ABS(PXYZ(1,1))-XYZ(1,1)
0223      DY=ABS(PXYZ(2,1))-XYZ(2,1)
0224      DZ=ABS(PXYZ(3,1))-XYZ(3,1)
0225      DO=SQRT(DX**2+DY**2+DZ**2)
0226      CD(1)=CD(1)+DO
0227      DO 233 J=1,3
0228      PXYZ(J,1)=XYZ(J,1)
0229      IF (LINE.LT.55) GO TO 235
0230      LINE=0
0231      WRITE(6,10J9)
0232      LINE=LINE+1
0233      IF (IX1(1).LT.0) IX1(1)=10000+IX1(1)
0234      IF (IY1(1).LT.0) IY1(1)=10000+IY1(1)
0235      IF (IX2(1).LT.0) IX2(1)=10000+IX2(1)
0236      IF (IY2(1).LT.0) IY2(1)=10000+IY2(1)
0237      IC=IC+1
0238      ICNT(1)=1
0239      WRITE(6,10J51),XYZ(J,1),J=1,3,Z1,Z2,IX1(1),IY1(1),IX2(1),IY2(1),
          X .0A,CY,DZ,DO,CD(1)
0240      IF (ABS(Z1-Z2).GT.TOL) WRITE(6,2009)
0241      FLAG INCORRECT COORDINATES
0242      IF IPNCH=1, PUNCH REAL WORLD COORDINATES IN GROUPS OF FOUR PER
0243      CARD.
0244      IF IPNCH=1, PUNCH ANY REMAINING DATA
0245      238 CONTINUE
0246      C...FLAG ESTIMATED COORDINATES
0247      IF (SFLG(1).EQ.0) GO TO 250
0248      IF (SFLG(1).EQ.1) WRITE (6,1030)
0249      IF (SFLG(1).EQ.2) WRITE (6,1031)
0250      250 CONTINUE
0251      IF (IPNCH.EQ.0) GO TO 255
0252      WRITE (2) IC,ICNT(1),XYZ(J,ICNT(1)),J=1,3,I=1,IC)
0253      CALCULATE INTRAPPAPE DISTANCES
0254      255 CONTINUE
0255      IF (ND.EQ.0) GO TO 280
0256      DO 270 I=1,N0
0257      J=ID1(I)
0258      K=ID2(I)
0259      IF (PFLG(J).EQ.1..OR.PFLG(K).EQ.1) GO TO 270
0260      D=(XYZ(1,J)-XYZ(1,K))**2+(XYZ(2,J)-XYZ(2,K))**2+
          X (XYZ(3,J)-XYZ(3,K))**2
0261      D=SQRT(D)
0262      IF (D.LT.C.10) D=0.0
0263      IF (LINE.LT.55) GO TO 260
0264      WRITE(6,10J9)
0265      LINE=0

```



```

0260 260 LINE=LINE+1
0261 WRITE(5,1012) J,K,C
0262 270 CONTINUE
C
C CALCULATE ANGULAR DISPLACEMENTS
C
0263 280 IF(NAT-EO.0) GO TO 290
0264 DO 290 I=1,NA
0265 J=141(I)
0266 K=142(I)
0267 IF (PFLG(J).EQ.1.OR.PFLG(K).EQ.1) GO TO 290
0268 DIFX=XYZ(1,K)-XYZ(1,J)
0269 DIFY=XYZ(2,K)-XYZ(2,J)
0270 DIFZ=XYZ(3,K)-XYZ(3,J)
0271 D=DIFX**2+DIFY**2+DIFZ**2
0272 U=SQR(D)
0273 DX=D.0
0274 DY=D.0
0275 DZ=D.0
0276 IF (ABS(D).LT.0.1) GO TO 281
0277 DX=ARCCOS(DIFX/D)*57.29577958
0278 DY=ARCCOS(DIFY/D)*57.29577958
0279 DZ=ARCCOS(DIFZ/D)*57.29577958
0280 281 IF(LINE.LT.55) GO TO 282
0281 WRITE(5,1059)
0282 LINE=0
0283 282 LINE=LINE+1
0284 WRITE(6,1019) J,K,DX,DY,DZ
0285 290 CONTINUE
0286 GO TO 290
0287 400 IF (LPUNCH.EQ.0) GO TO 500
0288 ENDFILE 2
0289 IF (IECUT.NE.0) GO TO 500
0290 REWIND 2
0291 READ (2,END=500) ISUB,MOVE,ISEQ,IANG
0292 PUNCH 1026,ISUB,MOVE,ISEQ,IANG
0293 410 READ (2,END=500) IC,ICNT(1),(XYZ(J,ICNT(1)),J=1,3),I=1,IC)
0294 PUNCH 1027,ICNT(1),(XYZ(J,ICNT(1)),J=1,3),I=1,IC)
0295 GO TO 410
0296 500 STOP
C
C FORMAT STATEMENTS
C
0297 1001 FORMAT(4F6.2,F5.2,2I3,7F5.2,2X,8X1)
0298 1002 FORMAT(26H1CAMERA 1 FOCAL LENGTH IS ,F7.2/10X,14HDISTANCE IS
X F7.2/25H CAMERA 2 FOCAL LENGTH IS,F8.2/10X,12HDISTANCE IS ,C2840000
X F11.2/14H FIL/SCREEN IS ,F17.2/16H POINTS/FRAME IS,117/
X 13H FRAMES/SUBJECT IS,115/28H S. R. P. RELATIVE TO V. I.,
X 10HP. ,3F6.2/35H DIGITIZER ORIGIN RELATIVE TO V. I.,
X 3H P.,3F6.2/13H TOLERANCE IS,F20.3)
0299 1003 FORMAT(11I6)
0300 1004 FORMAT(11I4)
0301 1005 FORMAT(2X,12,4X,F6.2,2(2X,F6.2),2(3X,F5.2),4(4X,14),5(F6.2))
0302 1006 FORMAT(15,F10.3)
0303 1007 FORMAT(13,7D12,17X)
0304 1008 FORMAT(10,23HPPOINTS TARGET-RATIO -- KEY ,14HTP=0=SURFACE,
X 31H TR=1 1 PATIO, TR=2 1 2 RATIO)
0305 1009 FORMAT(14I,24X,47H-----REAL WORLD-----REAL WORLD 2-- -----,02970000

```

```

FORTRAN IV C LEVEL 21          PAGE 12          DATE = 7505          11/13/07          PAGE 0008

X 54H-----DIGITIZER-----REAL WORLD DISTANCE-----
X /22H SUBCT FRAME POINT,6X,1HX,7X,1HY,7X,1HZ,4X,
X 55HFROM-LEFT FROM-RT LEFT--X LEFT--Z RIGHT-Y RIGHT-Z IN--X 1,03000000
X 22H--Y IN--Z VECTOR CUMM./319H -----,948H -----),
X 516H -----)
0306 1010 FORMAT(36I2,8X) 03030000
0307 1011 FORMAT(15,2H,1,13,3H TC,13) 03040000
0308 1012 FORMAT(10CX,4HFROM,13,3H TO,13,F9,2) 03050000
0309 1013 FORMAT(12,F10,4,213) 03060000
0310 1014 FORMAT(15,8X,11) 03070000
0311 1015 FORMAT(16H MOTION NUMBER ,15) 03080000
0312 1016 FORMAT(7H ANGLES,313) 03090000
0313 1017 FORMAT(36I2,8X) 03100000
0314 1018 FORMAT(15,2H,1,13,3H TC,13) 03120000
0315 1019 FORMAT(8CX,4HFROM,13,3H TO,13,5H ANGX,F6,1,5H ANGY,F6,1,5H ANGL,
X F6,1) 03130000
0316 1020 FORMAT(9HANGLES--)) 03150000
0317 1021 FORMAT(12HDISTANCES--)) 03160000
0318 1022 FORMAT(42H ANGLE, IN RADIANS, AXES ARE TO BE ROTATED,F10,4/
X 22H ANGLES TO COMPUTE ARE,111/ 03170000
X 25H DISTANCES TO COMPUTE ARE,18) 03180000
X 22H END FORWARD MOTION -- BEGIN BACKWARD MOTION) 03190100
0319 1023 FORMAT(46H END FORWARD MOTION -- BEGIN BACKWARD MOTION) 03191000
0320 1026 FORMAT(417) 03192000
0321 1027 FORMAT(4(12,3(F6,2))) 03193000
0322 1030 FORMAT(1+*,31X,1H6,23X,1H6) 03196000
0323 1031 FORMAT(1+*,33X,1H6,23X,1H6) 03197000
0324 1032 FORMAT(20X,12,4X,3(2X,F6,2)) 03198000
0325 2001 FORMAT(25H ***** VALUE FOR F1,F7,2,22H IS INVALID & REPLACED,03200000
X 7H BY 1.0) 03210000
0326 2002 FORMAT(25H ***** VALUE FOR D1,F7,2,22H IS INVALID & REPLACED,03220000
X 7H BY 1.0) 03230000
0327 2003 FORMAT(25H ***** VALUE FOR F2,F7,2,22H IS INVALID & REPLACED,03240000
X 7H BY 1.0) 03250000
0328 2004 FORMAT(25H ***** VALUE FOR D2,F7,2,22H IS INVALID & REPLACED,03260000
X 7H BY 1.0) 03270000
0329 2005 FORMAT(24H ***** VALUE FOR S,F7,2,22H IS INVALID & REPLACED,03280000
X 9H BY 0.125) 03290000
0330 2006 FORMAT(25H ***** VALUE FOR NS,16,22H IS INVALID & REPLACED,03300000
X 6H BY 40) 03310000
0331 2007 FORMAT(26H ***** VALUE FOR TOL,F7,3,20H IS INVALID & REPLAC,03320000
X 9HED BY 1.0) 03330000
0332 2009 FORMAT(14H,47X,1H*) 03340000
0333 2010 FORMAT(25H ***** VALUE FOR NP,16,22H IS INVALID & REPLACED,03350000
X 5H BY 30) 03360000
0334 2011 FORMAT(25H ***** VALUE FOR ND,16,22H IS INVALID & REPLACED,03370000
X 5H BY 0) 03380000
0335 2012 FOR 14T(20H ***** VALUE FOR ID(1,13,2H)=,16,14H IS INVALID & 03390000
X 14HREPLACED BY 1) 03400000
0336 2013 FORMAT(26H ***** VALUE FOR ID(2,13,2H)=,16,14H IS INVALID & 03410000
X 14HREPLACED BY NP) 03420000
0337 2014 FORMAT(25H ***** VALUE FOR NA,16,22H IS INVALID & REPLACED,03430000
X 5H BY 0) 03440000
0338 2015 FORMAT(26H ***** VALUE FOR IA(1,13,2H)=,16,14H IS INVALID & 03450000
X 14HREPLACED BY 1) 03460000
0339 2016 FOR 14T(26H ***** VALUE FOR IA(2,13,2H)=,16,14H IS INVALID & 03470000
X 14HREPLACED BY NP) 03480000
0340 END 03490000

```

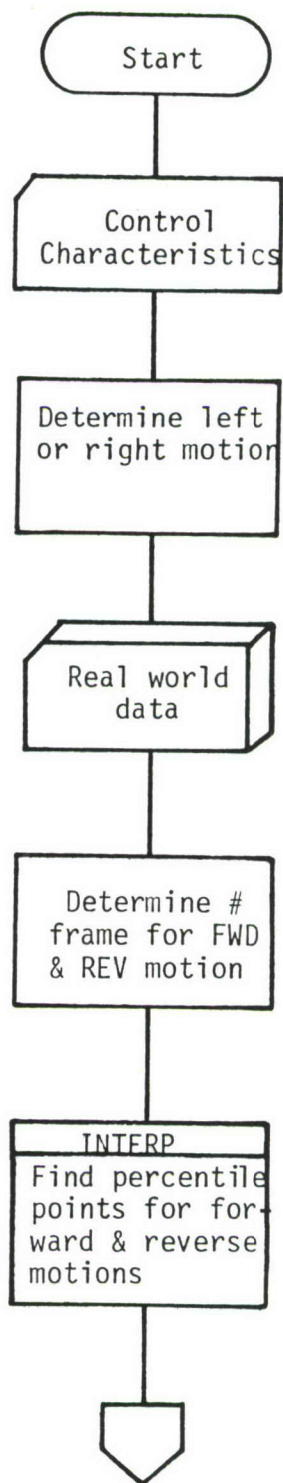


Fig. A-2 Flow Chart for Computer Program used in Statistical Analysis

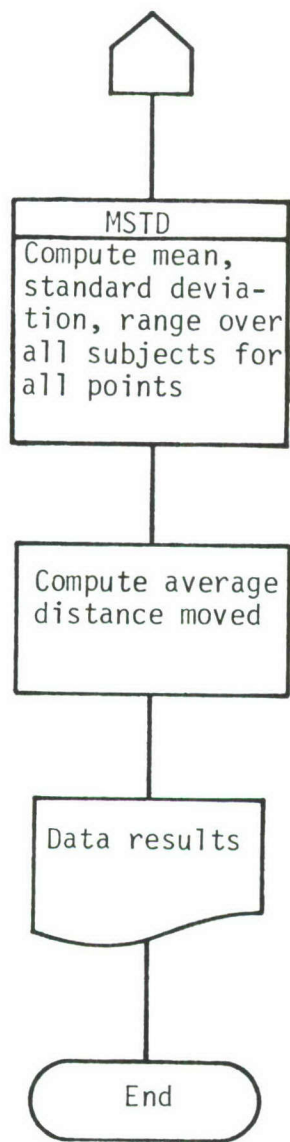


Fig. A-2 (continued)


```

DATA IF4RV/2*1H ,1HF,1HO,1HR,1HW,1HA,1HR,1HD,5*1H ,1HR,1HE,1HT,
X 1HU,1HR,1HN,2*1H /

```

```

STATE FUNCTION TO CALCULATE FIFTH AND NINETY-FIFTH PERCENTILES
PCTLE(RMEAN,STDV)=RMEAN+1.64*STDV

```

```

READ CONTROL CHARACTERS

```

```

INPUT VARIABLES -

```

```

NANGL - MAXIMUM NUMBER OF ANGLES TO BE PROCESSED
NTIME - NUMBER OF TIME PARTITIONS
NFRAME - MAXIMUM NUMBER OF SURFACE POINTS ALLOWED PER FRAME
NPTS - MAXIMUM NUMBER OF SURFACE POINTS TO BE USED IN
CALCULATIONS
NPTS - (NPTS,2) ARRAY WHICH HOLDS THE PCINT NUMBERS TO BE
PROCESSED FOR RIGHT AND LEFT SIDE
IANGLE - (NANGL,3) ARRAY WHICH HOLDS THE BODY POINTS USED
TO DETERMINE ANGLES
BA - BACK ANGLE TO BE PROCESSED THIS RUN
MVMT - MOTION NUMBER TO BE PROCESSED THIS RUN
NSUB - TOTAL NUMBER OF SUBJECTS TO BE READ IN
IREC - INDICATES RECORD NUMBER OF FIRST RECORD TO BE
WRITTEN ONTO DIRECT ACCESS DATA SET. USED ONLY IN
THOSE MOTIONS INVOLVING BOTH RIGHT AND LEFT HANDS.

```

```

READ (5,1000) NANGL,NTIME,NFRAME,NPOINT,NPTS,IPRT
READ (5,1003) ((IPTS(I,J),I=1,NPTS),J=1,2)
READ (5,1003) ((IANGLE(I,J),J=1,3),I=1,NANGL)
IF (IPRT.NE.0) READ (5,1005) LNDMRK
READ (5,1004) BA,MVMT,NSUB,IREC
WRITE (5,1058) BA,MVMT,NTIME,NSUB,NFRAME,NPOINT,NPTS
DO 5 I=1,NANGL
DO 5 J=1,3
IF (IANGLE(I,J).GE.1.OR.IANGLE(I,J).LE.NPOINT) GO TO 5
WRITE (6,1054) J,(IANGLE(I,J),JJ=1,3),NPOINT
IANGLE(I,J)=NPOINT
5 CONTINUE
DENOM=NSUB*(NSUB-1)
ITIME=NTIME+1

```

```

INITIALIZE ARRAYS

```

```

DO 10 I=1,ITIME
DO 10 J=1,NPTS
DO 10 K=1,4
DIST(I,J,K)=0.0
PCTSUB(I,J,K)=0
AVGL(I,J,K)=999.
NPTS(J,K)=0
NANGL(J,K)=0
DO 10 L=1,NSUB
PCTIL(I,J,K)=999.99
YPCITL(I,J,K)=999.99
ZPCITL(I,J,K)=999.99
FWOPEV(L,K)=0
10 CONTINUE
ISUB=0

```

```

0020
0021
0022
0023
0024
0025
0026
0027
0028
0029
0030
0031
0032
0033
0034
0035

```

```

0036
0037
0038
0039
0040
0041
0042
0043
0044
0045
0046
0047
0048
0049
0050

```

```

C
C  DETERMINE PRIMARY HAND INVOLVED IN MOTION
C
0051  M1=MOD(NVMT,10000)
0052  IF (M1-1100.GE.100) GO TO 20
0053  LR=1
0054  LOOP=4
0055  GO TO 23
0056  20  LOOP=2
0057  LR=1
0058  M1=MOD(M1,1000)
0059  IF (M1-100.GT.100) LR=2
0060  23  WRITE (6,1059) NVMT,LOOP,ILR(LR)

C
C  START MAIN LOOP WHICH READS IN SUBJECT DATA AND COMPUTES
C  PERCENTILES -- ONCE PER SUBJECT
C
0061  25  DO 30 IND1=1,NFRAME
0062  DO 30 IND2=1,NPOINT
0063  RWPTX(IND1,IND2)=999.99
0064  RWPTY(IND1,IND2)=999.99
0065  30  RWPTZ(IND1,IND2)=999.99
0066  LFRM=0
0067  MISIND=0
0068  K=0

C
C  READ IN SUBJECT DATA
C  INPUT VARIABLES -
C  INSB - SUBJECT NUMBER
C  NF - TOTAL NUMBER OF FRAMES FOR SUBJECT(INSB)
C  I4 - LAST FRAME OF FORWARD MOTION
C  IFRM - MISSING FRAMES, IF ANY
C  I41 - LAST FRAME OF LEFT FORWARD MOTION
C  I42 - LAST FRAME OF RIGHT REVERSE MOTION
C  (I41 AND I42 ARE USED IN MOTIONS INVOLVING LEFT AND
C  RIGHT HANDS, ONLY)
C
0069  READ (5,1002) INSB,NF,I4,IFRM,I41,I42
0070  WRITE (6,1060) INSB,NF,I4
0071  ISUB=ISUB+1
0072  IF1=1
0073  IF2=2
0074  40  IF (IFRM(IF1).EQ.0) GO TO 70
0075  IF (IFR4(IF1).EQ.1) GO TO 50
0076  IF (IF1.NE.1) GO TO 45
0077  I1=1
0078  I2=IFRM(IF1)
0079  GO TO 47
0080  45  I1=IFRM(IF2-2) +1
0081  I2=IFRM(IF1)-1
0082  47  WRITE (6,1061) (I,I=I1,I2)
0083  50  IND2=IFRM(IF1)
0084  IND3=IFRM(IF2)
0085  IND1=IND2
0086  52  READ (5,1001) ((IPT(I),(DUMMY(I,J),J=1,3)),I=1,4)
0087  IF (IPT(1).EQ.-1) GO TO 55
0088  IF (IPT(1).LT.K) I31=IND1+1
0089  DO 53 I=1,4
0090  IF (IPT(I).EQ.0) GO TO 52

```

13/23/27

DATE = 75344

RWANLS

FURTRAN IV G LEVEL 21

```

0091      K=IPT(I)
0092      RWPTX(I,ND1,IPT(I))=DUMMY(I,1)
0093      RWPTY(I,ND1,IPT(I))=DUMMY(I,2)
0094      RWPTZ(I,ND1,IPT(I))=DUMMY(I,3)
0095      53 CONTINUE
0096      GO TO 52
0097      55 CONTINUE
0098      65 CONTINUE
0099      IF1=IF1+2
0100      IF2=IF2+2
0101      GO TO 40

C
C      DETERMINE FORWARD AND BACKWARD MOTION
0102      70 IF (IND'.EQ.NF) GO TO 75
0103      WRITE (6,1057) IND1,NF,INSB
0104      DO 74 I=1,IND1
0105      WRITE (6,1062) I,((J,RWPTX(I,J),RWPTY(I,J),RWPTZ(I,J)),J=1,NPOINT)
0106      74 CONTINUE
0107      IER=1
0108      75 CONTINUE
0109      IF (LOOP.EQ.4) GO TO 80
0110      FADREV(ISUB,1)=14
0111      FADREV(ISUB,2)=NF-14
0112      GO TO 90
0113      80 FADREV(ISUB,1)=141
0114      FADREV(ISUB,2)=14-141
0115      FADREV(ISUB,4)=NF-142
0116      FADREV(ISUB,3)=NF-14-FADREV(ISUB,4)

C
C      INTERPOLATE BETWEEN FRAMES TO FIND PERCENTILES
0117      90 CONTINUE
0118      WRITE (6,2000) ISUB,(FADREV(ISUB,J),J=1,LOOP)
0119      CALL INTERP(XPCT,YPCT,ZPCT)
0120      IF (ISUB.LT.NSUB) GO TO 25
0121      IF (IER.NE.0) STOP

C
C      SAVE DATA ON LEFT HAND MOTION ON DIRECT ACCESS DATA SET FOR
C      LATER COMPUTATION.
0122      IF (LOOP.NE.4) GO TO 95
0123      READ (2,1) IFD
0124      WRITE (6,2000) IFD
0125      IF (IREC.NE.0) IFD=IREC
0126      WRITE (6,1063)
0127      DO 92 I=1,NSUB
0128      IS=I+2
0129      JI=0
0130      DO 92 J=1,4,3
0131      JI=JI+1
0132      IFD=IFD+1
0133      X      WRITE (2,IFD) BA,MVMT,IS ,JI,NPTS,ITIME, FADREV(I,J),
X      ((XPCT(I,IT,IP,J),YPCT(I,IT,IP,J),ZPCT(I,IT,IP,J)),
X      IT=1,ITIME),IP=1,NPTS)
0134      WRITE (6,1064) IFD ,IS,BA,MVMT,J
0135      92 CONTINUE
0136      IF (IREC.NE.0) GO TO 95
0137      WRITE (2,1) IFD
0138      WRITE (6,2000) IFD

```


C C COMPUTE MEAN AND STANDARD ERROR FOR X, Y, AND Z VALUES
C

```

0139      95 CONTINUE
0140      DO 98 I=1,ITIME
0141      DO 98 J=1,NPTS
0142      DO 98 K=1,LOOP
0143      XMEAN(I,J,K)=0.0
0144      YMEAN(I,J,K)=0.0
0145      ZMEAN(I,J,K)=0.0
0146      XSTDV(I,J,K)=0.0
0147      YSTDV(I,J,K)=0.0
0148      ZSTDV(I,J,K)=0.0
0149      98 CONTINUE
0150      CALL MSTC(XPCT,XMEAN,XSTDV)
0151      CALL MSTC(YPCT,YMEAN,YSTDV)
0152      CALL MSTC(ZPCT,ZMEAN,ZSTDV)
0153      DO 99 I=1,ITIME
0154      DO 99 J=1,NPTS
0155      DO 99 K=1,LOOP
0156      X5PCT(I,J,K)=0.0
0157      Y5PCT(I,J,K)=0.0
0158      Z5PCT(I,J,K)=0.0
0159      X95PCT(I,J,K)=0.0
0160      Y95PCT(I,J,K)=0.0
0161      Z95PCT(I,J,K)=0.0
0162      99 CONTINUE

```

C C COMPUTE MEAN AND STANDARD ERROR FOR TIME VALUES
C

```

0163      DO 140 L=1,LOOP
0164      SUM=0
0165      SUM2=0.0
0166      IMIN=999
0167      IMAX=0
0168      DO 100 IND=1,NSUB
0169      IL=FWDREV(IND,L)
0170      SUM=SUM+IL
0171      SUM2=SUM2+IL**2
0172      IF (IMIN.GT.IL) IMIN=IL
0173      IF (IMAX.LT.IL) IMAX=IL
0174      100 CONTINUE
0175      MEAN(L)=(SUM/NSUB)/10.
0176      STD(L)=(SQRT((NSUB*SUM2-(SUM**2))/DENOM))/10.
0177      MIN(L)=IMIN/10.0
0178      MAX(L)=IMAX/10.0

```

C C COMPUTE DISTANCES
C

```

0179      DO 130 I=1,ITIME
0180      DO 120 IND2=1,NPTS
0181      IF (PTSUB(IND1,IND2,L).EQ.0) GO TO 120

```

C C NJPTS(I,J) = 0 -- NO SURFACE POINTS READ OR CALCULATED FOR THE
C C I-TH POINT OF THE J-TH MOTION
C C NJPTS(I,J) = 1 -- ONE OR MORE SURFACE POINTS CALCULATED FOR THE
C C I-TH POINT OF THE J-TH MOTION
C C IF (NJPTS(IND2,L).EQ.1) GO TO 110

0182

```

0183 NOPTS(IND2,L)=1
0184 GO TO 115
0185 110 X0IST=(XMEAN(IND1,IND2,L)-XLAST(IND2,L))*2
0186 Y0IST=(YMEAN(IND1,IND2,L)-YLAST(IND2,L))*2
0187 Z0IST=(ZMEAN(IND1,IND2,L)-ZLAST(IND2,L))*2
0188 DIST(IND1,IND2,L)=SQRT(X0IST*Y0IST+Z0IST)
0189 115 XLAST(IND2,L)=XMEAN(IND1,IND2,L)
0190 YLAST(IND2,L)=YMEAN(IND1,IND2,L)
0191 ZLAST(IND2,L)=ZMEAN(IND1,IND2,L)

C
C CALL FUNCTION TO CALCULATE FIFTH AND NINETY-FIFTH PERCENTILES OF DATA
X5PCT(IND1,IND2,L)=PCTLE(XMEAN(IND1,IND2,L),-XSTDV(IND1,IND2,L))
Y5PCT(IND1,IND2,L)=PCTLE(YMEAN(IND1,IND2,L),-YSTDV(IND1,IND2,L))
Z5PCT(IND1,IND2,L)=PCTLE(ZMEAN(IND1,IND2,L),-ZSTDV(IND1,IND2,L))
X95PCT(IND1,IND2,L)=PCTLE(XMEAN(IND1,IND2,L),XSTDV(IND1,IND2,L))
Y95PCT(IND1,IND2,L)=PCTLE(YMEAN(IND1,IND2,L),YSTDV(IND1,IND2,L))
Z95PCT(IND1,IND2,L)=PCTLE(ZMEAN(IND1,IND2,L),ZSTDV(IND1,IND2,L))
120 CONTINUE

C
C CALCULATE SPECIFIED ANGLES
ILR1=L
IF (LODP.GT.2) ILR1=LRTBLE(L)
DO 125 I=1,NANGL
  IF (PTSUB(IND1,ANGLE(I),L).EQ.0.OR.PTSUB(IND1,ANGLE(I,2),L)
    .EQ.0.OR.PTSUB(IND1,ANGLE(I,3),L).EQ.0) GOTO 125
  X
  NDANGL(I,L)=1
  J1=ANGLE(I,1)
  DO 123 J=1,2
    J2=ANGLE(I,J+1)
    DX(J)=XMEAN(IND1,J2,L)-XMEAN(IND1,J1,L)
    DY(J)=YMEAN(IND1,J2,L)-YMEAN(IND1,J1,L)
    DZ(J)=ZMEAN(IND1,J2,L)-ZMEAN(IND1,J1,L)
    DXYZ(J)=SQRT(DX(J)**2+DY(J)**2+DZ(J)**2)
  123 CONTINUE
  DXYZ=DXYZ(1)*DXYZ(2)
  ANGL(IND1,I,L)=(ARCCOS((DX(1)*DX(2)+DY(1)*DY(2)+DZ(1)*DZ(2))/
    DXYZ)*57.2958)
  125 CONTINUE
130 CONTINUE
140 CONTINUE

C
C PRINT RESULTS
C
IF (IPRT.NE.0) GO TO 300
FRACT=1./NTIME
IPG=0
DO 200 I=1,LOOP
  IPG=IPG+1
  IF (LOOP.EQ.2) GO TO 160
  IF1=IFWDFRTBLE(I)
  ILR1=LRTBLE(I)
  GO TO 165
160 CONTINUE
  IF1=IFWDF(I)
  ILR1=L
  165 WRITE (5,1350) 'MMT,IPG,BA,ILR(ILR1),IF1,'EAM(I),STD(I),
    X '4(I),'AX(I)
C

```

C WRITE OUT BLOCKS OF DATA PER TIME UNIT
C

```

0230      I2=J
0231      DO 190 IND2=1,NPTS
0232      DSUM=0.0
0233      SUMT=0.
0234      IF (NDPTS(IND2,I).EQ.0) GO TO 180
0235      I2=I2+1
0236      IF (I2*(ITIME+5).LE.55) GO TO 170
0237      I2=1
0238      IPG=IPG+1
0239      WRITE (6,1051) MVMT,ILR(ILR1),IF1 ,IPG
0240      170 WRITE (6,1052) IPTS(IND2,ILR1)
0241      DO 175 IND1=1,ITIME
0242      IF (IND1.EQ.1) GO TO 172
0243      DSUM=DSUM+DIST(IND1,IND2,I)
0244      SUMT=SUMT+FRAC
0245      172 WRITE (5,1053) SUMT,PTSUB(IND1,IND2,I),XMEAN(IND1,IND2,I),
           X      XSTDV(IND1,IND2,I),XSPCT(IND1,IND2,I),X95PCT(IND1,IND2,I),
           X      YMEAN(IND1,IND2,I),YSTDV(IND1,IND2,I),YSPCT(IND1,IND2,I),
           X      Y95PCT(IND1,IND2,I),ZMEAN(IND1,IND2,I),ZSTDV(IND1,IND2,I),
           X      Z95PCT(IND1,IND2,I),Z95PCT(IND1,IND2,I),
           X      DIST(IND1,IND2,I) ,DSUM
0246      175 CONTINUE
0247      190 CONTINUE

```

C WRITE OUT ANGLES BETWEEN SPECIFIED SURFACE POINTS
C

```

0248      I2=0
0249      IPG=IPG+1
0250      WRITE (6,1051) MVMT,ILR(ILR1),IF1,IPG
0251      DO 190 J=1,NANGL
0252      IF (NANGL(J,I).EQ.0) GO TO 190
0253      SUMT=0.
0254      I2=I2+1
0255      IF (I2*(ITIME+3).LE.55) GO TO 182
0256      I2=1
0257      IPG=IPG+1
0258      WRITE (6,1051) MVMT,ILR(ILR1),IF1,IPG
0259      182 WRITE (6,1055) IPTS(1,ANGLE(J,2),ILR1),IPTS(1,ANGLE(J,1),ILR1),
           X      IPTS(1,ANGLE(J,3),ILR1)
0260      DO 185 K=1,ITIME
0261      IF (1,ANGLE(K,J,I).EQ.999.0) GO TO 185
0262      IF (K.EQ.1) GO TO 183
0263      SUMT=SUMT+FRAC
0264      183 WRITE (6,1056) SUMT,ANGL(K,J,I)
0265      185 CONTINUE
0266      190 CONTINUE
0267      200 CONTINUE
0268      STOP

```

C PRINT RESULTS IN FORMAT FOR DOCUMENT
C

```

0269      300 WRITE (6,1080) MVMT,BA
0270      IL=1
0271      I2=2
0272      IF (LOOP.EQ.2) GO TO 303
0273      IL=2
0274      I2=3

```

13/29/27

DATE = 75344

RWANLS

FORTAN IV G LEVEL 21

```

0275      303 DO 315 I=1,I2
0276      IF (L2CP.EQ.2) GO TO 305
0277      IF (L1=4) (PARTBLE(I))
0278      ILR1=LR1BLE(I)
0279      GO TO 310
0280      305 IF (L1=FWO(I))
0281      ILR1=L4
0282      310 WRITE (5,1031) ILR1,IFL,MEAN(I),STD(I),MIN(I),MAX(I)
0283      315 CONTINUE
0284      FRACT=1./NTIME
C
C      WRITE BLOCKS OF DATA PER LANDMARK
C
0285      IEJ=J
0286      320 DO 400 IND2=1,NPTS
0287      IF (NPTS(IND2,I1).EQ.0.AND.NOPTS(IND2,I2).EQ.0) GO TO 400
0288      IF (NPTS(IEJ,2).EQ.0) WRITE (6,1083)
0289      IP=IPTS(IND2,ILR1)
0290      WRITE (5,1082) (LNDMRK(J1,IP),J1=1,5),IP
0291      I3=J
0292      IEJ=IEJ+1
0293      DO 350 I=1,I2
0294      I3=I3+1
0295      DSJM=J.O
0296      SJMT=J.O
0297      340 DO 350 IND1=1,ITIME
0298      IF ((IND1.EQ.1) GO TO 345
0299      DSJM=DSJM+DIST(IND1,IND2,I)
0300      SJMT=SJMT+FRACT
0301      345 WRITE (5,1085) IFWRV(IND1,I3),SUMT,PTSUB(IND1,IND2,I),
X      XMEAN(IND1,IND2,I),
X      XSTDV(IND1,IND2,I),XSPCT(IND1,IND2,I),X95PCT(IND1,IND2,I),
X      YMEAN(IND1,IND2,I),YSTDV(IND1,IND2,I),YSPCT(IND1,IND2,I),
X      Y95PCT(IND1,IND2,I),ZMEAN(IND1,IND2,I),ZSTDV(IND1,IND2,I),
X      Z95PCT(IND1,IND2,I),Z95PCT(IND1,IND2,I),
X      DIST(IND1,IND2,I),DSUM
0302      350 CONTINUE
0303      WRITE (5,1087)
0304      CONTINUE
0305      IF (NPTS(IEJ,2).EQ.0) WRITE (6,1086) MVAT,BA
0306      400 CONTINUE
0307      STOP
C
C      FORMATS
C
C      INPUT FORMATS
0308      1000 FORMAT(4I5,5X,2I5)
0309      1001 FORMAT(4(12,3F6.2))
0310      1002 FORMAT(15I5)
0311      1003 FORMAT(24I3)
0312      1004 FORMAT(8I5)
0313      1005 FORMAT(20A4)
C
C      OUTPUT FORMATS
0314      2020 FORMAT(14,5(14,3F7.2))
0315      1050 FORMAT(14I1,/,14H MOTION NUMBER,16,70X,4HPAGE,13/,
X      15I1X,A4,2X,A3,9H POSITURE,12X
X      10RTIME DATA,2X,5HMEAN,F6.2,15HSECS,STD DEV,F6.2,

```



```

0316      X      1051 FORMAT (1H1, / 13HSECS. RANGE ,F5.2,3H TO,F6.2,5HSECS., /
0317      X      1052 FORMAT (1H1, / 14H MOTION NUMBER,16,3H ( ,A4,1X,A3,
      X      11H POSITION),52X,4HPAGE,13 /)
      X      11H,12X,18HPOSITION OF POINT ,15 / 1X,12HTIME SAMPLE,3X,
      X      11H,6X,15HX - CO-ORDINATE,8X,3H) (,6X,15HY - CO-ORDINATE,
      X      3X,3H) (,6X,154Z - CO-ORDINATE,9X,16H) DISTANCE MOVED /
      X      5H SECS,2X
      X      6HSIZE,N,2X,3(32H MEAN SE 5 PCT 95 PCT ),4X,
      X      4HINCR,4X,3HCUM)
0318      X      1053 FORMAT (1H ,F5.2,1X,15,3X,12(F6.2,2X),2F7.2)
0319      X      1054 FORMAT (1H ** THE ,12,37H VERTICE FOR THE ANGLE BETWEEN POINTS,
      X      13,1H,13,4H AND,13,33H EXCEEDS LIMITS AND IS REPLACED BY,
      X      13,4H ***)
0320      X      1055 FORMAT (1H0,44H TIME(SECS) -- ANGLE(DEGREES) BETWEEN POINTS, 13,
      X      1H,13,4H AND,13)
0321      X      1056 FORMAT (1H ,3X,F4.2,5X,F10.2)
0322      X      1057 FORMAT (20H *** LAST FRAME READ,13,23H DOES NOT CORRESPOND TO,
      X      24H TOTAL NUMBER OF FRAMES,13,134, FOR SUBJECT,12,4H ***)
0323      X      1058 FORMAT (1H1, 9X,29HBACK ANGLE TO BE PROCESSED --,16/10X,15HNUMBER OF TIME ,
      X      12HINTERVALS --,13/10X,15HTOTAL NUMBER OF,
      X      23H SUBJECTS TO BE PROCESSED --,12/10X,14HMAX NUMBER OF ,
      X      21HFRAMES PER SUBJECT --,13/10X,21HMAX NUMBER OF POINTS ,
      X      234TO BE READ PER FRAME --,13/10X,20HMAX NUMBER OF POINTS,
      X      35H TO BE PROCESSED PER TIME PERIOD --,13)
0324      X      1059 FORMAT (1H-, 9X,6H MOTION,16,9H CONTAINS,12,13H SUBMOTIONS, ,
      X      24HPRIMARILY INVOLVING THE ,A4,5H SIDE)
0325      X      1060 FORMAT (1H-,15X,14HSUBJECT NUMBER,13,9H CONTAINS,13,1H ,
      X      4HFRAMES. THE FORWARD MOTION ENDS AFTER FRAME,12)
0326      X      1061 FORMAT (1H *** FRAMES,13,5H THRU,13,12H MISSING ***)
0327      X      1062 FORMAT (15,5(13,3F7.2),5(/4X,5(13,3F7.2)))
0328      X      1063 FORMAT (1H0,5X,34HDA RCD NC SUBJ BA MVMT SUBMVMT)
0329      X      1064 FORMAT (1H ,7X,15,5X,12,3X,12,1X,15,6X,11)
0330      X      1065 FORMAT (1H1,7X,15,5X,12,3X,12,1X,15,6X,11)
      X      8HANGLE --,
      X      12 / 1140X,12HSUB-MOVEMENT, 5X,12(1H-),9HTIME DATA,12(1H-)/
      X      57X,44HMEAN,5X,7HSTD DEV,11X,SHRANGE)
0331      X      1081 FORMAT (1H0,40X,A4,1X,A3,1X ,3(6X,F5.2),4H TO ,F5.2,
      X      6H SECS.)
0332      X      1082 FORMAT (1H0,40X,11HLANDMARK - ,5A4,2H (,13,1H) / 4X,4HTIME,2X,
      X      6HSAMPLE,2X,1H(,6(1H-),15HX - CO-ORDINATE,8(1H-),3H) (,
      X      6(1H-),15HY - CO-ORDINATE,8(1H-),2H) (,6(1H-),7HZ - CO-,
      X      8HCOORDINATE,3(1H-),16H) DISTANCE MOVED/6X,1HT,3X,6HSIZE,N,
      X      1X,3(32H MEAN SE 5 PCT 95 PCT ),4X,4HINCR,4X,
      X      3HCUM)
0333      X      1083 FORMAT (1H1)
0334      X      1084 FORMAT (1H+,12(/))
0335      X      1085 FORMAT (1H ,1X,A1,1X,F4.2,17,3X,12(F6.2,2X),2F7.2)
0336      X      1086 FORMAT (1H-/9H MVMT NO.,1X,15,1H/,12)
0337      X      1087 FORMAT (1H )
0338      X      2000 FORMAT (1015)
0339      X      END

```

```

C001 SUBROUTINE INTERP(XPCT,YPCT,ZPCT)
C
C SUBROUTINE TO DETERMINE POINTS FOR EACH SUBJECT AT A SPECIFIED
C TIME INTERVAL
C
C002 REAL RWPTX(40,30),RWPTY(40,30),RWPTZ(40,30),
C003 X XPCT(7,15,15,4),YPCT(7,15,15,4),ZPCT(7,15,15,4)
C004 INTEGER FWDREV(7,4),IPTS(16,2),PTSUB(15,16,4),FRAME,MPTS(15)
C
C005 COMMON /PGMDTA/NSUB,NTIME,LCCP,IPTS,PTSUB,TCL,MPTS,FWDREV,LR
C006 COMMON /SUBDTA/ISUB,NF,14,RWPTX,RWPTY,RWPTZ
C007 INIT=0
C008 FRAME=0
C
C009 DO 100 IND1=1,LOOP
C010 IF (IND1.GT.1) INIT=INIT+FRAME
C011 FRAME=FWDREV(ISUB,IND1)
C012 IF (LOOP.LE.2) GO TO 10
C013 LR=3-IND1
C014 IF (IND1.LE.2) GO TO 10
C015 LR=1
C016 IF (IND1.EQ.4) LR=2
C
C017 PLACE LOCATION OF POINTS AT END OF MOTION AT THE BEGINNING OF
C018 MOTION (I.E. AT TIME T=0.0 SECONDS)
C019 10 I1=INIT
C020 IF (INIT.EQ.0) I1=NF
C021 IF (LOOP.EQ.4.AND.IND1.EQ.2) I1=FWDREV(ISUB,3)+INIT+FRAME
C022 IF (LOOP.EQ.4.AND.IND1.EQ.4) I1=FWDREV(ISUB,1)
C023 DO 5 I=1,NPTS
C024 IPNTR=IPTS(I,LR)
C025 XPCT(ISUB,1,I,IND1)=RWPTX(I1,IPNTR)
C026 YPCT(ISUB,1,I,IND1)=RWPTY(I1,IPNTR)
C027 ZPCT(ISUB,1,I,IND1)=RWPTZ(I1,IPNTR)
C
C028 DO 95 IND2=1,NPTS
C029 MP=0
C030 DO 15 J=1,NTIME
C031 MPTS(J)=0
C032 DO 90 IND3=1,NTIME
C033 I3=IPTS(IND2,LR)
C034 POINT=FRAME*FLOAT(IND3)/FLOAT(NTIME)
C035 FACT=AMD*(POINT,1.)
C036 IPPOINT=AINT(POINT)
C037 REV=FRAME-IPPOINT*NTIME
C038 LS=0
C039 ISD=0
C040 IF (FACT.EQ.0.) GO TO 20
C041 CALCULATE FOR INTERMEDIATE POINTS
C
C042 IF (POINT.GE.1.0) GO TO 25
C043 I1=INIT
C044 IF (IND1.EQ.1) I1=NF
C045 I2=INIT+1
C046 GO TO 30
C047 25 A1=INIT+POINT

```

13/29/27

DATE = 75344

INTERP

FORTRAN IV G LEVEL 21

```

0044 I1=AINI(A1)
0045 I2=I1+1
0046 GO TO 30

C
C   CALC FOR EXACT POINT
0047 20 I1=INIT+POINT
0048 I2=I1

C
C   CHECK FOR BLANK CELLS
0049 30 IF (RWPTX(I1,I3).LT.900.0.AND.RWPTX(I2,I3).LT.900.0) GO TO 50
0050 IF (RWPTX(I1,I3).LT.900.) GO TO 35
0051 LS=LS+1
0052 IF (INIT.EQ.0.AND.I1.EQ.NF) I1=0
0053 I1=I1-1
0054 ISD=ISD+1
0055 IF (I1.NE.0) GO TO 35
0056 I1=INIT
0057 IF (IND1.EQ.1) I1=NF
0058 35 IF (RWPTX(I2,I3).LT.900.) GO TO 40
0059 I2=I2+1
0060 ISD=ISD+1
0061 40 IF (I1.GE.INIT.AND.I2.LE.INIT+FRAME) GO TO 30
0062 MP=MP+1
0063 MPTS(MP)=IND3
0064 GO TO 90

C
C   USE FACTOR AND DETERMINE POINT
C
0065 50 CONTINUE
0066 I31=IND3+1
0067 IF (ISD.EQ.0) GO TO 55
0068 FACT=(FACT+LS)/ISD
0069 55 XPC1(ISUB,I31,IND2,IND1)=RWPTX(I1,I3)+(RWPTX(I2,I3)
X      -RWPTX(I1,I3))*FACT
0070 X      YPCT(ISUB,I31,IND2,IND1)=RWPTY(I1,I3)+(RWPTY(I2,I3)
X      -RWPTY(I1,I3))*FACT
0071 X      ZPCT(ISUB,I31,IND2,IND1)=RWPTZ(I1,I3)+(RWPTZ(I2,I3)
X      -RWPTZ(I1,I3))*FACT
0072 90 CONTINUE
0073 IF (MP.EQ.0) GO TO 95
0074 WRITE (6,203) I3,IND1,(MPTS(J1),J1=1,MP)
0075 95 CONTINUE
0076 100 CONTINUE
0077 RETURN
0078 203 FORMAT (2X,24HPPOINTS MISSING FOR POINT,I3,I3H, SUBMOVEMENT,I3,
X      18H, TIME PERIOD(S) ,I5I3)
0079 END

```

11/10/12

DATE = 76005

MAIN

FORM: IV 5 LEVEL 21

```

0001 SUBROUTINE MSTD(XPCT,MEAN,STDEV)
0002 C
0003 DIMENSION STDEV(15,16,4),XPCT(7,15,16,4),IPTS(16,2)
0004 REAL MEAN(15,16,4)
0005 INTEGER XYZ,PTSUB(15,16,4),FWDREV(7,4)
0006 COMMON /PSMDTA/NSUB,NTIME,LOOP,IPTS,PTSUB,TOL,NPTS,FWDREV,LR
0007 C
0008 C COMPUTE STANDARD DEVIATION AND MEAN FOR X,Y, AND Z COORDINATES
0009 C
0010 ITIME=NTIME+1
0011 DO 100 IND1=1,ITIME
0012 DO 100 IND2=1,NPTS
0013 DO 100 IND3=1,LOOP
0014 SUM=0.0
0015 SUMSQ=0.0
0016 NV=NSUB
0017 DO 70 IND4=1,NSUB
0018 VAL=XPCT(IND4,IND1,IND2,IND3)
0019 IF (VAL.LT.000.) GO TO 50
0020 NV=NV+1
0021 GO TO 70
0022 50 SUM=SUM+VAL
0023 SUMSQ=SUMSQ+VAL**2
0024 70 CONTINUE
0025 PTSUB(IND1,IND2,IND3)=NV
0026 IF (NV.EQ.0) GO TO 100
0027 MEAN(IND1,IND2,IND3)=SUM/NV
0028 IF (NV.FQ.1) GO TO 100
0029 DENOM=NV*(NV-1)
0030 STDEV(IND1,IND2,IND3)=SQRT((NV*SUMSQ-(SUM**2))/DENOM)
0031 100 CONTINUE
0032 RETURN
0033 END

```

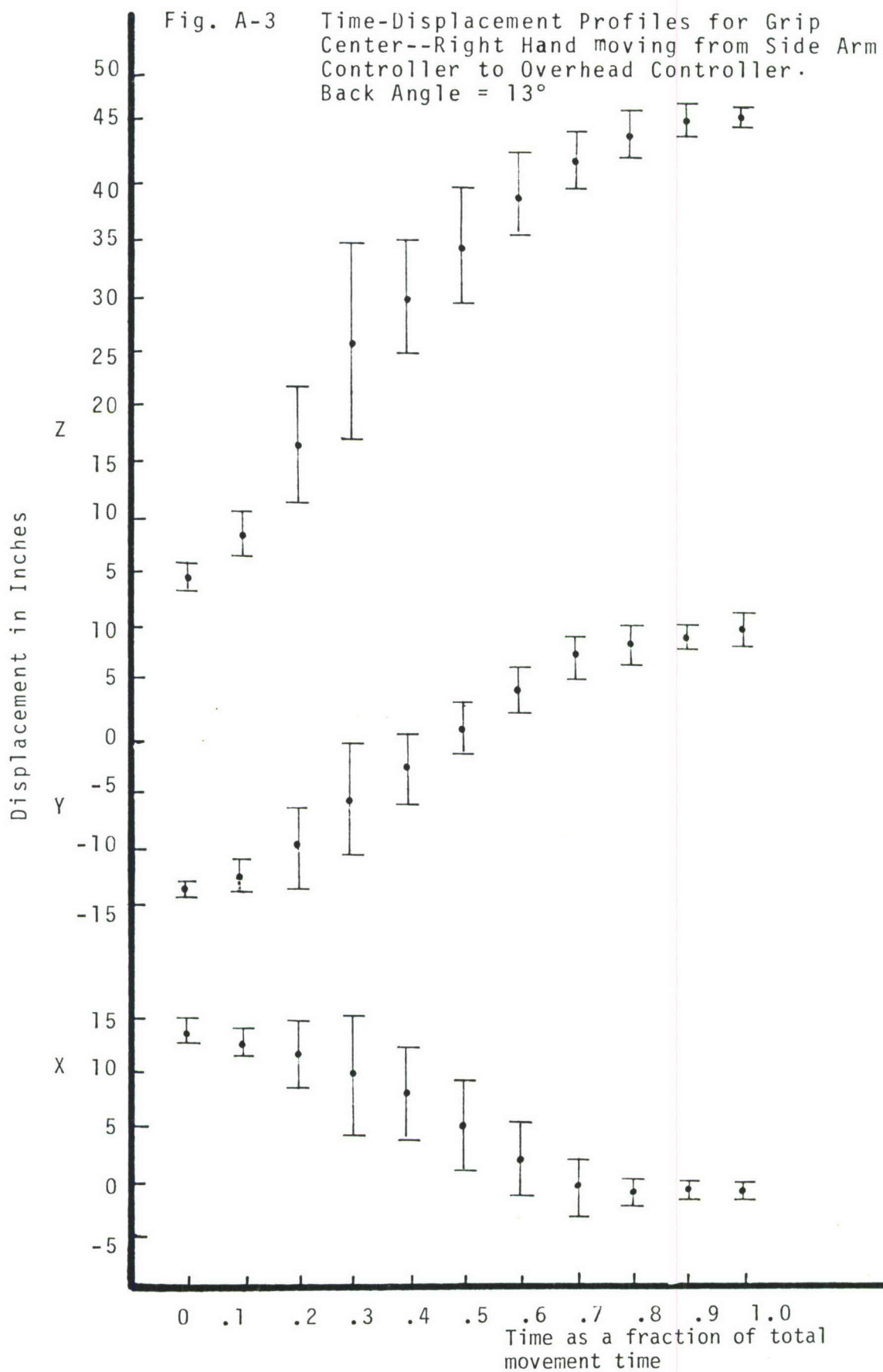



Fig. A-4. Time-Displacement Profiles for Grip Center-- Right Hand Moving from Side Arm Controller to Panel Controller.
Back Angle = 13°

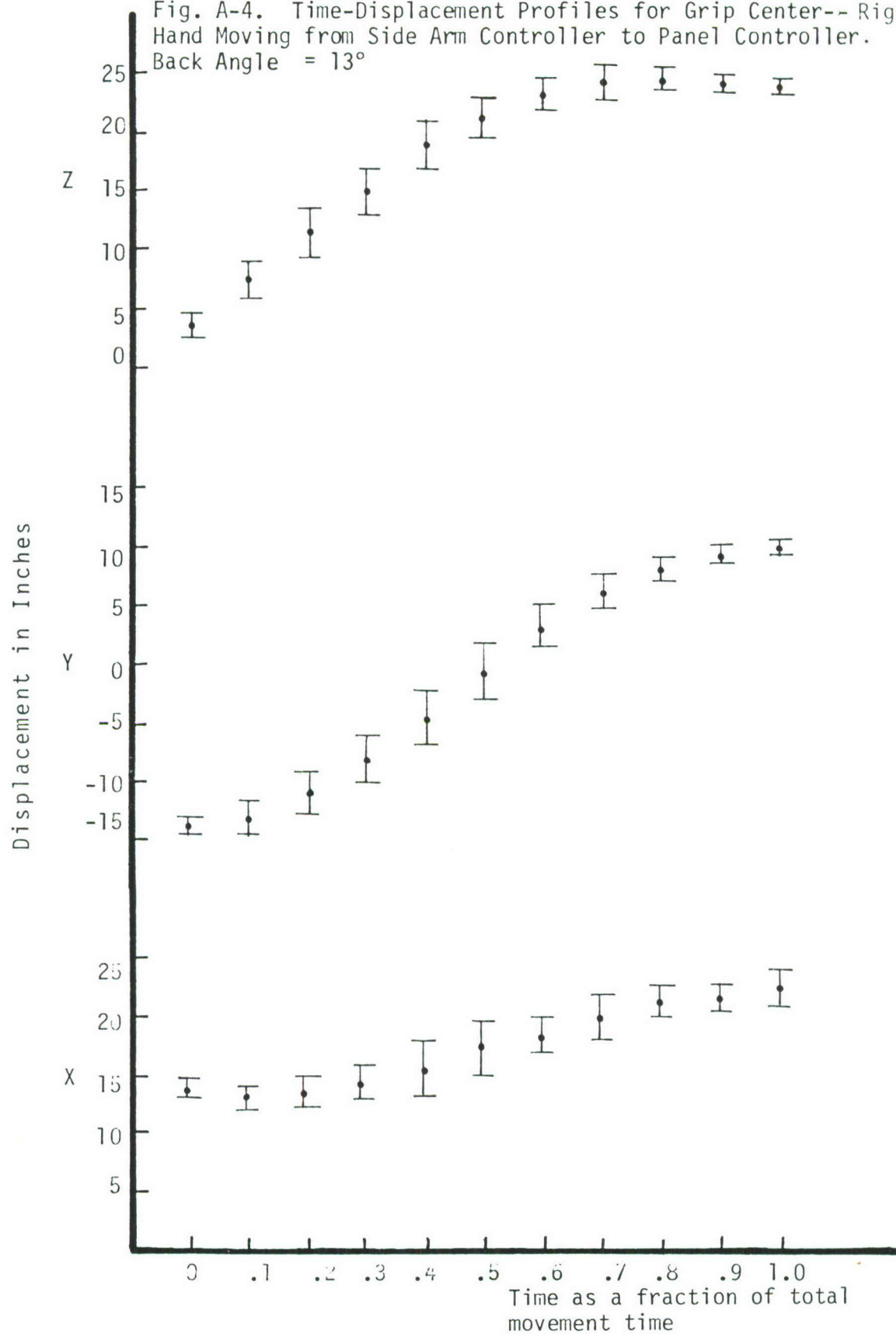


Fig. A-5. Time-Displacement Profiles for Grip Center--
Right Hand Moving from Side Arm Controller to
Hatch Release Controller. Back Angle = 13°

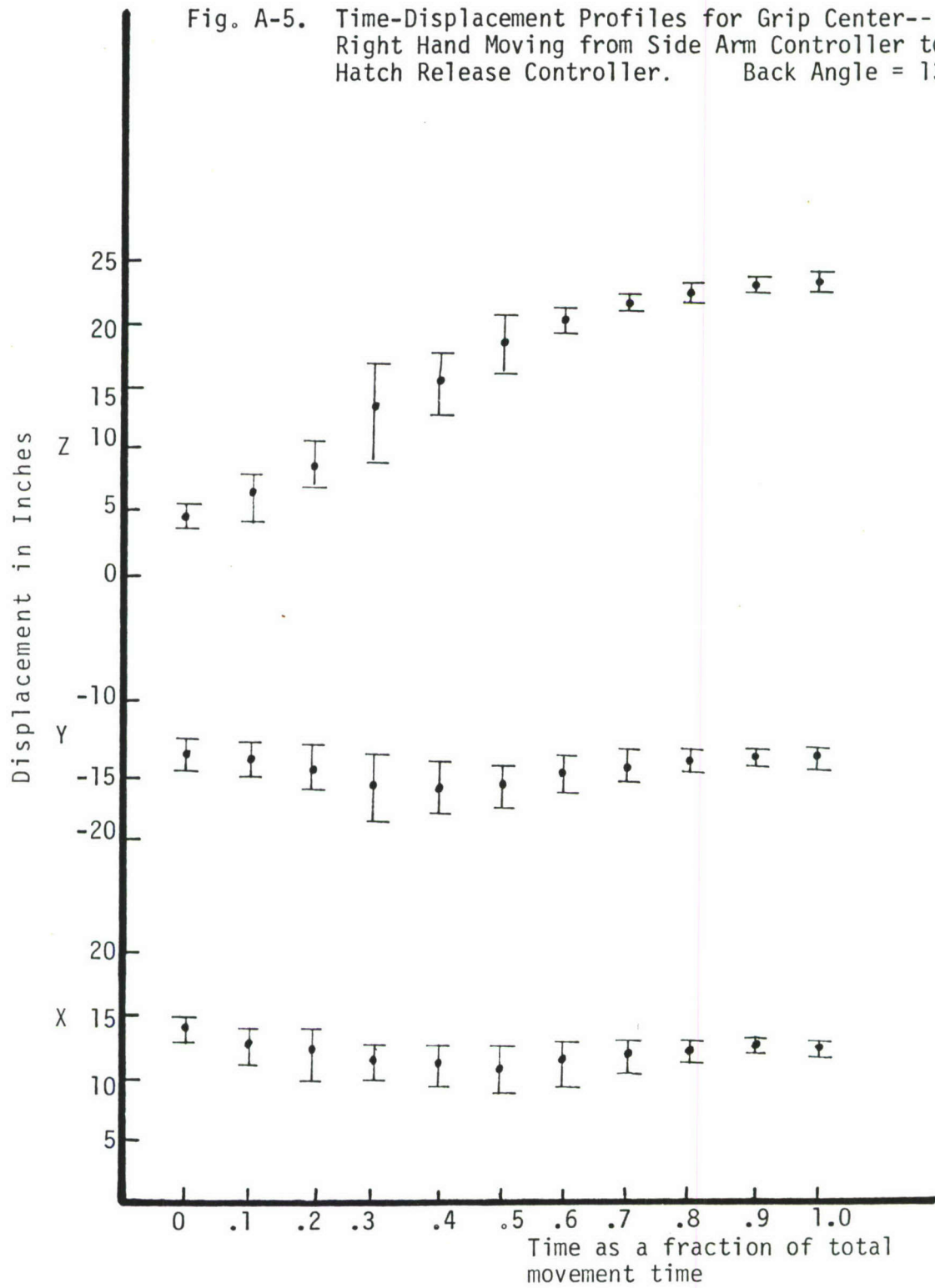


Fig. A-6 Time-Displacement Profiles for Grip Center-Left Hand Moving from Throttle to Over Head Controller. Back Angle=13°

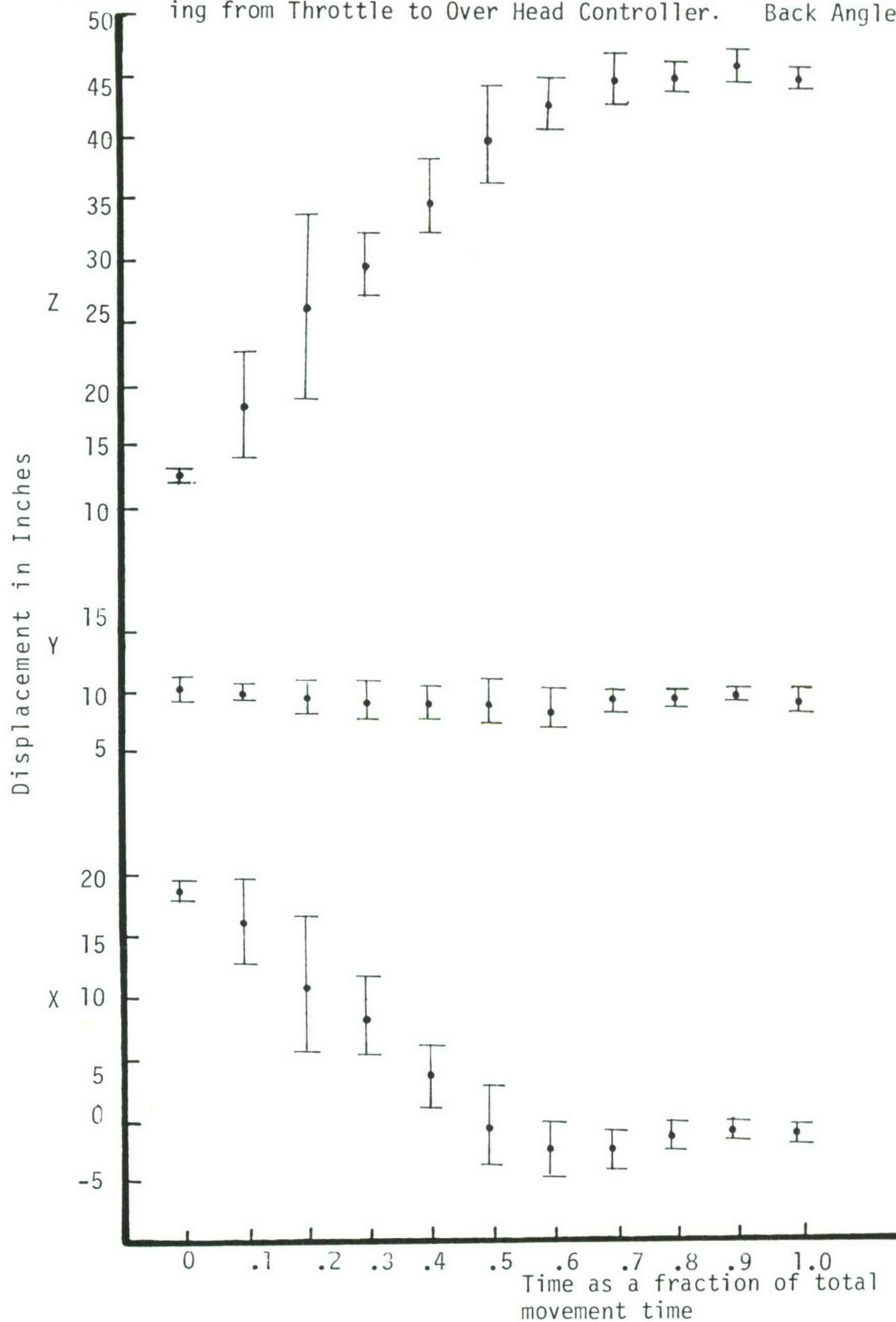


Fig. A-7. Time-Displacement Profiles for Grip Center--
Left Hand Moving from Throttle to Panel Controller.
Back Angle = 13°

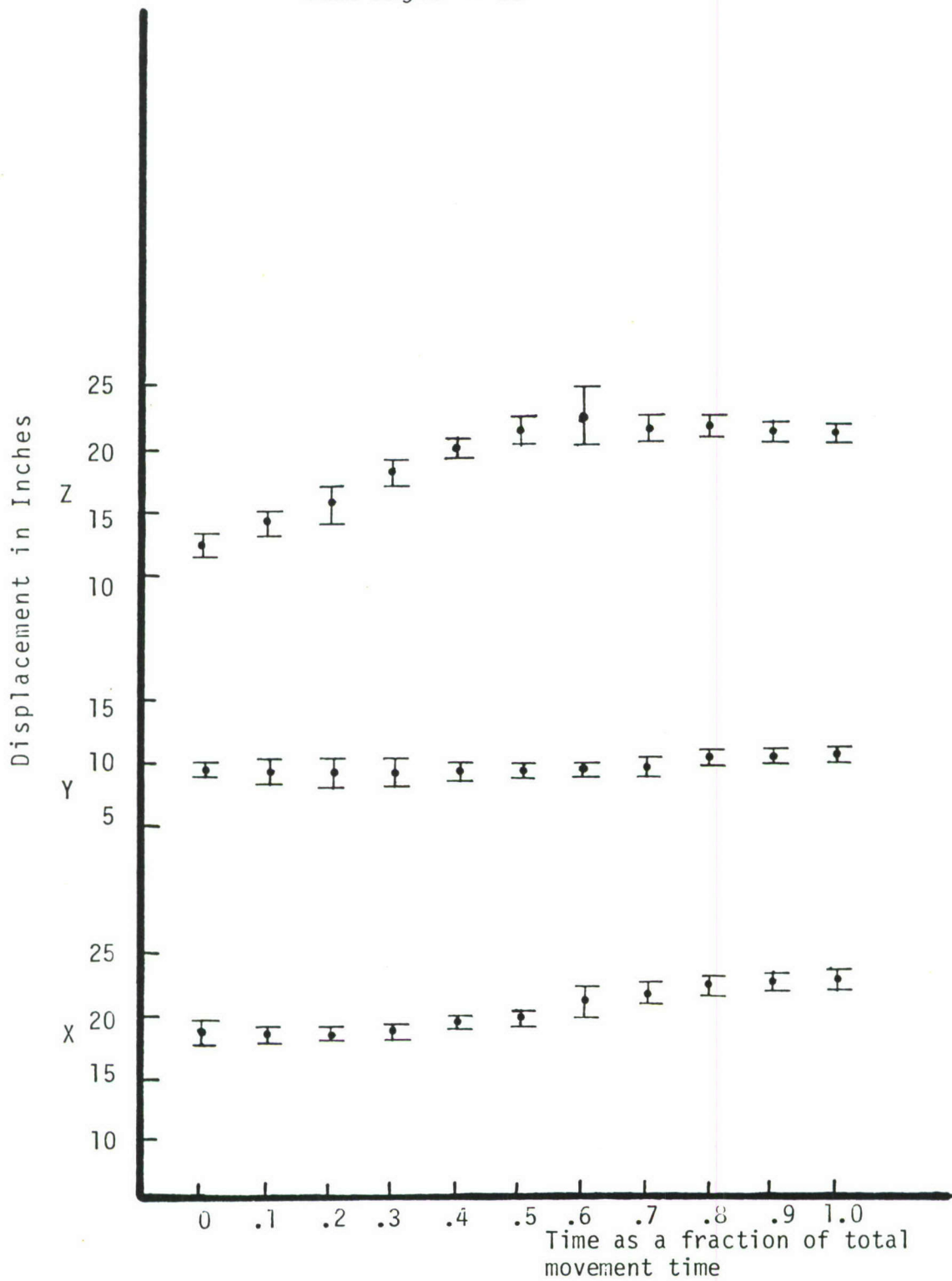


Fig. A-8 Time-Displacement Profiles for Grip Center--Right Hand Moving from Stick Controller to Overhead Controller.
Back Angle = 13°

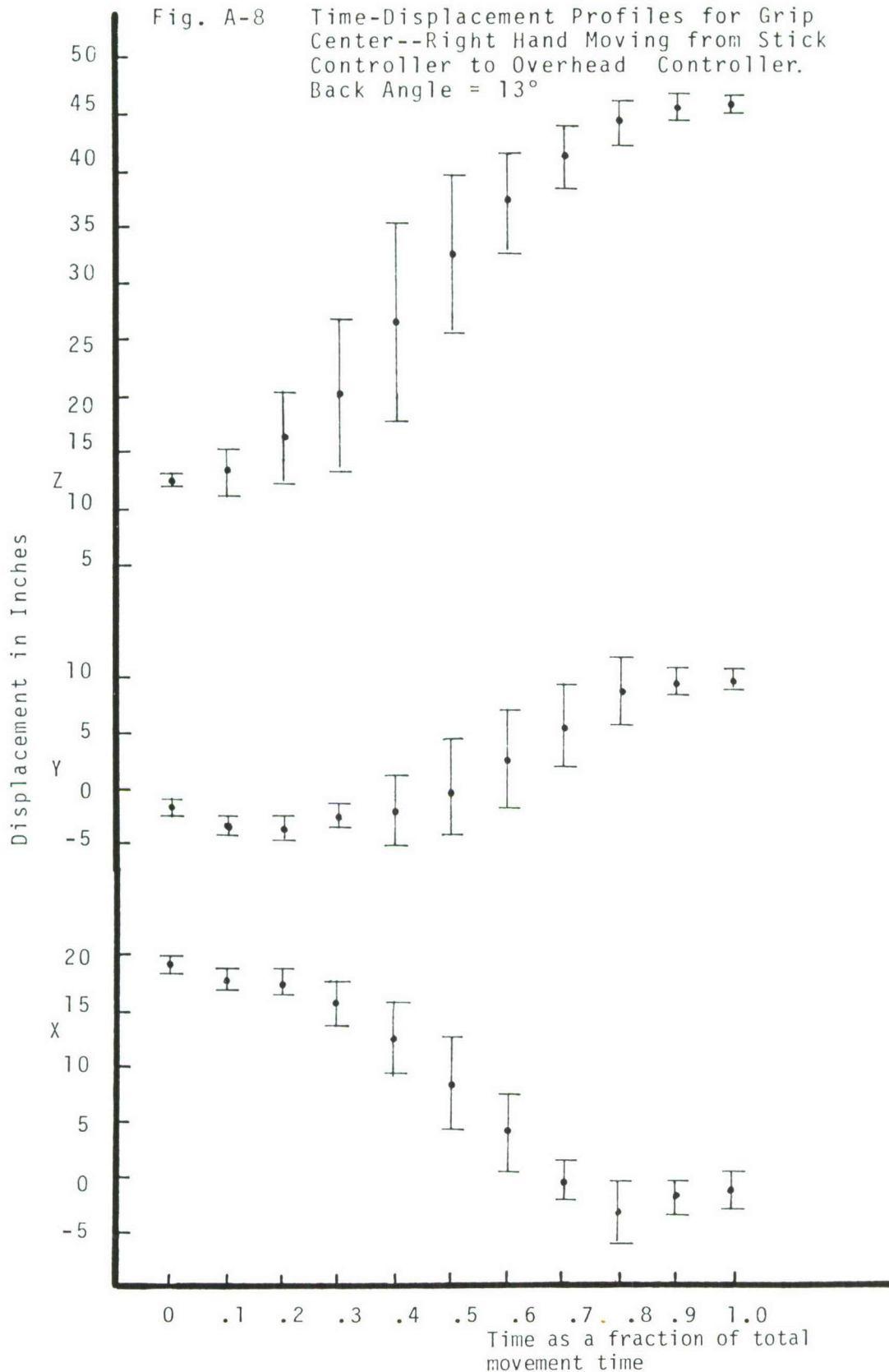


Fig. A-9. Time-Displacement Profiles for Grip Center--
Right Hand Moving from Stick Controller to
Panel Controller. Back Angle = 13°

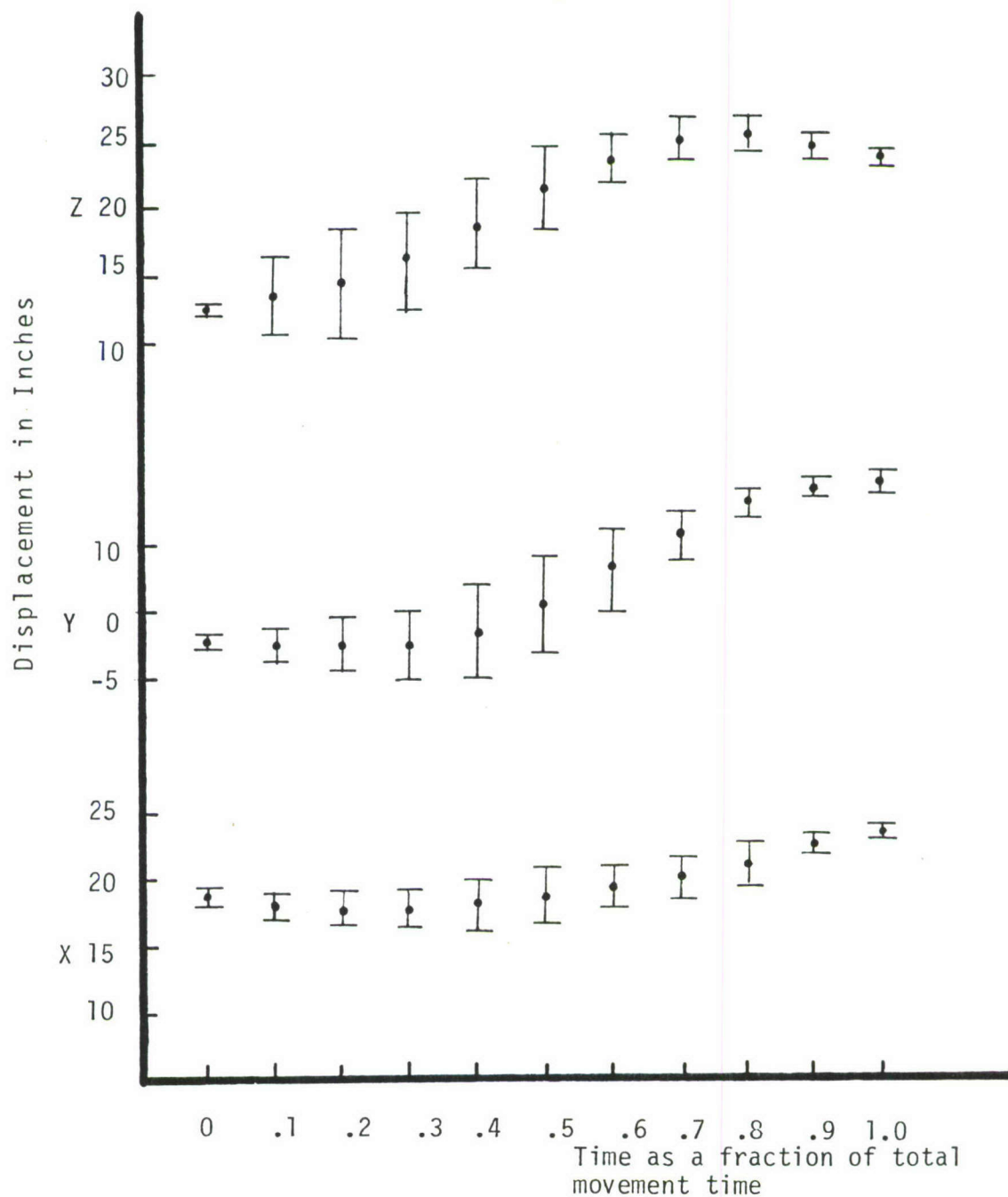


Fig. A-10. Time-Displacement Profiles for Grip Center--
Right Hand Moving from Stick Controller to
Hatch Release Controller. Back Angle = 13°

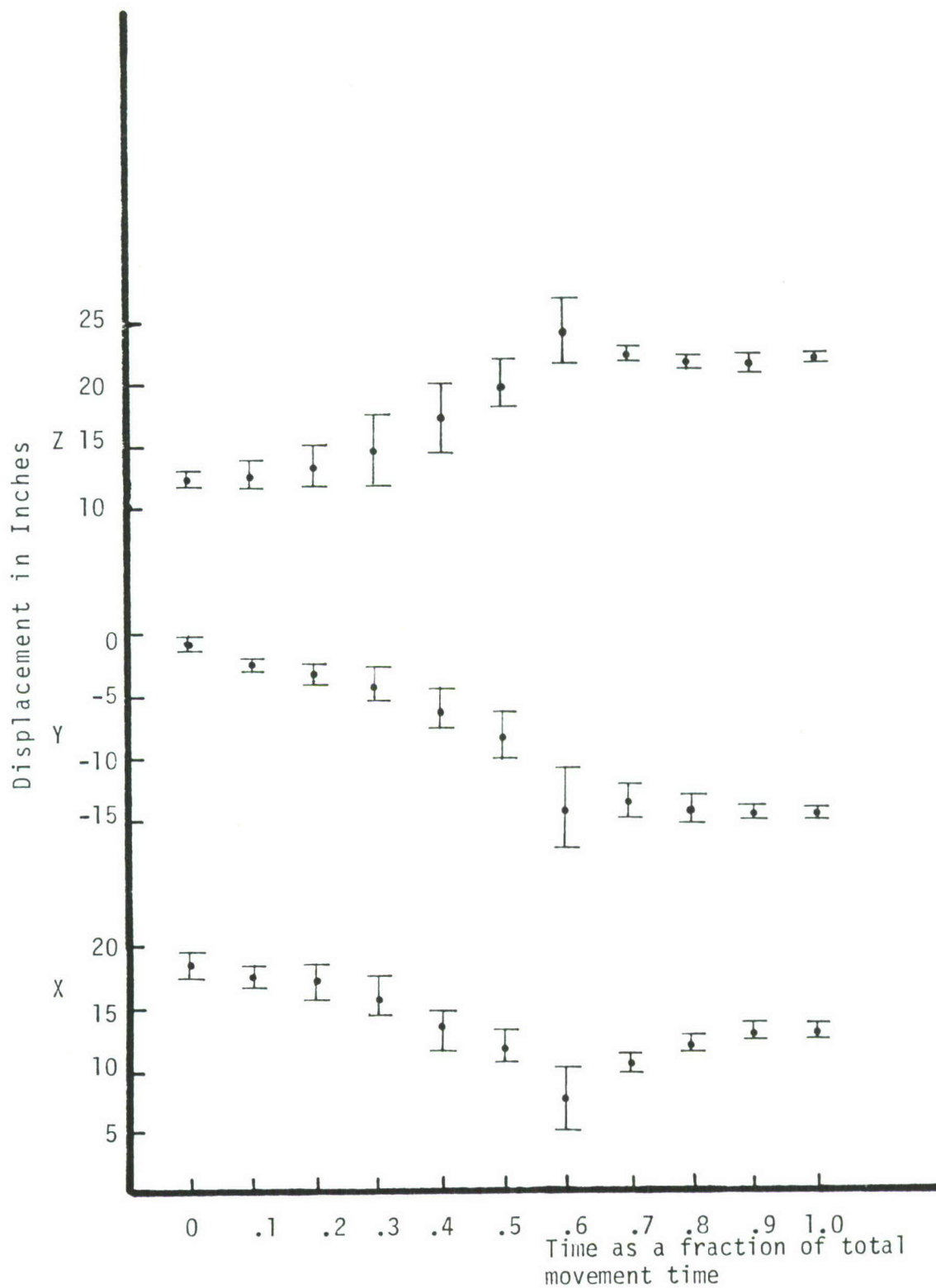


Fig. A-11 Time-Displacement Profiles for Grip Center--Right Hand Moving from Side Arm Controller to Overhead Controller.
Back Angle = 30°

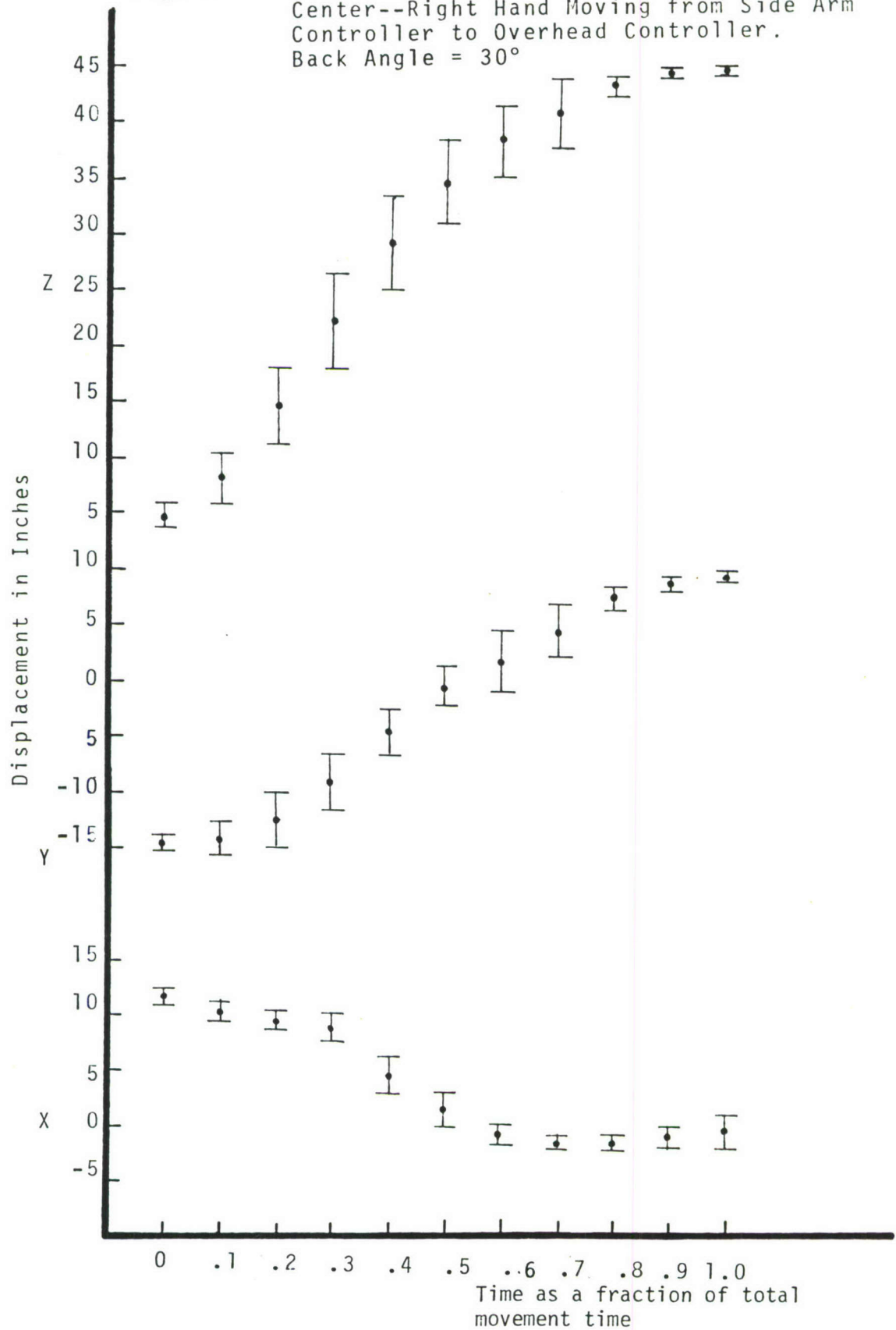


Fig. A-12. Time-Displacement Profiles for Grip Center--Right Hand Moving from Side Arm Controller to Panel Controller . Back Angle = 30°

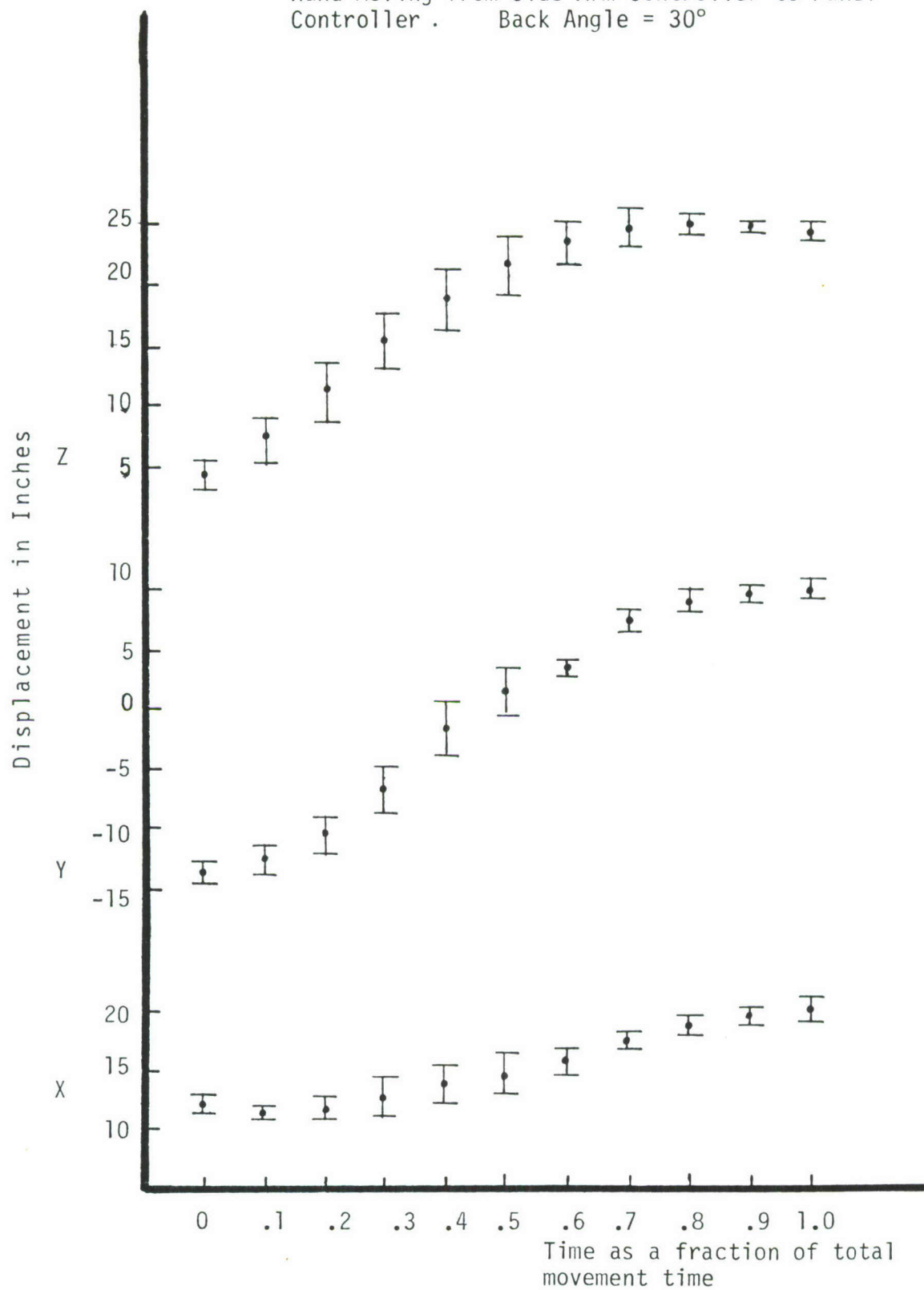


Fig. A-13. Time Displacement Profiles for Grip Center--
Right Hand Moving from Stick Controller to
Panel Controller. Back Angle = 30°

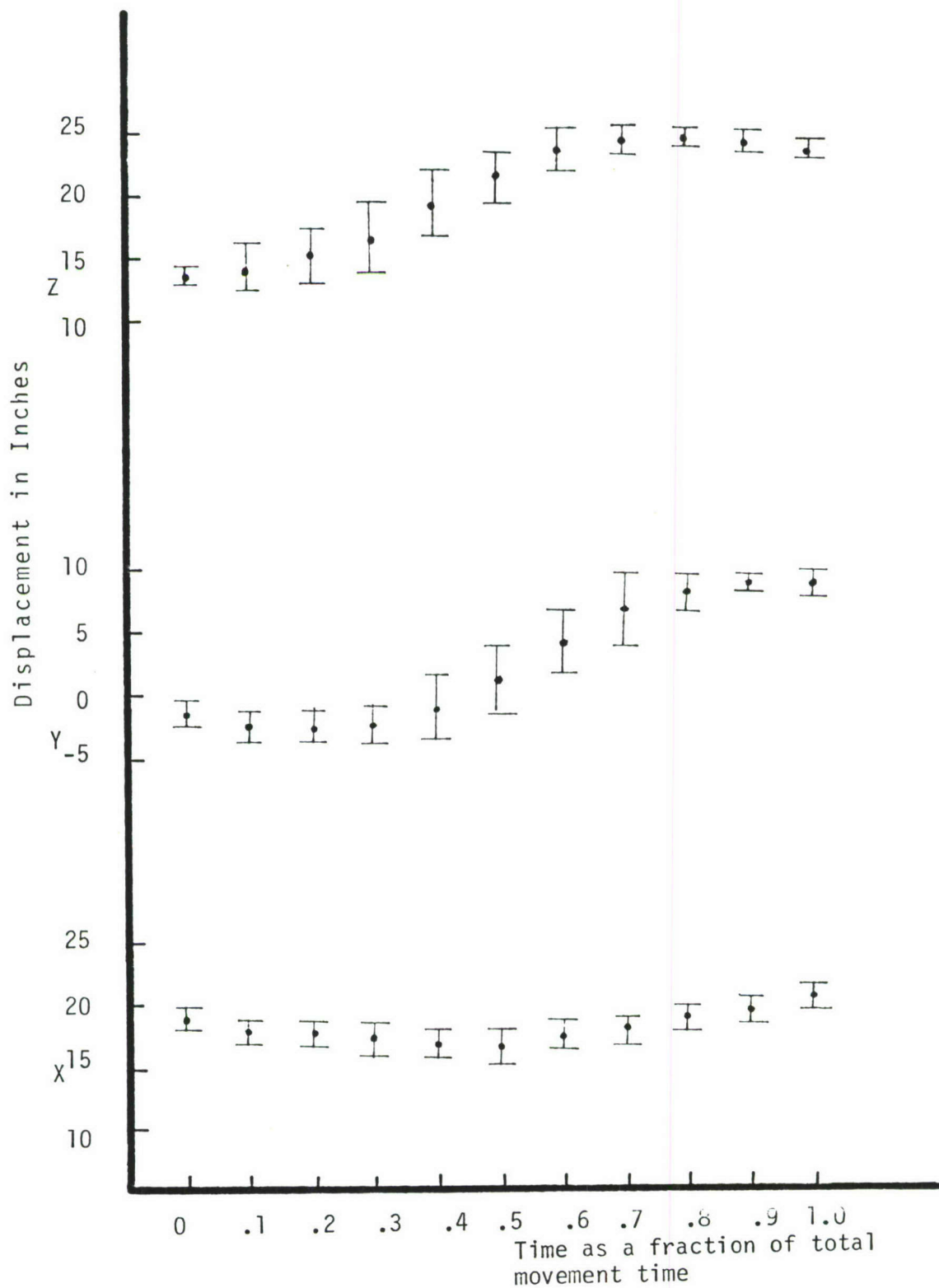


Fig. A-14 Time Displacement Profiles for Grip Center --
Right Hand Moving from Side Arm Controller
to Overhead Controller. Back Angle = 30°

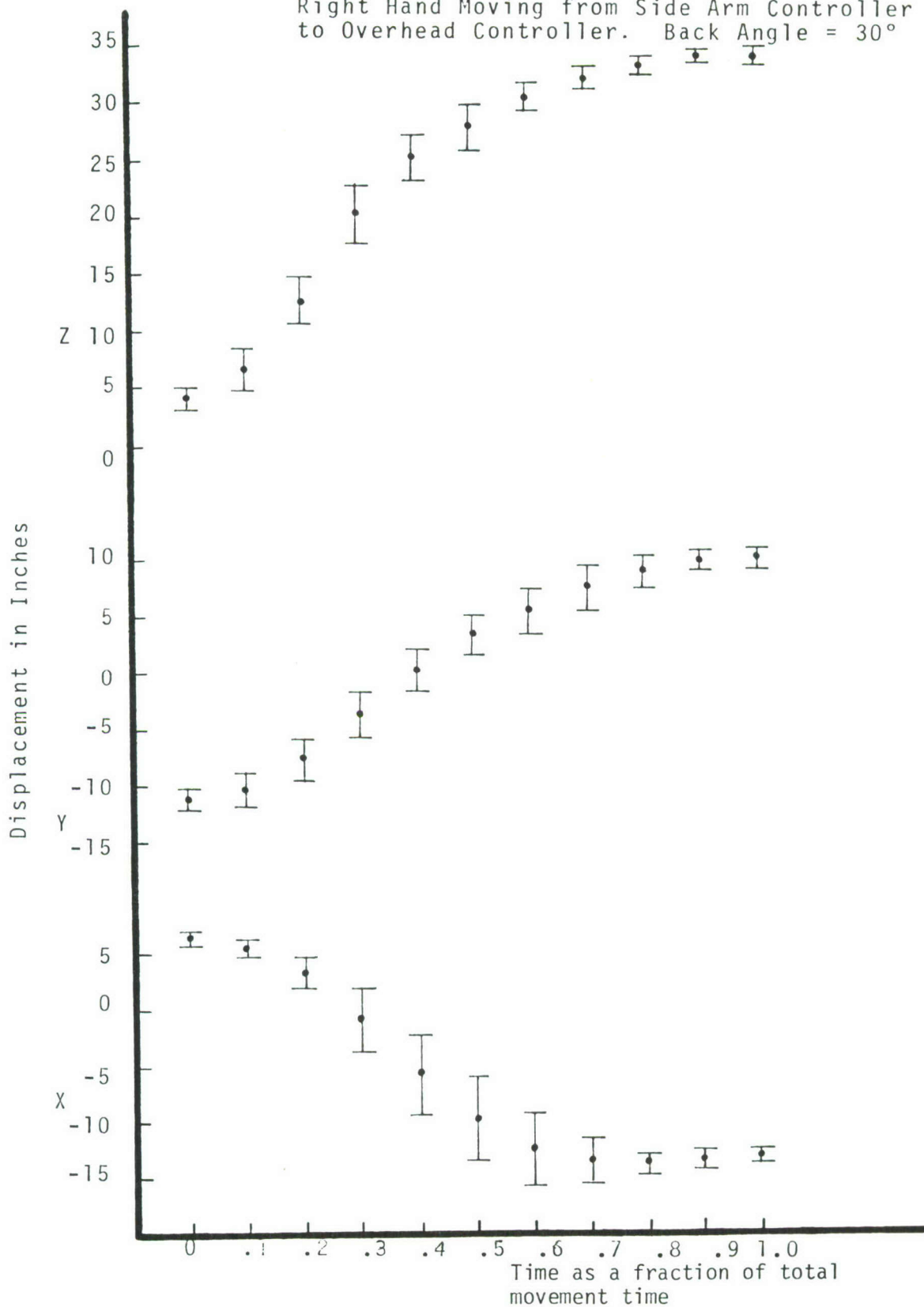


Fig. A-15. Time-Displacement Profiles for Grip Center--Right Hand moving from Side Arm Controller to Panel Controller. Back Angle = 30°

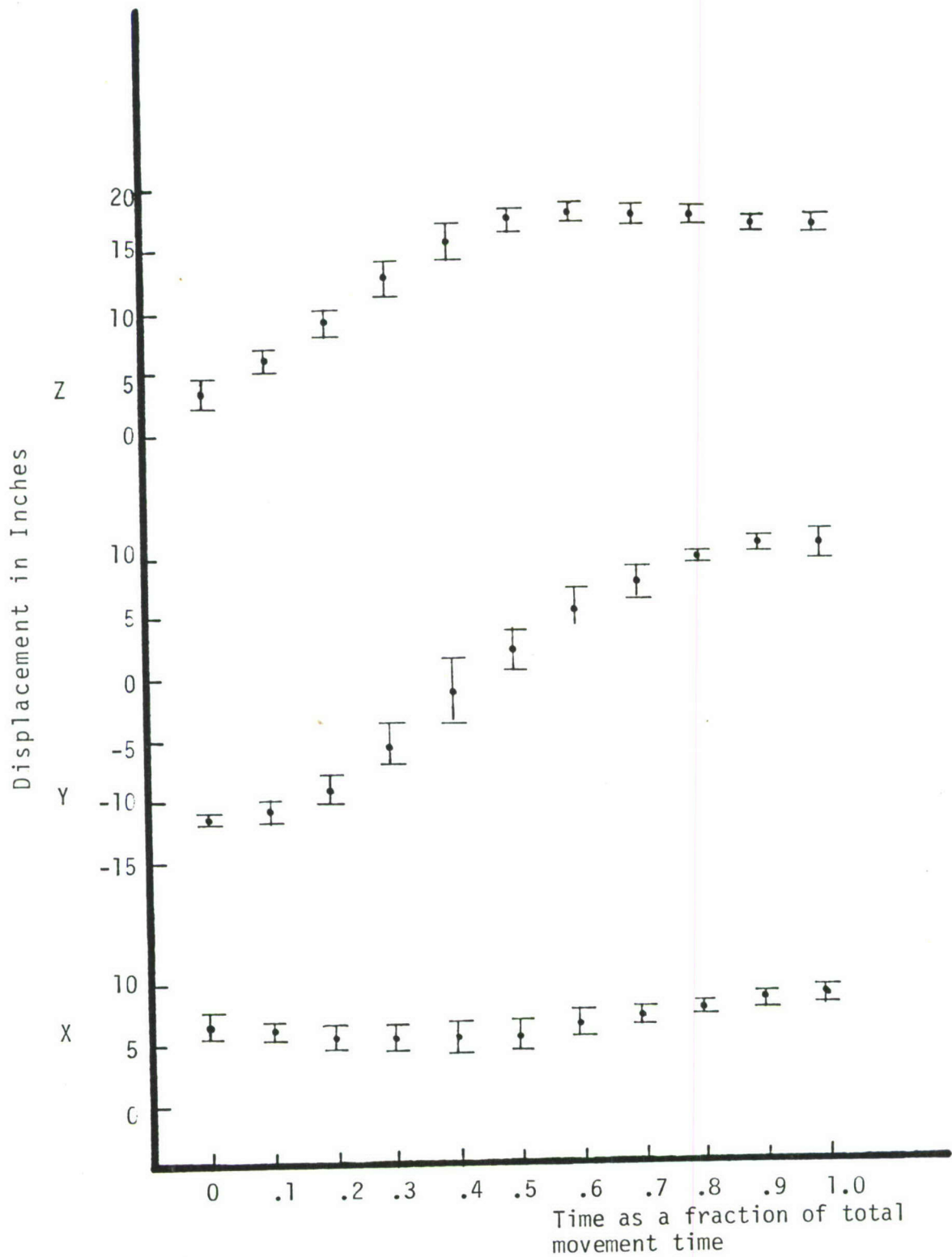


Fig. A-16. Time-Displacement Profiles for Grip Center--
Hand Moving from Throttle to Overhead Controller.
Back Angle = 65°

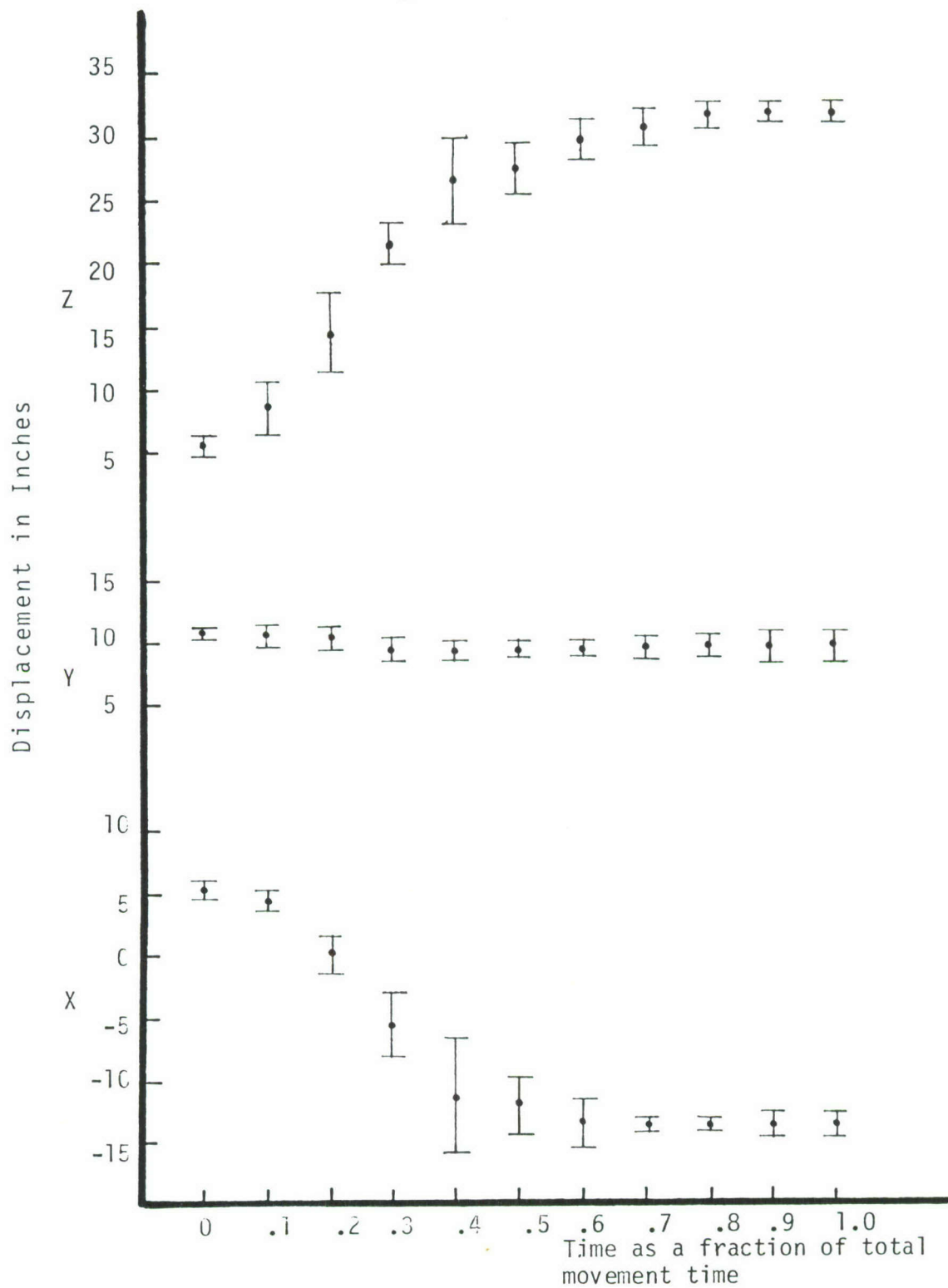


Fig. A-17. Time Displacement Profiles for Grip Center--
Right Hand Moving from Side Arm Controller to
Overhead Controller. Back Angle = 65°

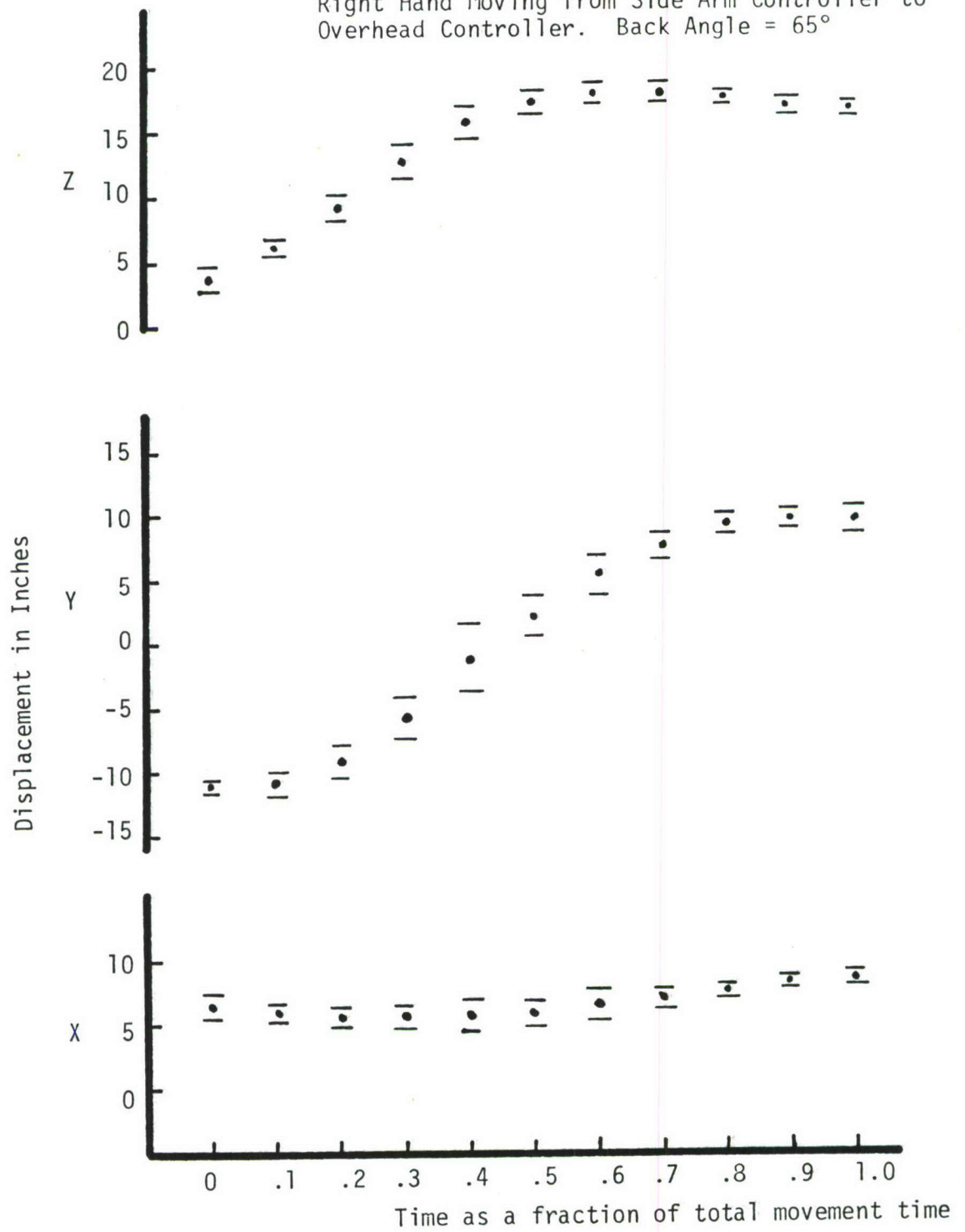


Fig. A-18. Time-Displacement Profiles for Left Grip Center--
 Movement is from Throttle to Stick Controller.
 Back Angle = 13°

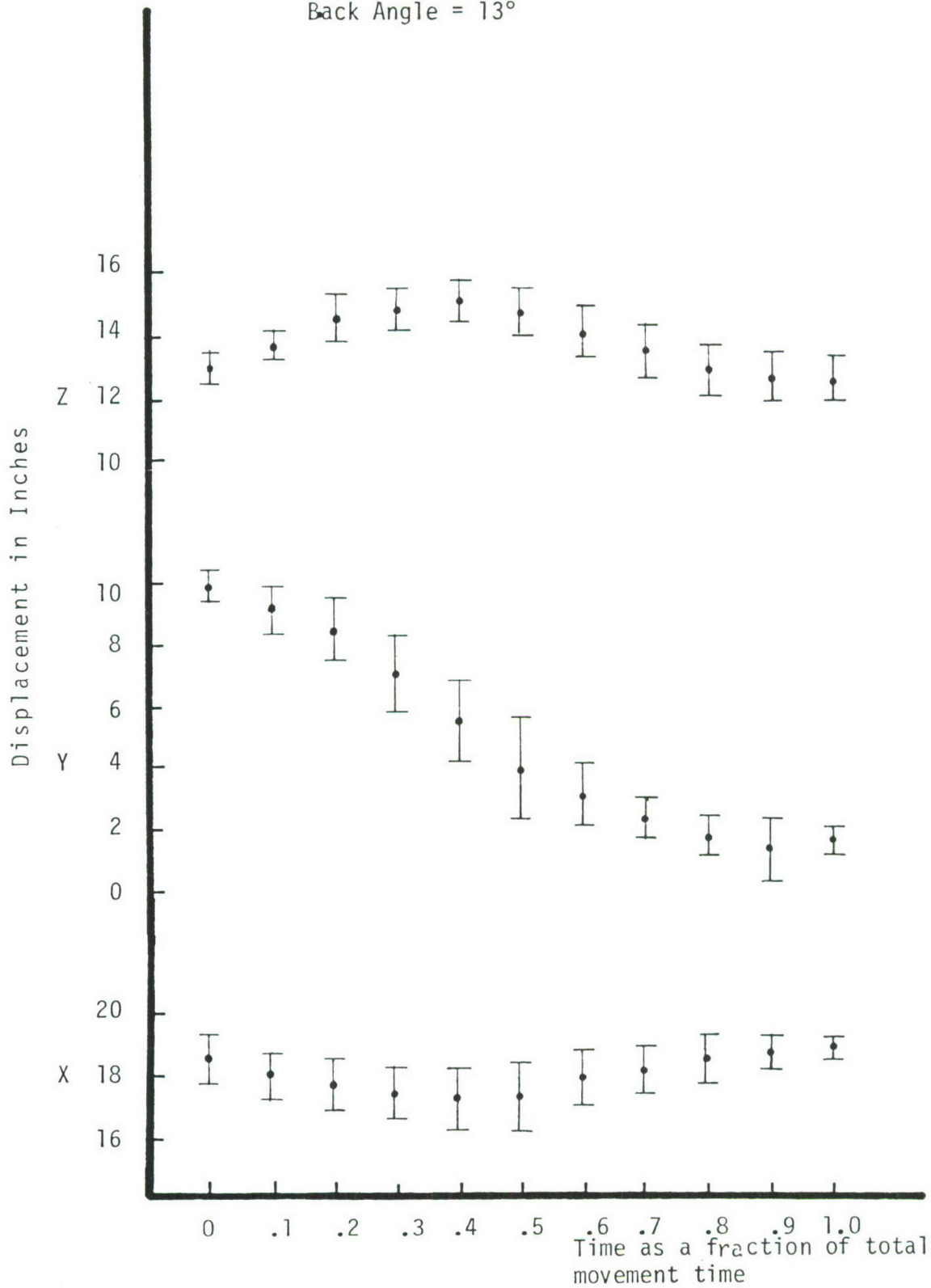


Fig. A-19. Time Displacement Profiles for Left Elbow Center--Movement is from Throttle to Stick Controller. Back Angle = 13°

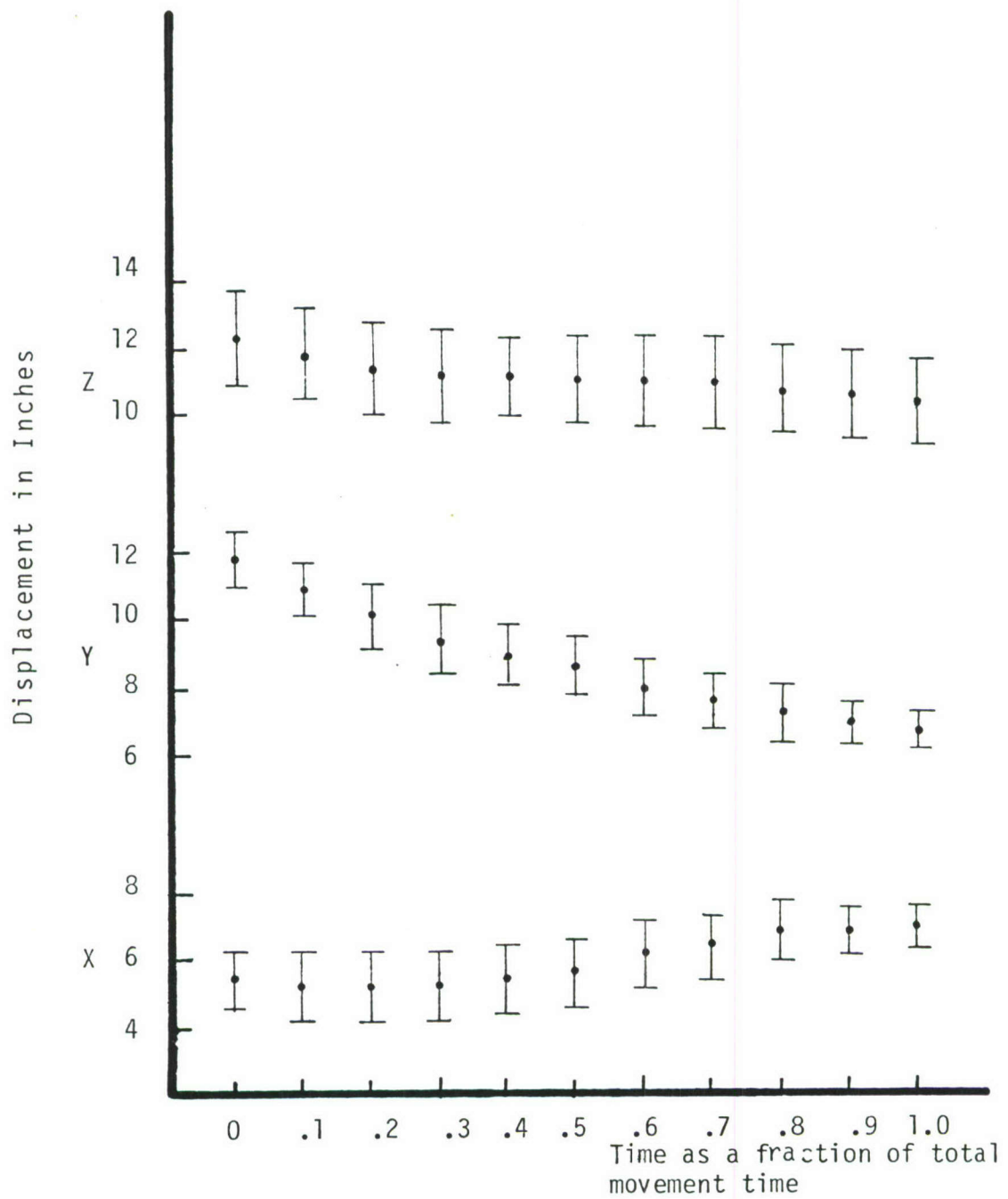


Fig. A-20. Time-Displacement Profile for Left Shoulder Center--Movement is from Throttle to Stick Controller. Back Angle = 13°

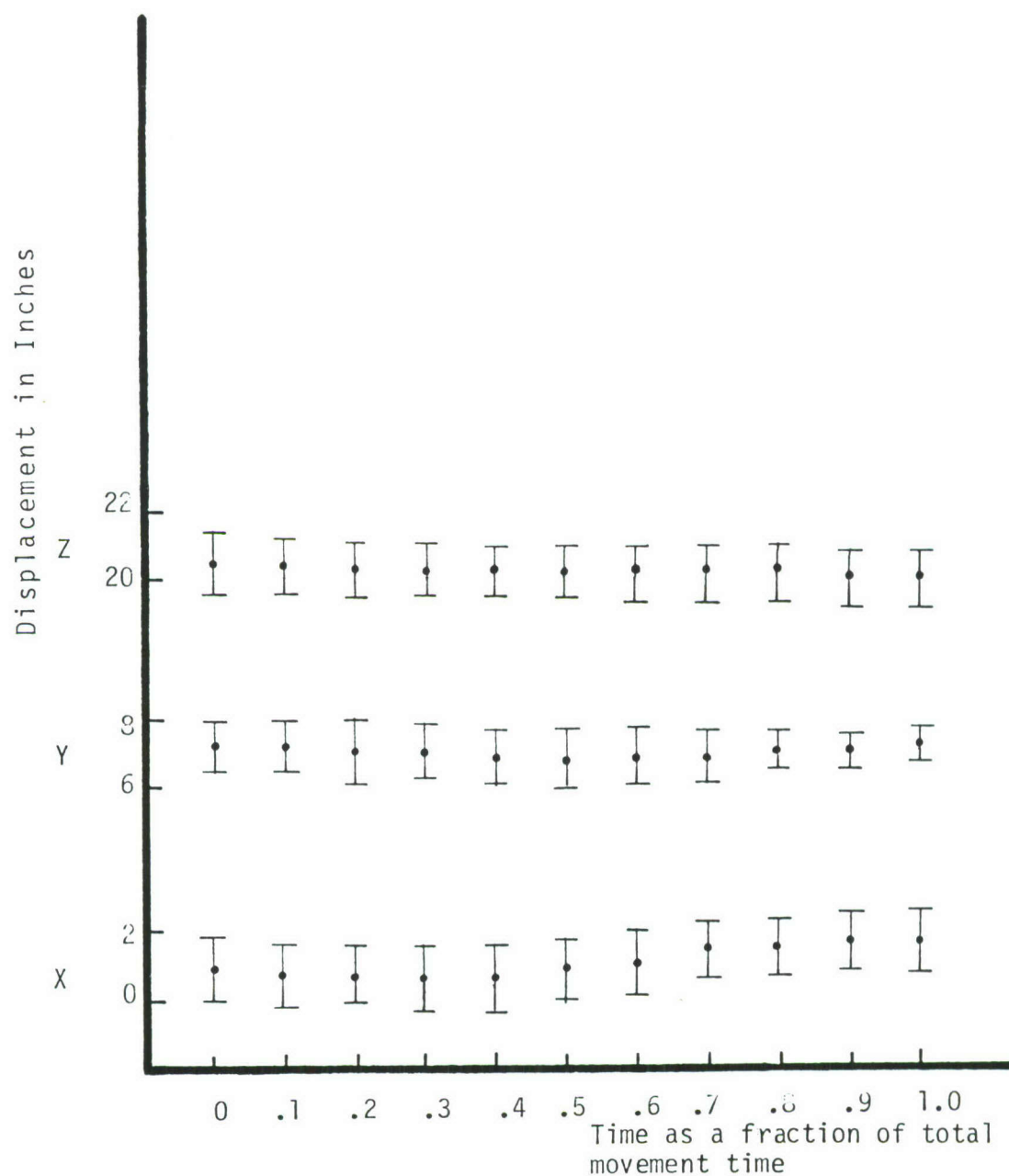


Fig. A-21. Time-Displacement Profiles for Left Grip Center--
 Movement is from Throttle to Stick Controller.
 Back Angle = 30°

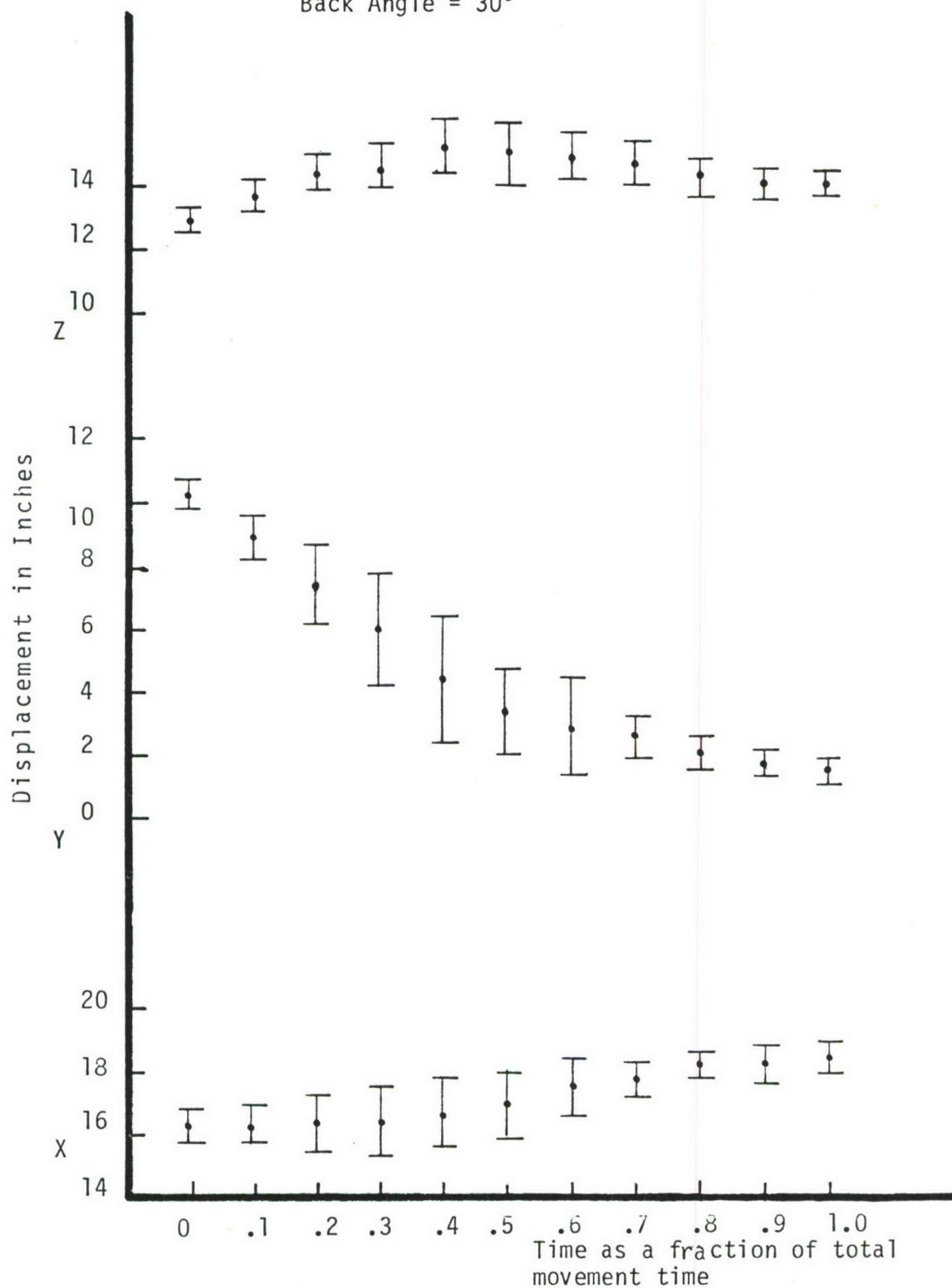


Fig. A-22. Time-Displacement Profiles for Left Elbow Center--
 Movement is from Throttle to Stick Controller.
 Back Angle = 30°

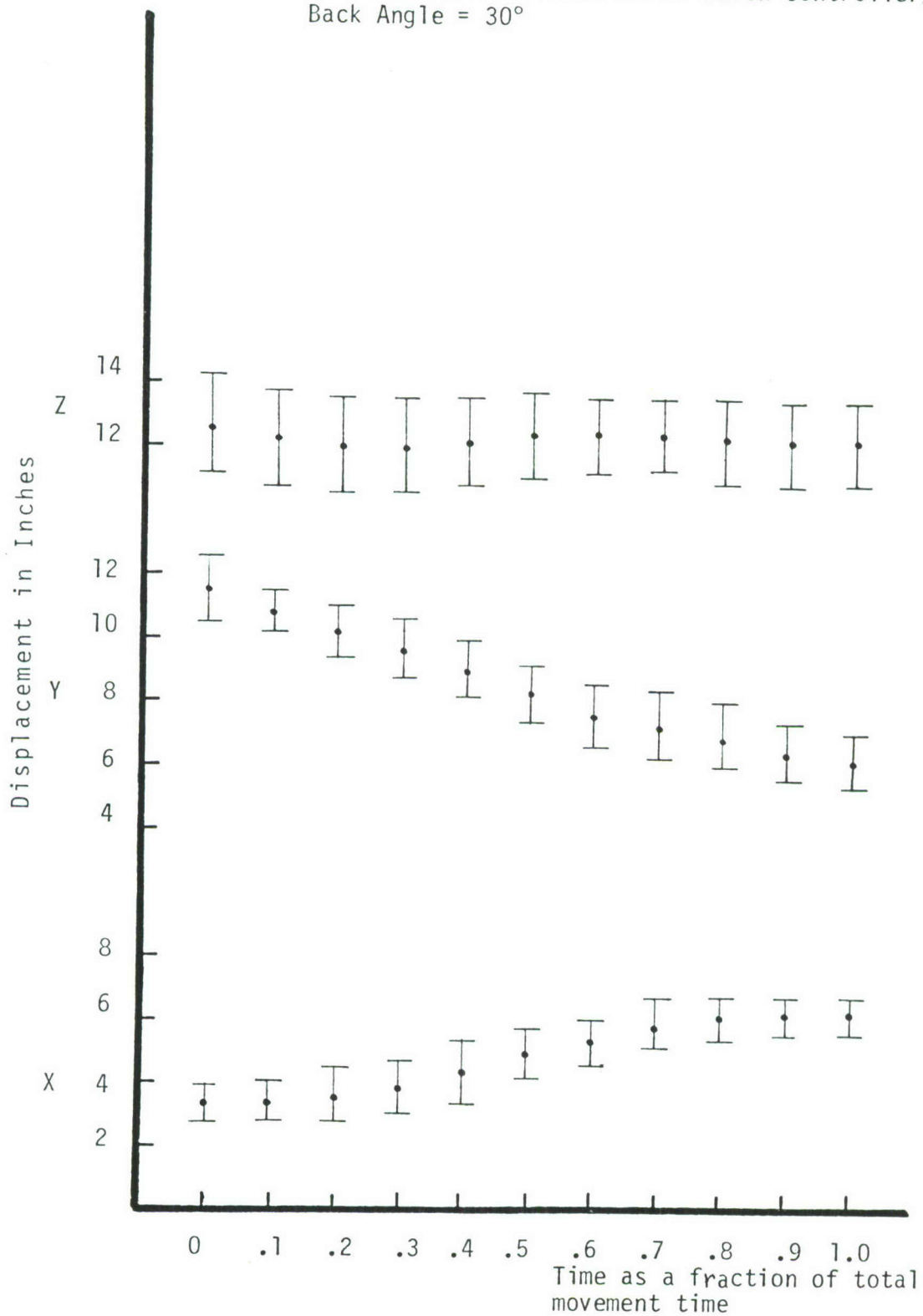
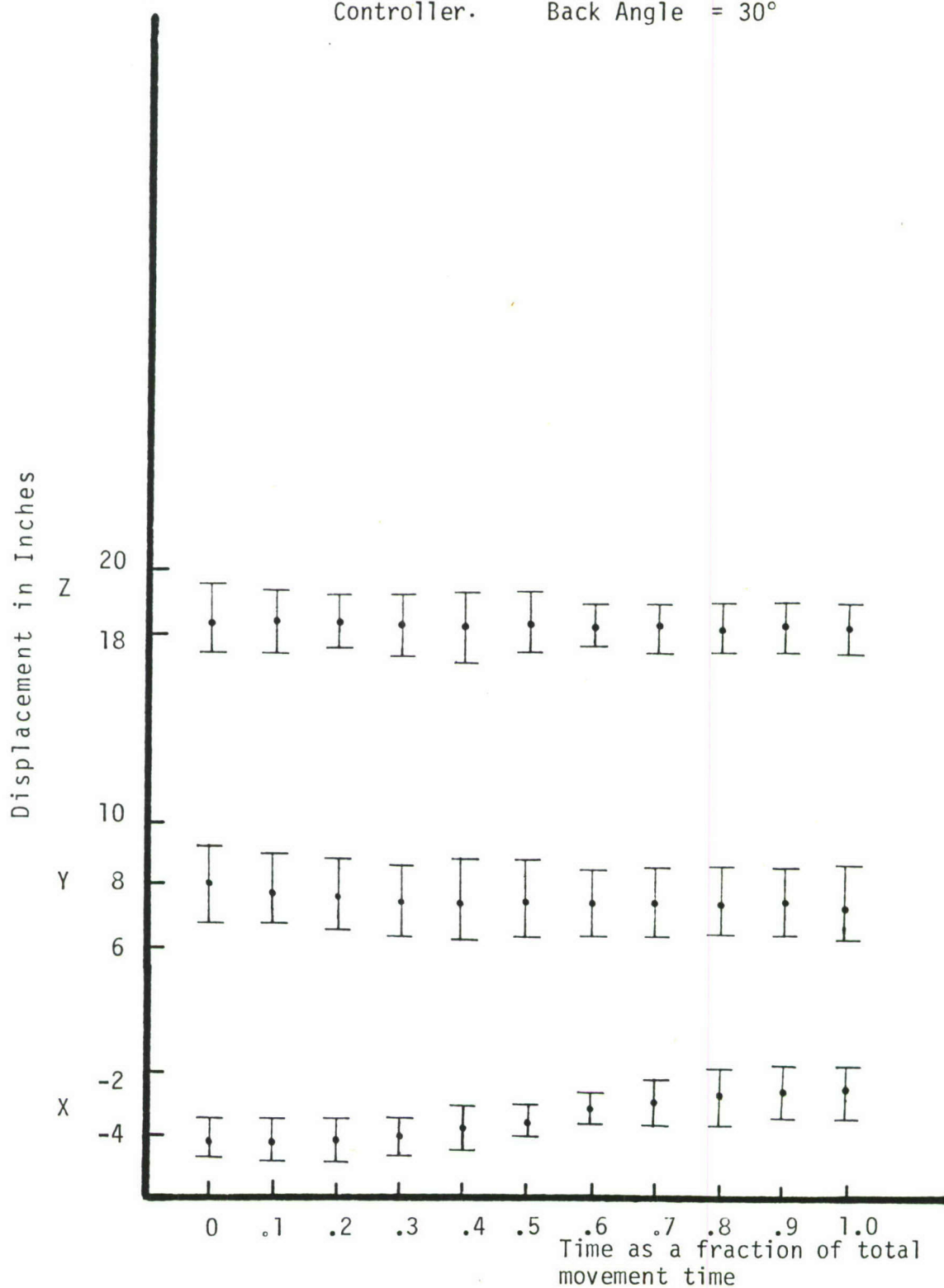


Fig. A-23. Time-Displacement Profiles for Left Shoulder Center--Movement is from Throttle to Stick Controller. Back Angle = 30°



APPENDIX B
PATHS OF MOVEMENT DATA

PATHS OF MOVEMENT TABLES

The following pages contain the essential results of this investigation in tabular form. Each movement is described at the beginning of each set of data indicating the starting and ending points (locations of controller) and the hand that performed the movement. The next page contains a summary of time history of the movement and is followed by the data on paths of movement of the various body surface landmarks and/or joint centers. The data are presented as coordinates of each point of interest at successive time intervals of 1/10th the total movement time for forward or return phase. The x, y, and z coordinates are given with respect to the seat reference point (SRP) as origin. For each coordinate the standard deviation, the 5th and 95th percentile limits are presented (all linear measurements are in inches). The tabulated data also give the successive incremental distances and the cumulative displacements moved for each landmark.

The 5th and 95th percentile limits were obtained using mean values ± 1.645 times the respective standard deviations. It was assumed that the sample mean is an acceptable estimate of the population mean. Also the standard deviation of the population is related to the standard deviation of the sample according to the following:

$$\sigma = \sqrt{\frac{n}{n-1}} s$$

where

σ = population standard deviation

s = sample standard deviation

n = sample size (when less than 30)

The above procedure for determining percentile values implies that the population distribution was assumed to be normal. Also referring to Table 5, it can be seen that the present sample compares favorably with the 1967 USAF survey data in most anthropometric variables measured. The small size of 7 makes it difficult to make any statements regarding the skewness of the distributions of these variables. As already stated, it was assumed that the locations (x , y , and z coordinates) of the various body landmarks are distributed in space according to normal distribution.

DATA FOR 13° BACK ANGLE CONFIGURATION

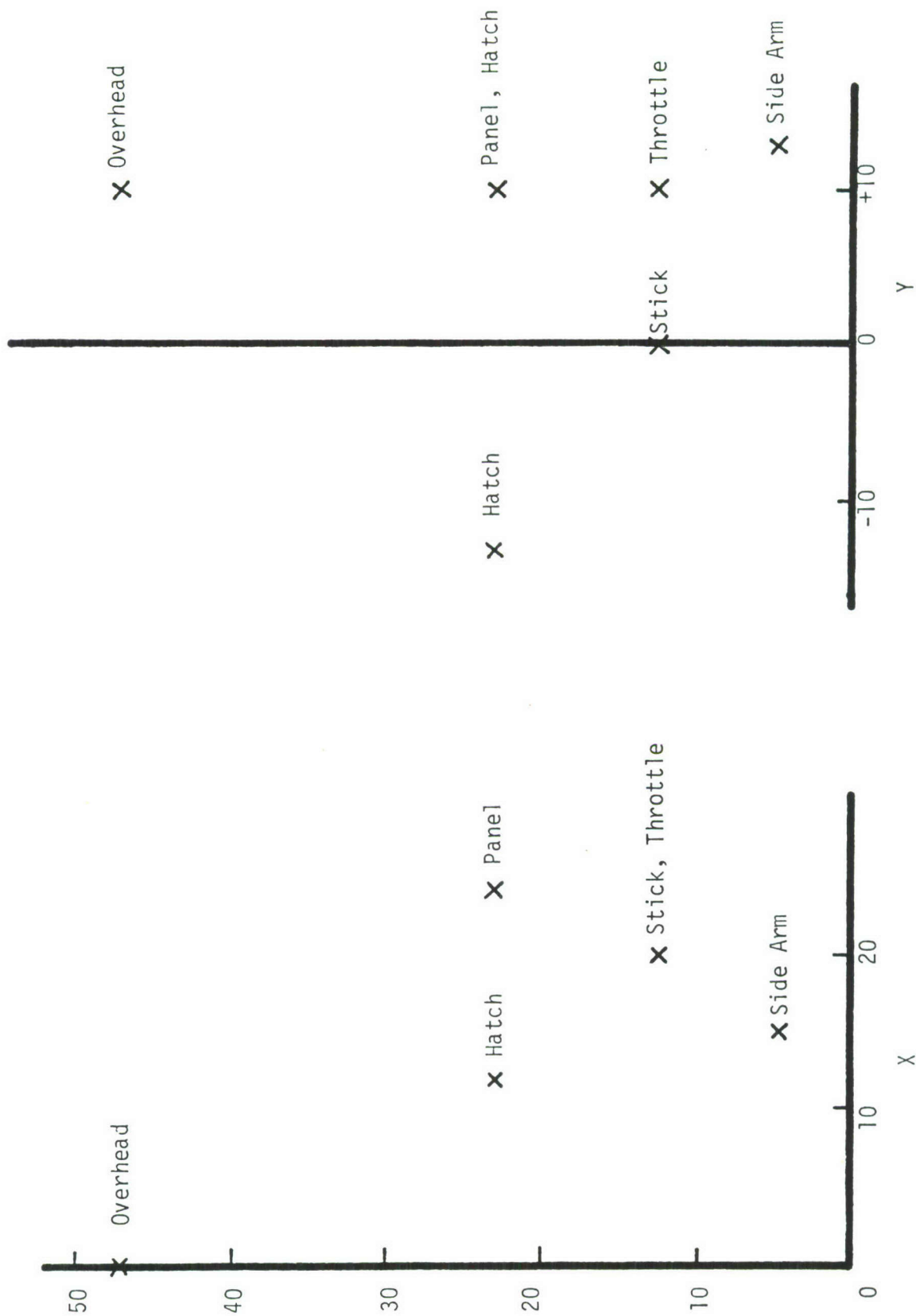


Fig. A-24. Controller Locations for 13° Back Rest Angle.

MOVEMENT: RIGHT HAND MOVES FROM STICK CONTROLLER AT +20.0, 0.0, +12.4 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +47.3 AND RETURNS. THIS MOVEMENT IS PRECEDED BY LEFT HAND MOVING FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO STICK CONTROLLER AND IS FOLLOWED BY LEFT HAND RETURNING BACK TO STICK CONTROLLER.

MOTION NUMBER - 11130
 BACK ANGLE - 13

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RGHT FWD	1.06	0.26	0.80 TO 1.50 SECS.
RGHT REV	0.94	0.19	0.70 TO 1.30 SECS.

(1)

LANDMARK - NASION

TIME	SAMPLE SIZE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	7	6.34	2.19	2.76	9.93	1.41	1.20	0.56	3.37	30.55	1.86	27.49	33.60	0.0	0.0	0.0	0.0
0.10	7	4.49	2.57	0.27	8.71	0.20	2.16	-3.34	3.73	31.25	2.34	27.42	35.08	2.32	2.32	2.32	2.32
0.20	7	3.64	2.98	-1.25	8.52	0.75	2.31	-3.03	4.53	31.52	2.26	27.81	35.23	1.05	3.37	1.05	3.37
0.30	7	2.67	3.23	-2.57	7.92	1.38	2.04	-1.97	4.73	31.34	1.81	28.86	34.81	1.19	4.57	1.19	4.57
0.40	7	1.59	3.17	-3.61	6.78	1.94	1.98	-1.30	5.18	32.16	1.19	30.21	34.11	1.26	5.83	1.26	5.83
0.50	7	0.36	2.59	-3.89	4.61	2.54	1.72	-0.28	5.36	32.43	1.05	30.71	34.15	1.39	7.22	1.39	7.22
0.60	7	-0.58	2.18	-4.16	2.99	3.07	1.62	0.42	5.73	32.50	1.06	30.76	34.24	1.09	8.31	1.09	8.31
0.70	7	-1.46	1.63	-4.13	1.22	3.54	1.70	0.70	6.38	32.55	1.01	30.90	34.20	0.99	9.30	0.99	9.30
0.80	7	-1.93	1.58	-4.53	0.66	4.04	1.73	1.26	6.83	32.45	1.08	30.68	34.21	0.70	10.00	0.70	10.00
0.90	7	-2.08	1.76	-4.96	0.80	4.48	1.65	1.77	7.18	32.29	1.28	30.19	34.38	0.48	10.49	0.48	10.49
1.00	7	-2.14	1.91	-5.26	0.99	5.20	1.55	2.66	7.74	32.20	1.35	29.98	34.42	0.73	11.22	0.73	11.22
0.0	7	-2.14	1.91	-5.26	0.99	5.20	1.55	2.66	7.74	32.20	1.35	29.98	34.42	0.0	0.0	0.0	0.0
0.10	7	0.44	3.24	-4.88	5.75	5.07	1.60	2.45	7.69	31.54	1.28	29.54	33.74	2.64	2.64	2.64	2.64
0.20	7	1.74	3.05	-3.26	6.74	4.80	1.52	2.30	7.30	31.23	1.46	28.83	33.63	1.39	4.03	1.39	4.03
0.30	7	2.60	2.71	-1.84	7.04	4.48	1.59	1.87	7.08	31.58	1.68	28.33	33.83	0.93	4.96	0.93	4.96
0.40	7	3.19	2.48	-0.87	7.25	4.34	1.71	1.54	7.14	30.93	1.90	27.82	34.05	0.62	5.58	0.62	5.58
0.50	7	3.90	2.38	0.00	7.80	4.11	1.88	1.03	7.19	30.89	1.95	27.70	34.09	0.75	6.33	0.75	6.33
0.60	7	4.48	2.25	0.79	8.17	3.68	1.93	0.52	6.84	30.82	1.96	27.60	34.04	0.73	7.06	0.73	7.06
0.70	7	5.19	2.43	1.21	9.17	3.05	1.63	0.38	5.73	30.51	2.02	27.30	33.92	0.96	8.02	0.96	8.02
0.80	7	5.59	2.15	2.07	9.12	2.31	1.34	0.11	4.52	30.51	2.00	27.33	33.89	0.64	8.87	0.64	8.87
0.90	7	6.00	2.06	2.63	9.37	1.86	1.21	-0.12	3.84	30.55	1.77	27.66	33.45	0.61	9.48	0.61	9.48
1.00	7	6.34	2.19	2.76	9.93	1.41	1.20	-0.56	3.37	30.55	1.86	27.49	33.60	0.57	10.05	0.57	10.05

(2)

LANDMARK - CERVICALE

TIME	SAMPLE SIZE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	7	-0.97	0.87	-2.40	0.47	0.23	0.50	-0.59	1.05	24.08	1.21	22.09	26.06	0.0	0.0	0.0	0.0
0.10	7	-1.36	1.27	-3.44	0.73	0.24	1.06	-1.51	1.99	23.79	1.13	21.93	25.65	0.49	0.49	0.49	0.49
0.20	7	-1.26	1.54	-3.78	1.26	0.59	1.43	-1.75	2.93	23.73	1.06	21.99	25.47	0.37	0.85	0.37	0.85
0.30	7	-1.64	1.33	-3.82	0.55	0.73	1.65	-1.97	3.43	23.54	1.18	21.70	25.58	0.42	1.27	0.42	1.27
0.40	7	-1.92	1.34	-4.11	0.28	1.10	1.71	-1.71	3.90	23.59	1.19	21.64	25.53	0.46	1.73	0.46	1.73
0.50	7	-2.46	1.23	-4.49	-0.44	1.38	1.82	-1.61	4.37	23.65	1.04	21.94	25.35	0.62	2.35	0.62	2.35
0.60	7	-2.76	1.25	-4.81	-0.70	1.56	1.91	-1.57	4.68	23.34	0.78	22.56	25.12	0.40	2.75	0.40	2.75
0.70	7	-2.76	1.13	-4.61	-0.91	2.11	1.96	-1.10	5.33	24.04	1.21	22.02	26.00	0.58	3.33	0.58	3.33
0.80	7	-2.94	1.01	-4.59	-1.28	2.26	1.93	-0.91	5.43	24.00	1.11	22.18	25.82	0.23	3.56	0.23	3.56
0.90	7	-3.11	1.20	-5.08	-1.43	2.54	1.85	-0.50	5.58	24.04	1.17	22.12	25.96	0.33	3.89	0.33	3.89
1.00	7	-3.12	1.15	-5.01	-1.24	2.81	1.75	-0.06	5.68	23.97	1.23	21.96	25.98	0.28	4.17	0.28	4.17
0.0	7	-3.12	1.15	-5.01	-1.24	2.81	1.75	-0.06	5.68	23.97	1.23	21.96	25.98	0.0	0.0	0.0	0.0
0.10	7	-2.61	1.03	-4.29	-0.92	2.71	1.73	-0.12	5.55	23.97	1.21	22.10	26.07	0.53	0.53	0.53	0.53
0.20	7	-2.65	1.10	-4.46	-0.85	2.84	1.80	-0.11	5.78	24.16	1.48	21.73	26.59	0.15	0.69	0.15	0.69
0.30	7	-2.42	1.06	-4.15	-0.69	3.06	1.70	0.27	5.84	23.96	1.28	21.86	26.06	0.38	1.06	0.38	1.06
0.40	7	-2.54	1.17	-4.46	-0.62	2.70	1.70	-0.08	5.49	24.05	1.19	22.09	26.01	0.38	1.45	0.38	1.45
0.50	7	-2.14	1.09	-3.92	-0.36	2.23	1.40	-0.07	4.52	24.18	1.04	22.47	25.89	0.64	2.08	0.64	2.08
0.60	7	-1.71	0.80	-3.01	-0.40	1.82	1.07	0.07	3.57	24.35	0.93	22.83	25.89	0.62	2.70	0.62	2.70
0.70	7	-1.37	0.55	-2.26	-0.47	1.38	0.84	0.01	2.75	24.27	1.05	22.54	25.99	0.57	3.27	0.57	3.27
0.80	7	-1.16	0.59	-2.12	-0.20	0.98	0.67	-0.12	2.07	24.14	1.08	22.36	25.92	0.47	3.74	0.47	3.74
0.90	7	-1.01	0.61	-2.02	-0.01	0.53	0.59	-0.44	1.50	24.18	1.13	22.33	26.04	0.47	4.21	0.47	4.21
1.00	7	-0.97	0.87	-2.40	0.47	0.23	0.50	-0.59	1.05	24.08	1.21	22.09	26.06	0.32	4.53	0.32	4.53

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----) MEAN SE 5 PCT 95 PCT	(-----Y - CO-ORDINATE-----) MEAN SE 5 PCT 95 PCT	(-----Z - CO-ORDINATE-----) MEAN SE 5 PCT 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	4.26 0.83 2.90 5.62	-0.06 0.62 -1.07 0.95	22.50 0.81 21.27 23.92	0.0	0.0
0.10	7	3.60 1.35 1.40 5.81	0.06 1.13 -1.80 1.91	22.50 1.07 20.88 24.41	0.67	0.67
0.20	7	3.54 1.57 0.96 6.11	0.58 1.34 -1.63 2.78	22.88 0.95 21.31 24.44	0.57	1.24
0.30	7	3.35 1.64 0.66 6.04	0.74 1.53 -1.76 3.25	22.95 1.13 21.10 24.80	0.26	1.51
0.40	7	3.05 1.96 -0.16 6.27	0.93 1.71 -1.87 3.73	23.13 1.22 21.14 25.13	0.39	1.90
0.50	7	2.49 1.25 0.44 4.55	1.20 1.81 -1.76 4.17	23.35 0.95 21.80 24.99	0.66	2.56
0.60	7	2.02 1.44 -0.35 4.38	1.95 1.82 -1.03 4.94	23.77 0.74 22.55 24.99	0.98	3.54
0.70	7	1.66 1.45 -0.72 4.04	2.27 2.07 -1.13 5.67	23.83 0.91 22.34 25.31	0.48	4.02
0.80	7	1.29 1.20 -0.67 3.25	2.90 1.81 -0.07 5.86	23.94 0.94 22.40 25.48	0.74	4.76
0.90	7	1.14 1.57 -1.43 3.71	3.35 1.84 0.34 6.37	23.98 1.01 22.33 25.63	0.48	5.24
1.00	7	1.18 1.21 -0.80 3.16	3.53 1.67 0.79 6.27	24.09 0.94 22.55 25.63	0.21	5.45
0.0	7	1.18 1.21 -0.80 3.16	3.53 1.67 0.79 6.27	24.09 0.94 22.55 25.63	0.0	0.0
0.10	7	1.35 1.52 -1.15 3.85	3.36 2.01 0.06 6.67	24.09 0.98 22.42 25.64	0.25	0.25
0.20	7	1.75 1.50 -0.71 4.21	3.10 1.93 -0.07 6.27	23.81 0.90 22.33 25.29	0.53	0.78
0.30	7	2.09 1.32 -0.08 4.26	2.89 1.95 -0.30 6.08	23.77 1.17 21.85 25.70	0.40	1.17
0.40	7	2.31 1.50 0.18 4.44	2.57 1.95 -0.63 5.77	23.52 0.90 22.04 25.00	0.46	1.64
0.50	7	2.80 1.26 0.74 4.86	1.93 1.49 -0.52 4.37	23.24 0.84 21.87 24.62	0.86	2.49
0.60	7	3.65 0.89 2.18 5.11	1.46 1.20 -0.50 3.42	23.08 0.83 21.71 24.45	0.98	3.47
0.70	7	3.75 0.71 2.59 4.92	0.95 0.86 -0.46 2.36	22.94 0.72 21.75 24.12	0.51	4.01
0.80	7	3.95 0.62 2.94 4.96	0.51 0.73 -0.69 1.72	22.78 0.70 21.61 23.92	0.55	4.52
0.90	7	4.26 0.73 3.07 5.46	0.23 0.61 -0.77 1.23	22.72 0.85 21.32 24.13	0.42	4.94
1.00	7	4.26 0.83 2.90 5.62	-0.06 0.62 -1.07 0.96	22.60 0.81 21.27 23.92	0.32	5.26

LANDMARK - RT ACRCHION (4)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----) MEAN SE 5 PCT 95 PCT	(-----Y - CO-ORDINATE-----) MEAN SE 5 PCT 95 PCT	(-----Z - CO-ORDINATE-----) MEAN SE 5 PCT 95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	1.70 0.77 0.44 2.96	-7.58 0.39 -8.21 6.94	22.20 1.18 20.27 24.14	0.0	0.0
0.10	6	1.01 0.75 -0.22 2.24	-7.80 0.54 -8.68 6.91	22.31 1.29 20.19 24.43	0.73	0.73
0.20	6	0.74 0.99 -0.88 2.36	-7.56 0.76 -8.82 6.31	22.73 1.42 20.41 25.06	0.55	1.28
0.30	6	0.27 0.94 -1.28 1.81	-6.97 1.01 -8.63 5.32	23.30 1.73 20.45 26.14	0.95	2.23
0.40	6	-0.22 1.09 -2.00 1.57	-6.38 1.39 -8.66 4.11	23.94 1.95 20.74 27.14	1.00	3.23
0.50	6	-1.00 1.01 -2.65 0.65	-5.56 1.45 -7.94 3.17	24.63 1.74 21.78 27.48	1.33	4.56
0.60	6	-1.63 1.36 -3.87 0.61	-4.70 1.49 -7.15 2.25	25.18 1.45 22.79 27.56	1.20	5.75
0.70	6	-2.61 1.31 -4.76 -0.46	-3.94 1.39 -6.22 1.66	25.51 1.19 23.55 27.46	1.29	7.04
0.80	5	-2.83 1.52 -5.31 -0.34	-3.37 1.11 -5.18 1.55	25.52 1.40 23.32 27.92	0.62	7.66
0.90	5	-2.93 1.71 -5.74 -0.12	-2.82 1.28 -4.92 0.73	25.72 1.45 23.34 28.10	0.56	8.22
1.00	5	-2.93 1.43 -5.28 -0.58	-2.42 1.16 -4.31 -0.52	26.92 1.57 24.35 29.50	1.27	9.49
0.0	5	-2.93 1.43 -5.28 -0.58	-2.42 1.16 -4.31 -0.52	26.92 1.57 24.35 29.50	0.0	0.0
0.10	5	-2.66 1.54 -5.19 -0.13	-2.37 1.29 -4.49 -0.25	26.56 0.97 24.96 28.15	0.46	0.46
0.20	6	-2.57 1.57 -5.15 0.00	-2.60 1.32 -4.77 -0.44	25.73 0.96 24.15 27.31	0.86	1.32
0.30	6	-2.07 1.72 -4.88 0.75	-2.96 1.51 -5.44 -0.48	25.57 1.00 24.03 27.31	0.62	1.95
0.40	6	-1.58 1.83 -4.59 1.42	-3.50 1.59 -6.11 -0.89	25.54 0.97 23.95 27.13	0.73	2.68
0.50	6	-0.52 1.50 -2.98 1.94	-4.59 1.33 -6.78 -2.41	25.03 0.95 23.48 26.59	1.61	4.29
0.60	6	-0.56 1.01 -1.10 2.21	-5.74 1.02 -7.42 -4.05	24.23 1.02 22.55 25.90	1.77	6.06
0.70	6	0.56 0.52 0.35 2.06	-6.36 0.79 -7.66 -5.05	23.45 1.12 21.61 25.28	1.19	7.25
0.80	6	1.21 0.56 0.68 2.53	-6.97 0.52 -7.83 -6.11	22.91 1.25 20.86 24.96	0.91	8.15
0.90	6	1.83 0.54 0.94 2.71	-7.32 0.42 -8.00 -6.63	22.51 1.18 20.57 24.45	0.57	8.73
1.00	6	1.70 0.77 0.44 2.96	-7.58 0.39 -8.21 -6.94	22.20 1.18 20.27 24.14	0.42	9.15

LANDMARK - RT GRIP CENTER (16)													
TIME	SAMPLE	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT
0.0	7	19.37	0.83	18.01	20.73	-1.76	0.31	-2.27	-1.25	12.85	0.57	11.92	13.79
0.10	7	17.94	0.94	16.40	19.48	-3.07	0.63	-4.10	-2.04	13.56	1.72	10.83	16.48
0.20	7	17.51	1.14	15.64	19.38	-3.41	0.86	-4.82	-2.00	16.51	3.96	10.02	23.00
0.30	7	15.77	1.83	12.76	18.78	-2.98	1.54	-5.50	-0.47	21.10	6.84	9.89	32.31
0.40	7	12.59	3.11	7.50	17.69	-2.06	3.08	-7.11	2.98	26.50	8.79	12.14	40.98
0.50	7	8.38	4.39	1.19	15.58	-0.04	4.20	-6.93	6.85	32.40	7.07	20.80	44.00
0.60	7	4.02	3.40	-1.56	9.59	2.79	4.22	-0.67	9.70	37.32	4.33	30.22	44.42
0.70	7	-0.19	1.43	-2.52	2.15	5.55	3.79	-0.67	11.77	41.06	2.78	36.50	45.62
0.80	7	-3.12	2.35	-6.97	0.74	8.80	13.52	4.70	1.73	41.86	47.53	5.69	42.91
0.90	7	-1.84	1.37	-4.09	0.41	9.05	1.08	7.28	10.81	45.50	0.90	44.02	46.99
1.00	6	-1.20	1.30	-3.33	0.93	9.45	0.79	8.15	10.74	45.91	0.42	45.22	46.61
0.0	6	-1.20	1.30	-3.33	0.93	9.45	0.79	8.15	10.74	45.91	0.42	45.22	46.61
0.10	6	-1.29	1.37	-3.55	0.96	8.06	1.04	6.35	9.77	43.97	1.07	42.22	45.72
0.20	6	-0.23	2.12	-3.71	3.25	5.83	1.33	3.65	8.02	41.49	1.18	39.55	43.43
0.30	6	2.50	2.96	-2.35	7.35	3.33	2.01	0.02	6.63	39.36	1.26	37.00	41.11
0.40	7	7.85	3.07	2.82	12.88	1.03	2.08	-2.37	4.43	35.33	1.36	32.81	37.26
0.50	7	13.38	2.22	9.74	17.02	-1.53	1.53	-4.68	1.63	29.37	2.16	25.53	32.60
0.60	7	17.52	1.07	15.76	19.28	-3.16	2.01	-6.46	0.14	22.16	2.65	17.82	26.51
0.70	7	19.03	1.09	17.25	20.82	-2.97	1.02	-4.64	-1.31	16.54	2.29	12.88	20.40
0.80	7	19.33	0.93	17.80	20.85	-2.15	0.39	-2.80	-1.51	13.90	1.41	11.59	16.22
0.90	7	19.41	0.99	17.78	21.04	-1.74	0.32	-2.26	-1.22	13.02	0.56	12.10	13.95
1.00	7	19.37	0.83	18.01	20.73	-1.76	0.31	-2.27	-1.25	12.65	0.57	11.92	13.79

LANDMARK - RT TROCHANTER (18)													
TIME	SAMPLE	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT
0.0	7	4.09	1.07	2.33	5.84	-7.78	0.52	-9.29	-6.26	3.81	0.65	2.73	4.88
0.10	7	3.81	0.70	2.66	4.96	-7.67	0.74	-8.89	-6.45	3.70	0.56	2.77	4.62
0.20	7	3.75	1.27	1.66	5.84	-7.37	1.02	-9.04	-5.69	3.83	0.56	2.91	4.74
0.30	7	3.85	0.91	2.36	5.34	-7.46	0.82	-8.81	-6.11	3.84	0.54	2.95	4.73
0.40	7	4.01	0.82	2.67	5.35	-7.62	0.86	-9.03	-6.22	3.82	0.54	2.93	4.72
0.50	7	3.78	0.64	2.74	4.82	-7.55	0.94	-9.08	-6.01	3.89	0.54	3.00	4.78
0.60	7	3.92	0.93	2.39	5.45	-7.47	0.90	-8.95	-5.99	3.91	0.54	3.02	4.79
0.70	7	3.87	0.77	2.62	5.13	-7.54	0.83	-8.91	-6.18	3.88	0.58	2.93	4.84
0.80	7	3.85	0.64	2.80	4.90	-7.47	0.82	-8.81	-6.13	3.99	0.61	2.99	4.99
0.90	7	4.03	0.96	2.46	5.60	-7.43	0.77	-8.70	-6.16	3.98	0.57	3.06	4.91
1.00	7	4.04	0.80	2.73	5.35	-7.41	0.77	-8.67	-6.15	4.01	0.57	3.07	4.95
0.0	7	4.04	0.80	2.73	5.35	-7.41	0.77	-8.67	-6.15	4.01	0.57	3.07	4.95
0.10	7	3.84	0.61	2.83	4.85	-7.41	0.95	-8.97	-5.65	3.94	0.50	3.12	4.76
0.20	7	3.77	0.49	2.97	4.57	-7.55	0.70	-8.70	-6.40	3.94	0.53	3.04	4.79
0.30	7	3.94	0.64	2.89	5.00	-7.50	0.84	-8.88	-6.12	4.00	0.50	3.19	4.82
0.40	7	3.99	0.84	2.62	5.36	-7.52	0.80	-8.84	-6.21	3.92	0.56	2.99	4.82
0.50	7	4.12	1.02	2.44	5.79	-7.66	0.80	-8.98	-6.34	3.95	0.51	3.01	4.68
0.60	7	4.30	1.20	2.33	6.27	-7.67	0.95	-9.22	-6.12	3.84	0.52	2.99	4.70
0.70	7	4.15	1.01	2.49	5.82	-7.66	1.05	-9.38	-5.94	3.86	0.58	2.91	4.80
0.80	7	4.05	1.02	2.38	5.72	-7.71	0.88	-9.15	-6.26	3.81	0.64	2.75	4.86
0.90	7	4.08	1.06	2.33	5.82	-7.65	0.91	-9.13	-6.16	3.86	0.60	2.87	4.84
1.00	7	4.09	1.07	2.33	5.84	-7.78	0.92	-9.29	-6.26	3.81	0.65	2.73	4.88

LANDMARK - RT KNEE TOP (20)														
TIME	SAMPLE	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE			MVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	CUM
0.0	7	19.51	1.10	17.70	21.31	-6.79	1.31	-8.94	4.64	11.36	1.02	9.69	13.03	0.0
0.10	7	19.48	1.14	17.61	21.35	-6.81	1.35	-9.02	4.61	11.36	0.97	9.78	12.94	0.04
0.20	7	19.48	1.12	17.64	21.32	-6.85	1.43	-9.19	4.51	11.39	0.92	9.88	12.90	0.09
0.30	7	19.56	1.09	17.77	21.35	-6.77	1.33	-8.95	4.58	11.41	0.87	9.98	12.84	0.21
0.40	7	19.64	1.12	17.80	21.47	-6.80	1.44	-9.17	4.44	11.38	0.92	9.97	12.89	0.30
0.50	7	19.51	1.05	17.78	21.24	-6.78	1.40	-9.08	4.47	11.40	0.90	9.92	12.88	0.43
0.60	7	19.66	1.19	17.70	21.62	-6.73	1.40	-9.03	4.43	11.39	0.92	9.88	12.90	0.59
0.70	7	19.57	1.08	17.81	21.34	-6.75	1.49	-9.19	4.30	11.43	0.93	9.91	12.96	0.69
0.80	7	19.60	1.12	17.76	21.44	-6.69	1.42	-9.01	4.36	11.43	0.94	9.94	13.03	0.77
0.90	7	19.74	1.31	17.58	21.89	-6.62	1.49	-9.07	4.18	11.51	0.95	9.95	13.07	0.93
1.00	7	19.72	1.24	17.69	21.75	-6.55	1.45	-8.93	4.16	11.44	0.95	9.88	12.99	1.03
0.0	7	19.72	1.24	17.69	21.75	-6.55	1.45	-8.93	4.16	11.44	0.95	9.88	12.99	0.0
0.10	7	19.57	1.19	17.62	21.52	-6.59	1.53	-9.10	4.09	11.46	0.98	9.87	13.06	0.16
0.20	7	19.54	1.07	17.80	21.29	-6.65	1.41	-8.97	4.33	11.42	0.99	9.80	13.05	0.24
0.30	7	19.58	1.07	17.84	21.33	-6.61	1.48	-9.04	4.18	11.50	0.93	9.97	13.03	0.33
0.40	7	19.59	1.32	17.43	21.76	-6.64	1.48	-9.07	4.21	11.46	0.91	9.97	12.95	0.38
0.50	7	19.67	1.26	17.60	21.75	-6.72	1.31	-8.87	4.57	11.45	0.90	9.94	12.91	0.50
0.60	7	19.65	1.16	17.74	21.56	-6.79	1.41	-9.09	4.48	11.43	0.96	9.85	13.00	0.57
0.70	7	19.53	1.09	17.74	21.32	-6.72	1.33	-8.90	4.54	11.39	0.96	9.82	12.96	0.71
0.80	7	19.41	1.12	17.57	21.24	-6.87	1.29	-8.99	4.75	11.37	1.00	9.73	13.00	0.91
0.90	7	19.46	1.17	17.55	21.37	-6.77	1.35	-8.99	4.55	11.38	0.98	9.77	12.99	1.03
1.00	7	19.51	1.10	17.70	21.31	-6.79	1.31	-8.94	4.64	11.36	1.02	9.69	13.03	1.08

LANDMARK - RT SHOULDER CENTER (22)														
TIME	SAMPLE	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE			MVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	CUM
0.0	7	2.88	0.64	1.82	3.93	-7.46	0.62	-8.48	6.43	19.69	0.69	18.56	20.82	0.0
0.10	7	2.06	0.77	0.79	3.32	-7.48	0.60	-8.47	6.49	19.80	1.24	17.76	21.84	0.83
0.20	7	1.79	0.89	0.44	3.36	-7.20	0.93	-8.72	5.67	20.27	1.29	18.15	22.39	0.57
0.30	7	1.79	0.77	0.53	3.04	-6.92	0.90	-8.41	5.44	21.06	1.77	18.15	23.96	0.84
0.40	7	1.72	0.97	0.14	3.31	-6.60	1.17	-8.51	4.68	22.29	2.23	18.64	25.94	1.27
0.50	7	1.32	1.03	-0.36	3.01	-6.16	1.48	-8.60	3.73	23.76	2.55	19.59	27.94	1.59
0.60	7	1.01	1.78	-1.91	3.94	-5.26	1.73	-8.10	2.43	25.15	2.20	21.55	28.75	1.69
0.70	7	0.24	1.46	-2.16	2.63	-4.29	1.59	-6.90	1.69	26.35	1.82	23.38	29.34	1.73
0.80	7	-0.46	1.17	-2.39	1.46	-3.48	1.18	-5.41	1.55	26.87	1.86	23.82	29.92	1.19
0.90	7	-1.02	1.36	-3.25	1.21	-2.75	1.09	-4.54	0.97	26.57	1.87	23.61	29.73	0.94
1.00	7	-1.03	1.41	-3.34	1.28	-2.48	0.78	-3.76	1.20	26.51	1.79	23.68	29.54	10.92
0.0	7	-1.03	1.41	-3.34	1.28	-2.48	0.78	-3.76	1.20	26.51	1.79	23.68	29.54	0.0
0.10	7	-0.36	1.48	-2.79	2.07	-2.82	1.37	-5.07	0.58	27.02	1.56	24.46	29.58	0.85
0.20	7	0.13	1.74	-2.71	2.96	-3.41	1.35	-5.62	1.20	26.71	1.35	24.50	28.92	0.83
0.30	7	0.89	1.79	-2.05	3.83	-4.09	1.28	-6.19	1.98	26.10	1.09	24.31	27.89	1.18
0.40	7	1.48	2.00	-1.79	4.76	-4.71	1.52	-7.20	2.22	24.81	0.76	23.57	26.05	1.55
0.50	7	2.26	1.87	-0.81	5.32	-5.69	1.02	-7.37	4.02	23.13	0.86	21.72	24.54	2.09
0.60	7	2.54	1.40	0.25	4.84	-6.31	0.63	-7.35	5.27	21.78	0.85	20.39	23.17	1.51
0.70	7	2.76	0.75	1.54	3.98	-6.65	0.55	-7.56	5.74	20.80	0.85	19.40	22.19	1.06
0.80	7	2.83	1.59	1.59	4.07	-7.13	0.32	-7.65	6.63	20.26	0.89	18.80	21.72	0.72
0.90	7	3.05	0.64	2.01	4.09	-7.29	0.46	-8.04	6.54	19.33	0.82	18.58	21.27	0.43
1.00	7	2.88	0.64	1.82	3.93	-7.46	0.62	-8.48	6.43	19.69	0.69	18.56	20.82	10.56

MMWT NO. 11130/13

LANDMARK - RT ELBOW CENTER (24)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT
0.0	7	7.27	1.07	5.52	9.02	-6.78	0.64	-7.84	-5.73
0.10	7	6.40	1.17	4.48	8.33	-8.07	1.24	-10.11	-6.04
F 0.20	7	6.81	1.59	4.20	9.42	-8.50	1.23	-10.52	-6.48
U 0.30	7	7.55	2.71	3.10	12.00	-8.64	0.77	-9.90	-7.37
R 0.40	7	8.49	3.81	2.24	14.74	-8.19	1.43	-10.54	-5.84
W 0.50	7	8.52	2.16	4.99	12.06	-7.55	2.00	-10.83	-4.27
A 0.60	7	7.42	2.53	3.27	11.56	-5.96	2.70	-10.40	-1.53
R 0.70	7	5.10	2.23	1.44	8.76	-4.01	2.93	-8.82	0.81
D 0.80	7	2.38	1.26	0.32	4.45	-1.61	1.99	-4.87	1.65
0.90	7	1.16	1.32	-1.00	3.32	-1.14	1.50	-2.59	2.31
1.00	6	1.55	0.68	0.43	2.67	0.71	0.90	-0.77	2.19
0.0	6	1.55	0.68	0.43	2.67	0.71	0.90	-0.77	2.19
0.10	6	2.84	1.11	1.02	4.65	-1.70	0.92	-3.20	-0.19
0.20	7	4.50	2.40	0.56	8.43	-3.26	1.29	-5.37	-1.15
R 0.30	7	7.17	2.36	3.31	11.03	-5.51	0.77	-6.78	-4.25
E 0.40	7	9.22	1.94	6.03	12.40	-7.45	0.76	-8.69	-6.21
T 0.50	7	9.39	2.03	6.07	12.72	-8.39	0.81	-9.72	-7.06
U 0.60	7	8.37	2.28	4.63	12.12	-8.00	1.18	-9.93	-6.06
R 0.70	7	7.66	1.69	4.90	10.43	-7.47	1.08	-9.25	-5.70
N 0.80	7	7.44	1.44	5.07	9.81	-7.15	1.05	-8.87	-5.44
0.90	7	7.38	1.27	5.30	9.47	-6.95	0.92	-8.45	-5.45
1.00	7	7.27	1.07	5.52	9.02	-6.78	0.64	-7.84	-5.73

LANDMARK - RT WRIST CENTER (26)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT
0.0	6	16.15	0.92	14.64	17.66	-3.32	0.55	-4.23	-2.42
0.10	7	14.80	0.85	13.40	16.20	-4.11	0.88	-5.56	-2.67
F 0.20	7	14.29	0.83	12.93	15.66	-4.13	1.07	-5.88	-2.38
U 0.30	7	13.26	1.09	11.47	15.05	-3.74	1.87	-6.82	-0.67
R 0.40	7	11.32	1.57	8.75	13.90	-3.53	2.75	-8.04	0.97
W 0.50	7	8.26	2.01	4.96	11.56	-1.48	3.23	-6.78	3.82
A 0.60	7	4.96	2.16	1.42	8.51	1.18	3.24	-4.14	6.49
R 0.70	7	1.98	1.50	-0.48	4.44	3.45	3.13	-1.68	8.58
D 0.80	7	-0.35	0.97	-1.94	1.25	5.85	2.03	2.51	9.18
0.90	7	-0.83	1.35	-3.06	1.39	7.25	1.13	5.39	9.11
1.00	7	-0.49	1.37	-2.74	1.76	7.72	0.77	6.46	8.98
0.0	7	-0.49	1.37	-2.74	1.76	7.72	0.77	6.46	8.98
0.10	7	0.50	1.23	-1.52	2.51	6.23	0.84	4.86	7.60
0.20	7	2.12	2.13	-1.37	5.60	4.17	1.00	2.53	5.81
R 0.30	7	4.65	2.69	0.24	9.05	1.65	1.26	-0.42	3.72
E 0.40	7	8.37	2.61	4.10	12.65	-0.73	1.22	-2.73	1.27
T 0.50	7	12.32	2.07	8.92	15.72	-2.80	1.26	-4.87	-0.73
U 0.60	7	14.80	1.74	11.95	17.65	-3.91	1.20	-5.87	-1.95
R 0.70	7	15.83	1.30	13.70	17.96	-4.16	0.91	-5.65	-2.65
N 0.80	6	16.15	1.21	14.17	18.13	-3.70	0.47	-4.47	-2.92
0.90	6	16.24	1.08	14.48	18.00	-3.42	0.67	-4.52	-2.32
1.00	6	16.15	0.92	14.64	17.66	-3.32	0.55	-4.23	-2.42

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +15.0, -13.0, +4.8 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +47.3 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +20.0, +10.0, +12.4.

MOTION NUMBER - 12130
 BACK ANGLE - 13

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.97	0.14	0.80 TD 1.20 SECS.
RIGHT REV	1.07	0.15	0.90 TD 1.30 SECS.

(1)

LANDMARK - NASION

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				-----			
T	SIZE,N	MEAN	5 PCT	95 PCT	SE	MEAN	5 PCT	95 PCT	SE	MEAN	5 PCT	95 PCT	SE	5 PCT	95 PCT	INCR	MVED CUM
0.0	7	6.75	1.54	4.21	9.28	-3.83	1.78	-6.75	-0.92	28.31	25.83	30.78	1.51	25.83	30.78	0.0	0.0
0.10	7	4.03	3.27	-1.34	9.39	0.86	1.01	-0.80	2.52	31.33	29.16	33.49	1.32	29.16	33.49	6.21	6.21
F 0.20	7	2.63	2.98	-2.25	7.52	1.42	1.01	-0.24	3.07	32.00	29.75	34.25	1.37	29.75	34.25	1.65	7.85
O 0.30	7	1.29	2.58	-2.94	5.51	1.89	0.36	3.43	32.36	30.36	29.90	34.83	1.50	29.90	34.83	1.47	9.33
R 0.40	7	0.03	2.28	-3.71	3.77	2.29	1.32	0.13	4.46	32.53	29.94	35.32	1.64	29.94	35.32	1.34	10.67
W 0.50	7	-0.84	2.23	-4.51	2.82	2.84	1.37	0.60	5.08	32.71	29.88	35.55	1.73	29.88	35.55	1.03	11.70
A 0.60	7	-1.49	1.99	-4.75	1.78	3.12	1.63	0.45	5.78	32.56	30.15	35.17	1.53	30.15	35.17	0.70	12.41
R 0.70	7	-2.08	1.89	-5.02	0.87	3.61	1.66	0.89	6.33	32.51	30.25	34.96	1.43	30.25	34.96	0.77	13.18
D 0.80	7	-2.31	1.75	-5.18	0.56	3.95	1.77	1.04	6.86	32.42	30.06	34.78	1.44	30.06	34.78	0.55	13.63
U 0.90	7	-2.44	2.05	-5.80	0.91	4.49	1.68	1.74	7.24	32.48	30.20	34.77	1.39	30.20	34.77	0.56	14.19
1.00	7	-2.65	1.93	-5.82	0.52	4.67	2.01	1.37	7.95	32.36	30.16	34.56	1.34	30.16	34.56	0.30	14.49
0.0	7	-2.65	1.93	-5.82	0.52	4.67	2.01	1.37	7.95	32.36	30.16	34.56	1.34	30.16	34.56	0.0	0.0
0.10	7	0.57	2.69	-3.85	4.98	3.12	1.16	1.22	5.02	31.77	28.79	34.76	1.82	28.79	34.76	3.62	3.62
0.20	7	1.85	2.48	-2.22	5.91	2.06	1.48	-0.37	4.49	31.45	28.00	34.91	2.11	28.00	34.91	1.69	5.31
R 0.30	7	2.84	2.19	-0.74	6.43	1.11	1.32	-1.06	3.27	31.00	27.38	34.62	2.21	27.38	34.62	1.65	6.76
E 0.40	7	3.85	1.84	0.84	6.86	0.10	1.25	-1.96	2.15	30.45	27.35	33.54	1.89	27.35	33.54	1.53	8.29
U 0.50	7	4.84	1.58	2.25	7.42	-0.83	1.18	-2.77	1.10	29.88	27.18	32.58	1.65	27.18	32.58	1.47	9.76
T 0.60	7	5.76	1.34	3.56	7.97	-1.85	1.10	-3.65	-0.06	29.39	27.01	31.77	1.45	27.01	31.77	1.46	11.22
R 0.70	7	6.30	1.29	4.18	8.41	-2.91	1.28	-5.02	-0.81	28.95	26.71	31.19	1.37	26.71	31.19	1.27	12.49
N 0.80	7	6.52	1.39	4.24	8.80	-3.21	1.42	-5.53	-0.88	28.73	25.48	30.98	1.37	25.48	30.98	0.43	12.92
0.90	7	6.64	1.44	4.27	9.00	-3.71	1.65	-6.41	-1.01	28.31	25.08	30.54	1.36	25.08	30.54	0.67	13.59
1.00	7	6.75	1.54	4.21	9.28	-3.83	1.78	-6.75	-0.92	28.31	25.83	30.78	1.51	25.83	30.78	0.16	13.75

(2)

LANDMARK - CERVICALE

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				-----			
T	SIZE,N	MEAN	5 PCT	95 PCT	SE	MEAN	5 PCT	95 PCT	SE	MEAN	5 PCT	95 PCT	SE	5 PCT	95 PCT	INCR	MVED CUM
0.0	7	-0.56	1.28	-2.65	1.54	0.11	1.00	-1.53	1.75	23.58	21.53	25.64	1.25	21.53	25.64	0.0	0.0
0.10	7	-1.25	1.29	-3.36	0.86	0.36	0.47	-0.41	1.13	23.58	21.94	25.43	1.06	21.94	25.43	0.74	0.74
F 0.20	7	-1.57	1.31	-3.72	0.58	0.56	0.61	-0.44	1.56	23.55	22.01	25.30	1.01	22.01	25.30	0.39	1.13
O 0.30	7	-2.05	1.29	-4.17	0.08	0.89	0.59	-0.07	1.85	23.83	22.25	25.41	0.96	22.25	25.41	0.60	1.72
R 0.40	7	-2.28	1.29	-4.40	-0.17	1.24	0.57	0.31	2.17	23.79	22.19	25.40	1.03	22.19	25.40	0.43	2.15
W 0.50	7	-2.36	1.14	-4.23	-0.50	1.47	0.85	0.08	2.85	23.75	22.05	25.45	1.14	22.05	25.45	0.24	2.40
A 0.60	7	-2.58	1.10	-4.39	-0.78	1.59	1.12	-0.24	3.43	23.79	21.92	25.66	1.03	21.92	25.66	0.25	2.65
R 0.70	7	-2.91	0.93	-4.43	-1.39	1.94	1.02	0.28	3.61	23.75	21.83	25.67	1.17	21.83	25.67	0.48	3.13
D 0.80	7	-3.06	0.81	-4.38	-1.74	2.28	1.00	0.64	3.92	23.89	22.12	25.66	1.08	22.12	25.66	0.40	3.53
U 0.90	7	-3.07	0.97	-4.66	-1.48	2.56	1.11	0.75	4.38	23.98	22.42	25.53	0.95	22.42	25.53	0.30	3.82
1.00	7	-3.37	0.88	-4.81	-1.92	2.68	1.11	0.86	4.50	23.95	22.00	25.70	1.13	22.00	25.70	0.34	4.16
0.0	7	-3.37	0.88	-4.81	-1.92	2.68	1.11	0.86	4.50	23.95	22.00	25.70	1.13	22.00	25.70	0.0	0.0
0.10	7	-2.91	0.75	-4.13	-1.68	2.81	1.30	0.67	4.95	23.94	21.95	25.92	1.21	21.95	25.92	0.49	0.49
0.20	7	-2.96	0.93	-4.49	-1.44	2.82	1.31	0.68	4.97	23.97	21.97	25.78	1.10	21.97	25.78	0.07	0.56
R 0.30	7	-2.65	1.12	-4.48	-0.82	2.58	1.39	0.31	4.86	24.06	22.49	25.63	0.96	22.49	25.63	0.40	0.96
E 0.40	7	-2.10	1.03	-3.79	-0.41	2.56	1.07	0.81	4.31	24.26	22.48	26.05	1.09	22.48	26.05	0.58	1.54
T 0.50	7	-1.84	1.07	-3.57	-0.05	2.08	0.81	0.76	3.41	24.18	22.31	26.06	1.14	22.31	26.06	0.56	2.11
U 0.60	7	-1.30	0.87	-2.73	0.14	1.56	0.67	0.47	2.66	23.92	22.21	25.63	1.04	22.21	25.63	0.78	2.89
R 0.70	7	-1.02	1.00	-2.64	0.65	1.06	0.45	0.33	1.80	23.92	21.92	25.69	1.15	21.92	25.69	0.59	3.48
N 0.80	7	-0.85	1.29	-2.76	1.47	0.57	0.63	-0.46	1.60	24.77	21.73	25.81	1.24	21.73	25.81	0.61	4.09
0.90	7	-0.73	1.18	-2.66	1.20	0.12	0.92	-1.39	1.62	23.98	21.63	25.53	1.19	21.63	25.53	0.50	4.58
1.00	7	-0.56	1.28	-2.65	1.54	0.11	1.00	-1.53	1.75	23.98	21.53	25.64	1.25	21.53	25.64	0.18	4.76

WMT NO. 12130/13

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE, N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN SE 5 PCT 95 PCT	MEAN SE 5 PCT 95 PCT	MEAN SE 5 PCT 95 PCT		
0.0	7	2.99 1.23 0.98 5.00	-0.12 0.83 0.37 0.48	22.44 1.28 20.31 24.51	0.0	0.0
0.10	7	3.19 1.43 0.84 5.53	-0.41 0.48 -0.32 1.15	22.24 1.40 19.95 24.53	0.55	0.55
F 0.20	7	2.65 1.62 -0.01 5.31	0.37 0.67 -0.32 1.89	22.44 1.30 20.26 24.53	0.70	1.25
O 0.30	7	2.26 1.61 -0.37 4.90	1.13 0.67 0.04 2.22	22.59 1.36 20.46 24.92	0.60	1.85
R 0.40	7	2.12 1.41 -0.19 4.43	1.25 0.72 0.07 2.44	22.87 1.35 20.65 25.09	0.25	2.10
W 0.50	7	1.94 1.34 -0.25 4.14	1.77 0.85 0.37 3.17	22.86 1.65 20.15 25.57	0.55	2.65
A 0.60	7	1.52 1.42 -0.81 3.85	2.24 1.03 0.52 3.90	23.22 1.65 20.51 25.93	0.70	3.35
U 0.70	7	1.35 1.53 -1.16 3.86	2.58 1.00 0.95 4.21	23.52 1.26 21.54 25.69	0.57	3.92
D 0.80	7	1.07 1.49 -1.37 3.51	2.99 0.73 1.78 4.19	23.77 1.26 21.70 25.84	0.51	4.44
O 0.90	7	1.04 1.24 -0.99 3.07	3.11 0.87 1.88 4.73	23.82 1.19 21.87 25.77	0.33	4.76
1.00	7	0.70 1.35 -1.51 2.91	3.53 0.97 1.94 5.12	23.56 1.12 21.83 25.50	0.44	5.20
0.0	7	0.70 1.35 -1.51 2.91	3.53 0.97 1.94 5.12	23.56 1.12 21.83 25.50	0.0	0.0
0.10	7	1.08 1.53 -1.44 3.59	3.13 0.90 1.66 4.61	23.79 1.25 21.74 25.84	0.57	0.57
0.20	7	1.30 1.36 -0.93 3.53	2.71 0.79 1.40 4.01	23.79 1.32 21.62 25.96	0.48	1.05
R 0.30	7	1.42 1.35 -0.80 3.63	2.44 0.94 0.90 3.98	23.46 1.33 21.29 25.63	0.44	1.49
E 0.40	7	1.39 1.39 -0.48 4.09	2.08 0.58 1.12 3.04	23.34 1.20 21.36 25.31	0.54	2.03
T 0.50	7	2.17 1.48 -0.26 4.60	1.39 0.70 0.25 2.53	23.10 1.21 21.11 25.09	0.82	2.85
U 0.60	7	2.42 1.10 0.62 4.22	1.07 0.66 -0.01 2.15	22.89 1.16 21.00 24.79	0.45	3.30
K 0.70	7	2.50 1.24 0.48 4.53	0.82 0.47 0.05 1.59	22.75 1.17 20.83 24.68	0.30	3.60
N 0.80	7	2.86 1.25 0.81 4.91	0.39 0.91 -1.09 1.88	22.64 1.45 20.26 25.01	0.57	4.17
O 0.90	7	2.93 1.07 1.18 4.69	-0.07 0.74 -1.27 1.14	22.48 1.32 20.32 24.65	0.49	4.66
1.00	7	2.99 1.23 0.98 5.00	-0.12 0.83 -1.48 1.24	22.44 1.28 20.31 24.51	0.11	4.77

LANDMARK - RT ACROMION (4)

TIME T	SAMPLE SIZE, N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN SE 5 PCT 95 PCT	MEAN SE 5 PCT 95 PCT	MEAN SE 5 PCT 95 PCT		
0.0	7	0.37 0.69 -0.77 1.50	-8.29 0.84 -9.67 6.52	21.37 1.58 18.78 23.95	0.0	0.0
0.10	7	0.23 1.04 -1.47 1.93	-7.57 0.57 -8.51 6.62	22.33 0.80 21.01 23.65	1.21	1.21
F 0.20	7	-0.25 1.50 -2.71 2.22	-7.04 0.74 -8.26 5.83	22.99 0.71 21.83 24.15	0.97	2.19
O 0.30	7	-0.90 1.68 -3.65 1.85	-6.60 1.03 -8.29 4.90	23.77 0.87 22.33 25.20	1.11	3.29
R 0.40	7	-1.27 1.95 -4.47 1.94	-6.03 1.35 -8.24 3.81	24.39 0.96 22.82 25.96	0.92	4.21
W 0.50	7	-1.60 2.13 -5.09 1.89	-5.20 1.61 -7.95 2.55	25.11 1.07 23.35 26.87	1.15	5.36
A 0.60	7	-2.02 2.08 -5.44 1.39	-4.26 1.84 -7.27 1.24	25.50 0.99 24.04 27.28	1.17	6.53
R 0.70	7	-2.58 1.85 -5.62 0.46	-3.64 1.71 -6.45 0.83	25.94 0.95 24.36 27.46	0.87	7.40
U 0.80	7	-2.86 1.64 -5.55 -0.16	-2.93 1.78 -5.84 -0.02	26.12 0.97 24.53 27.71	0.79	8.19
O 0.90	7	-2.96 1.45 -5.34 -0.59	-2.52 1.73 -5.35 0.31	26.28 0.92 24.77 27.78	0.45	8.64
1.00	7	-3.27 1.54 -5.80 -0.74	-2.23 1.55 -4.77 0.31	26.19 0.87 24.77 27.61	0.43	9.07
0.0	7	-3.27 1.54 -5.80 -0.74	-2.23 1.55 -4.77 0.31	26.19 0.87 24.77 27.61	0.0	0.0
0.10	7	-2.94 1.08 -4.71 -1.16	-2.55 1.74 -5.21 0.51	26.14 0.94 24.59 27.69	0.36	0.36
0.20	7	-3.05 1.30 -5.18 -0.91	-2.94 1.39 -5.22 0.67	26.00 1.06 24.26 27.74	0.62	0.98
R 0.30	7	-2.58 1.50 -5.05 -0.11	-3.92 1.24 -5.95 1.12	23.83 1.12 23.83 27.50	1.13	2.11
E 0.40	7	-1.88 1.29 -4.00 0.23	-5.05 1.02 -6.72 3.38	24.91 1.14 23.04 26.78	1.53	3.64
T 0.50	7	-1.43 1.06 -3.17 0.30	-6.18 0.75 -7.42 4.94	24.06 0.95 22.52 25.64	1.47	5.11
U 0.60	7	-0.11 1.97 -3.34 3.11	-6.06 1.85 -9.10 3.02	23.56 0.78 22.07 24.64	1.51	6.62
R 0.70	7	0.02 1.24 -2.02 2.08	-7.09 0.88 -8.53 5.54	22.58 1.11 20.86 24.51	1.23	7.85
N 0.80	7	0.42 0.73 -1.08 1.31	-7.92 0.62 -8.94 6.90	22.10 1.48 19.73 24.58	0.99	8.84
U 0.90	7	0.26 0.53 -0.61 1.12	-8.26 0.72 -9.43 7.08	21.52 1.57 19.05 24.19	0.65	9.49
1.00	7	0.37 0.69 -0.77 1.50	-8.29 0.84 -9.67 6.52	21.37 1.58 18.78 23.95	0.28	9.77

LANDMARK - RT GRIP CENTER (16)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	13.75	0.76	12.50	14.99	-13.69	0.79	-14.99	-12.40	4.54	1.05	2.92	6.36	0.0	0.0
0.10	7	12.44	0.92	10.92	13.95	-12.79	1.64	-15.48	-10.11	8.44	1.83	5.44	11.43	4.12	4.12
0.20	7	11.10	2.87	6.40	15.80	-9.77	3.79	-15.98	-3.56	16.59	5.15	8.24	25.14	8.89	13.01
0.30	7	9.53	5.27	0.90	18.17	-5.62	5.32	-14.34	3.10	25.84	9.13	10.87	40.82	10.17	23.18
0.40	7	7.93	4.13	1.16	14.71	-2.63	3.04	-7.61	2.35	29.85	4.58	22.34	37.37	5.25	28.43
0.50	7	4.92	4.11	-1.82	11.66	0.91	2.20	-2.69	4.51	34.85	4.47	27.29	41.96	6.66	35.09
0.60	7	1.80	3.37	-3.73	7.33	6.01	1.85	0.98	7.04	38.58	3.54	32.78	44.39	5.92	41.01
0.70	7	-0.52	2.21	-4.14	3.10	6.39	1.87	3.33	9.46	41.45	2.47	37.90	46.01	4.73	45.74
0.80	7	-1.32	1.28	-3.41	0.78	8.17	1.39	5.90	10.45	44.29	1.93	41.12	47.46	3.05	48.79
0.90	7	-1.18	0.70	-2.34	-0.03	8.92	0.99	7.30	10.53	45.72	1.01	44.06	47.37	1.61	50.40
1.00	7	-1.16	0.65	-2.22	-0.10	9.62	1.01	7.96	11.28	45.98	0.46	45.22	46.74	0.75	51.15
0.0	7	-1.16	0.65	-2.22	-0.10	9.62	1.01	7.96	11.28	45.98	0.46	45.22	46.74	0.0	0.0
0.10	7	-0.47	1.52	-2.96	2.01	8.21	1.66	5.49	10.93	43.01	1.73	40.17	45.85	3.36	3.36
0.20	7	1.99	3.15	-3.18	7.16	1.82	2.14	1.82	8.4	38.03	2.83	33.39	42.66	6.26	9.62
0.30	7	5.54	3.61	-0.39	11.46	1.70	1.98	-1.55	4.95	33.31	2.99	28.40	38.21	6.93	16.55
0.40	7	8.33	2.99	3.92	13.74	-1.82	0.54	-2.70	-0.93	28.55	3.26	23.31	33.99	6.70	23.25
0.50	7	11.82	2.37	7.94	15.70	-5.85	1.70	-8.84	-3.06	21.53	3.91	15.22	28.04	8.63	31.88
0.60	7	12.96	2.18	9.41	16.55	-10.02	2.56	-14.22	-5.82	14.57	3.89	8.28	21.05	8.20	40.08
0.70	7	12.96	1.85	9.93	15.99	-13.19	2.71	-17.63	-8.75	8.90	2.83	4.26	13.53	6.58	46.66
0.80	7	13.13	1.38	10.87	15.40	-13.76	1.55	-16.30	-11.22	6.32	3.07	1.78	11.86	2.16	48.82
0.90	7	13.41	0.82	12.06	14.76	-13.94	1.25	-15.99	-11.90	5.28	1.85	2.25	8.31	1.58	50.40
1.00	7	13.75	0.76	12.50	14.99	-13.69	0.79	-14.99	-12.40	4.54	1.05	2.92	6.36	0.77	51.17

LANDMARK - RT TRUCHANTER (18)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	3.86	0.41	3.18	4.53	-7.57	1.07	-9.32	-5.81	3.86	0.39	3.22	4.50	0.0	0.0
0.10	7	4.06	0.61	3.06	5.05	-7.67	0.73	-8.87	-6.46	3.83	0.47	3.06	4.61	0.23	0.23
0.20	7	4.06	0.68	2.94	5.18	-7.75	0.71	-8.92	-6.58	3.80	0.56	2.89	4.72	0.09	0.32
0.30	7	4.04	0.67	2.94	5.14	-7.84	0.79	-9.14	-6.55	3.88	0.53	3.01	4.74	0.12	0.44
0.40	7	4.02	0.72	2.84	5.20	-7.70	0.82	-9.04	-6.35	3.88	0.54	3.00	4.77	0.15	0.59
0.50	7	4.21	0.89	2.75	5.66	-7.57	0.80	-8.88	-6.27	3.93	0.46	3.17	4.70	0.23	0.82
0.60	7	4.19	0.74	2.99	5.40	-7.68	0.85	-9.07	-6.29	3.94	0.47	3.17	4.71	0.11	0.92
0.70	7	4.18	0.76	2.94	5.42	-7.65	0.80	-8.96	-6.34	3.96	0.45	3.23	4.69	0.04	0.97
0.80	7	4.28	0.89	2.82	5.73	-7.65	0.89	-9.11	-6.18	3.99	0.49	3.18	4.80	0.10	1.06
0.90	7	4.33	0.86	2.92	5.74	-7.64	0.96	-9.21	-6.07	4.03	0.55	3.12	4.93	0.07	1.13
1.00	7	4.10	0.74	2.88	5.33	-7.59	0.89	-9.06	-6.13	4.01	0.48	3.21	4.81	0.23	1.37
0.0	7	4.10	0.74	2.88	5.33	-7.59	0.89	-9.06	-6.13	4.01	0.48	3.21	4.81	0.0	0.0
0.10	7	4.23	0.72	3.04	5.41	-7.62	0.83	-8.99	-6.25	4.03	0.43	3.32	4.74	0.13	0.13
0.20	7	4.02	0.65	2.94	5.11	-7.67	0.85	-9.06	-6.28	4.02	0.44	3.30	4.75	0.21	0.33
0.30	7	4.06	0.74	2.85	5.28	-7.75	0.88	-9.19	-6.31	3.99	0.45	3.26	4.73	0.09	0.43
0.40	7	4.02	0.71	2.85	5.18	-7.75	0.83	-9.08	-6.35	3.95	0.46	3.19	4.71	0.06	0.49
0.50	7	4.04	0.73	2.85	5.24	-7.72	0.83	-9.08	-6.35	3.97	0.53	3.11	4.84	0.05	0.54
0.60	7	4.10	0.67	3.00	5.21	-7.71	0.94	-9.25	-6.15	3.98	0.50	2.96	4.81	0.11	0.65
0.70	7	4.12	0.50	3.30	4.94	-7.67	1.00	-9.32	-6.03	3.82	0.55	2.91	4.73	0.08	0.73
0.80	7	4.16	0.87	2.73	5.59	-7.62	0.83	-8.99	-6.26	3.97	0.50	3.16	4.79	0.17	0.89
0.90	7	3.87	0.50	3.04	4.70	-7.71	0.87	-9.14	-6.28	3.91	0.47	3.14	4.67	0.31	1.21
1.00	7	3.86	0.41	3.18	4.53	-7.57	1.07	-9.32	-5.81	3.86	0.39	3.22	4.50	0.15	1.36

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	-----X-----	CO-ORDINATE-----	5 PCT	95 PCT	-----Y-----	CO-ORDINATE-----	5 PCT	95 PCT	-----Z-----	CO-ORDINATE-----	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	MEAN	SE	MEAN	SE	MEAN	SE	MEAN	SE	MEAN	SE	INCR	CUM
0.0	7	19.49	1.05	17.77	1.02	-5.92	1.63	-8.34	1.63	-3.51	0.92	10.15	13.17	0.0	0.0
0.10	7	19.64	1.02	17.97	1.02	-6.31	1.63	-8.99	1.63	-3.64	0.92	10.12	13.15	0.42	0.42
0.20	7	19.62	1.09	17.83	1.09	-6.33	1.58	-8.93	1.58	-3.74	1.03	9.92	13.30	0.04	0.45
0.30	7	19.47	1.07	17.72	1.07	-6.21	1.52	-8.70	1.52	-3.72	0.92	10.15	13.19	0.20	0.65
0.40	7	19.61	1.07	17.84	1.07	-6.20	1.57	-8.77	1.57	-3.63	0.92	10.17	13.20	0.13	0.79
0.50	7	19.73	1.18	17.79	1.18	-6.27	1.60	-8.90	1.60	-3.64	0.82	10.36	13.07	0.14	0.93
0.60	7	19.73	1.25	17.68	1.25	-6.27	1.66	-8.92	1.66	-3.48	0.78	10.44	13.00	0.06	0.99
0.70	7	19.51	1.17	17.70	1.17	-6.18	1.63	-8.85	1.63	-3.51	0.79	10.44	13.03	0.12	1.11
0.80	7	19.71	1.15	17.82	1.15	-6.15	1.69	-8.92	1.69	-3.38	0.93	10.21	13.25	0.10	1.21
0.90	7	19.81	1.18	17.86	1.18	-6.10	1.72	-8.92	1.72	-3.29	0.94	10.21	13.31	0.11	1.32
1.00	7	19.63	1.19	17.67	1.19	-6.03	1.68	-8.77	1.68	-3.28	0.90	10.26	13.23	0.20	1.52
0.0	7	19.63	1.19	17.67	1.19	-6.03	1.68	-8.77	1.68	-3.28	0.90	10.26	13.23	0.0	0.0
0.10	7	19.66	1.13	17.81	1.13	-6.06	1.67	-8.79	1.67	-3.33	0.80	10.45	13.08	0.05	0.05
0.20	7	19.56	1.10	17.76	1.10	-5.94	1.66	-8.65	1.66	-3.22	0.78	10.55	13.11	0.17	0.22
0.30	7	19.66	1.13	17.82	1.13	-6.03	1.56	-8.59	1.56	-3.46	0.82	10.41	13.10	0.16	0.38
0.40	7	19.51	1.15	17.62	1.15	-6.05	1.54	-8.54	1.54	-3.52	0.89	10.29	13.21	0.15	0.54
0.50	7	19.51	1.19	17.56	1.19	-5.89	1.55	-8.44	1.55	-3.35	0.84	10.34	13.09	0.15	0.69
0.60	7	19.71	1.23	17.69	1.23	-5.85	1.54	-8.37	1.54	-3.33	0.87	10.24	13.11	0.21	0.90
0.70	7	19.71	1.21	17.73	1.21	-5.84	1.51	-8.32	1.51	-3.36	0.88	10.21	13.09	0.03	0.93
0.80	7	19.69	1.24	17.66	1.24	-5.99	1.49	-8.43	1.49	-3.36	0.82	10.41	13.08	0.18	1.11
0.90	7	19.54	1.19	17.59	1.19	-5.99	1.45	-8.38	1.45	-3.61	0.82	10.33	13.02	0.16	1.28
1.00	7	19.49	1.05	17.77	1.05	-5.92	1.47	-8.34	1.47	-3.51	0.92	10.15	13.17	0.09	1.36

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	-----X-----	CO-ORDINATE-----	5 PCT	95 PCT	-----Y-----	CO-ORDINATE-----	5 PCT	95 PCT	-----Z-----	CO-ORDINATE-----	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	MEAN	SE	MEAN	SE	MEAN	SE	MEAN	SE	MEAN	SE	INCR	CUM
0.0	7	1.30	0.84	0.25	0.77	-7.76	0.78	-9.03	0.78	-6.48	1.40	17.36	21.56	0.0	0.0
0.10	7	0.97	0.77	-0.29	0.77	-7.27	0.50	-8.09	0.50	-6.46	0.87	19.05	21.89	0.99	0.99
0.20	7	0.55	0.96	-1.03	0.96	-7.08	0.86	-8.49	0.86	-5.67	0.70	19.99	22.30	0.82	1.82
0.30	7	0.58	1.26	-1.48	1.26	-6.64	1.15	-8.53	1.15	-4.76	0.77	20.64	23.17	0.87	2.69
0.40	7	0.73	1.40	-1.55	1.40	-6.05	1.38	-8.30	1.38	-4.76	0.90	21.53	24.47	1.26	3.95
0.50	7	0.62	1.49	-1.82	1.49	-5.50	1.32	-7.67	1.32	-3.32	1.42	21.66	26.31	1.14	5.09
0.60	7	0.33	1.77	-2.58	1.77	-4.47	1.36	-6.70	1.36	-2.25	1.36	22.87	27.35	1.55	6.64
0.70	7	-0.31	1.70	-3.09	1.70	-3.68	1.51	-6.15	1.51	-1.20	1.70	23.22	28.61	1.36	7.99
0.80	7	-0.86	1.45	-3.24	1.45	-3.05	1.68	-5.80	1.68	-0.29	1.59	23.67	28.89	0.88	8.88
0.90	7	-0.99	1.45	-3.36	1.45	-2.49	1.68	-5.25	1.68	0.27	0.95	24.94	28.05	0.61	9.49
1.00	7	-1.25	1.28	-3.35	1.28	-2.20	1.53	-4.72	1.53	0.31	1.33	24.66	29.01	0.51	10.00
0.0	7	-1.25	1.28	-3.35	1.28	-2.20	1.53	-4.72	1.53	0.31	1.33	24.66	29.01	0.0	0.0
0.10	7	-1.05	1.28	-3.15	1.28	-2.79	1.71	-5.60	1.71	0.02	1.20	24.43	28.36	0.76	0.76
0.20	7	-0.76	1.43	-3.05	1.43	-3.63	1.85	-6.66	1.85	-0.60	1.23	23.78	27.81	1.08	1.83
0.30	7	-0.34	1.45	-2.73	1.45	-4.22	1.69	-6.99	1.69	-2.45	1.20	22.72	26.65	1.32	3.16
0.40	7	-0.10	1.16	-2.00	1.16	-4.22	1.66	-7.41	1.66	-2.62	1.04	21.80	25.20	1.45	4.60
0.50	7	0.03	0.79	-1.27	0.79	-5.95	1.14	-7.83	1.14	-4.08	0.83	20.99	23.72	1.49	6.09
0.60	7	0.39	0.68	-0.73	0.68	-6.70	0.91	-8.18	0.91	-5.21	0.80	20.18	22.80	1.19	7.28
0.70	7	0.62	0.78	-0.62	0.78	-7.26	0.81	-8.59	0.81	-5.92	1.00	19.21	22.50	0.89	8.17
0.80	7	0.99	0.69	-0.13	0.69	-7.61	0.72	-8.80	0.72	-6.43	1.38	18.03	22.57	0.74	8.91
0.90	7	1.18	0.58	0.23	0.58	-7.86	0.63	-8.90	0.63	-6.83	1.40	17.49	22.07	0.60	9.51
1.00	7	1.30	0.64	0.25	0.64	-7.76	0.78	-9.03	0.78	-6.48	1.40	17.36	21.56	0.20	9.71

LANDMARK - RT ELBOW CENTER (24)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				DISTANCE			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	2.37	0.93	0.84	3.20	-10.26	1.02	-11.94	-8.59	8.70	1.91	5.77	12.03	0.0	0.0	0.0	
0.10	7	1.35	1.15	-0.53	3.23	-10.09	1.47	-12.50	-7.68	10.38	1.12	8.25	11.91	1.57	1.57	1.57	
F 0.20	7	2.25	1.32	0.09	4.41	-10.37	1.83	-13.36	-7.37	11.42	1.99	8.17	14.68	1.64	3.21	3.21	
D 0.30	7	5.16	1.94	1.97	8.34	-10.45	2.20	-14.06	-6.84	14.98	3.79	8.76	21.20	4.59	7.80	7.80	
R 0.40	7	8.17	2.50	4.07	12.26	-9.35	2.40	-13.27	-5.38	21.54	6.38	11.14	32.07	7.37	15.17	15.17	
W 0.50	7	7.67	3.53	2.88	14.46	-7.22	2.41	-11.17	-3.25	26.39	5.40	17.53	35.25	5.25	20.42	20.42	
A 0.60	7	7.06	4.10	3.33	13.79	-6.40	1.89	-7.49	-1.31	31.19	4.08	24.49	37.89	5.80	26.22	26.22	
R 0.70	7	4.52	3.92	-1.92	10.95	-2.22	1.66	-4.94	0.50	34.40	2.37	30.51	38.29	4.64	30.85	30.85	
D 0.80	7	2.67	3.37	-2.85	8.19	-0.72	1.24	-2.75	1.31	35.80	1.09	34.01	37.59	2.76	33.62	33.62	
U 0.90	7	1.70	2.34	-2.15	5.54	0.20	1.11	-1.62	2.01	36.44	0.46	35.65	37.17	1.47	35.04	35.04	
1.00	7	1.05	1.49	-1.40	3.50	0.54	1.17	-1.38	2.45	36.42	0.53	35.55	37.29	0.73	35.81	35.81	
0.0	7	1.05	1.49	-1.40	3.50	0.54	1.17	-1.38	2.45	36.42	0.53	35.55	37.29	0.0	0.0	0.0	
0.10	7	3.05	2.11	-0.41	6.50	-1.31	0.74	-2.53	-0.09	35.56	0.72	34.38	36.75	2.85	2.85	2.85	
U 20	7	6.01	3.69	-0.04	12.07	-3.89	0.76	-5.13	-2.64	32.09	2.52	27.95	36.23	5.24	8.09	8.09	
R 0.30	7	7.79	3.74	1.65	13.92	-6.55	1.54	-9.09	-4.02	26.33	3.72	20.22	32.44	6.59	14.69	14.69	
E 0.40	7	6.48	3.21	1.22	11.74	-9.06	2.27	-12.77	-5.34	19.55	3.92	13.13	25.97	7.34	22.03	22.03	
U 0.50	7	3.61	3.21	-1.85	8.87	-10.55	2.05	-13.91	-7.20	14.57	2.88	9.95	19.39	5.85	27.88	27.88	
U 0.60	7	1.59	2.61	-2.69	5.87	-11.04	1.77	-13.94	-8.14	12.15	1.94	8.97	15.33	3.26	31.15	31.15	
U 0.70	7	1.26	1.85	-1.77	4.29	-10.94	1.74	-13.80	-8.09	10.61	1.88	7.54	13.59	1.58	32.73	32.73	
N 0.80	7	1.56	1.39	-0.72	3.83	-10.66	1.53	-13.17	-8.45	9.85	1.88	6.77	12.92	0.87	33.59	33.59	
0.90	7	1.84	0.99	0.22	3.47	-10.51	1.25	-12.56	-8.16	9.16	1.95	5.96	12.35	0.76	34.35	34.35	
1.00	7	2.37	0.93	0.84	3.50	-10.26	1.02	-11.94	-8.59	8.90	1.91	5.77	12.03	0.64	34.99	34.99	

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				DISTANCE			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	10.60	0.35	10.03	11.16	-12.67	0.97	-14.26	-11.07	5.14	1.45	2.76	7.52	0.0	0.0	0.0	
0.10	7	9.67	1.53	7.16	12.18	-9.98	2.37	-13.86	-6.10	14.82	3.78	8.82	21.02	3.90	3.90	3.90	
F 0.20	7	9.43	2.97	4.55	14.31	-7.34	2.91	-12.10	-2.57	21.26	4.43	13.99	28.53	6.97	17.10	17.10	
R 0.30	7	8.35	3.59	2.46	14.23	-4.02	2.53	-8.17	0.13	27.38	4.69	19.69	35.08	7.05	24.15	24.15	
W 0.40	7	6.40	3.85	0.09	12.72	-0.62	1.98	-3.86	2.62	32.43	4.56	24.95	39.91	6.39	30.53	30.53	
A 0.50	7	3.75	3.51	-2.00	9.50	2.51	1.61	-0.13	5.15	36.58	3.54	30.77	42.39	5.64	36.37	36.37	
R 0.60	7	1.23	2.76	-3.29	5.75	4.90	1.45	2.52	7.27	39.84	2.40	35.88	43.74	4.74	41.11	41.11	
D 0.70	7	0.13	1.96	-3.09	3.35	6.51	0.90	5.03	7.99	41.77	1.68	39.01	44.53	2.77	43.86	43.86	
0.80	7	-0.32	1.20	-2.28	1.64	7.22	0.66	6.15	8.30	42.91	0.86	41.51	44.32	1.42	45.30	45.30	
0.90	7	-0.62	1.05	-2.34	1.10	7.64	0.70	6.49	8.79	43.19	0.48	42.39	43.99	0.58	45.88	45.88	
1.00	7	-0.62	1.05	-2.34	1.10	7.64	0.70	6.49	8.79	43.19	0.48	42.39	43.99	0.0	0.0	0.0	
0.0	7	0.89	1.43	-1.46	3.24	6.49	0.87	5.06	7.91	41.15	1.30	39.01	43.29	2.79	2.79	2.79	
0.10	7	3.25	2.82	-1.38	7.88	3.88	0.72	2.70	5.06	36.82	2.72	32.36	41.28	5.57	8.36	8.36	
R 0.20	7	5.99	3.12	0.88	11.10	0.46	0.54	-0.43	1.35	32.01	2.87	27.31	36.71	6.51	14.87	14.87	
E 0.30	7	8.50	2.97	3.63	13.37	-3.18	1.07	-4.95	-1.42	26.21	3.16	21.03	31.40	7.29	22.17	22.17	
T 0.40	7	9.84	2.64	5.52	14.17	-7.05	1.86	-10.10	-4.00	19.33	2.63	15.02	23.64	8.01	30.17	30.17	
U 0.50	7	10.32	2.28	6.57	14.06	-10.70	3.07	-15.73	-5.67	12.70	2.06	16.08	23.64	7.58	37.75	37.75	
U 0.60	7	9.83	1.76	8.94	12.72	-12.05	2.26	-15.75	-3.34	9.39	3.03	4.42	14.36	3.60	41.36	41.36	
U 0.70	7	10.00	1.10	8.19	11.81	-12.74	1.61	-15.38	-10.10	6.93	2.81	2.32	11.53	2.57	43.93	43.93	
N 0.80	7	10.39	0.56	9.47	11.32	-12.94	1.46	-15.34	-10.54	5.64	1.98	2.40	8.89	1.56	45.29	45.29	
0.90	7	10.60	0.35	10.03	11.16	-12.67	0.97	-14.26	-11.07	5.14	1.45	2.76	7.52	0.61	45.89	45.89	
1.00	7	10.60	0.35	10.03	11.16	-12.67	0.97	-14.26	-11.07	5.14	1.45	2.76	7.52	0.0	0.0	0.0	

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +47.3 AND RETURNS. RIGHT HAND REMAINS AT STICK CONTROLLER AT +20.0, 0.0, +12.4.

MOTION NUMBER - 21230
 BACK ANGLE - 13

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.87	0.15	0.70 TO 1.10 SECS.
LEFT REV	0.73	0.13	0.50 TO 0.90 SECS.

(1)

LANDMARK - NASION

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT	INCR	CUM	INCR	CUM	
0.0	7	6.36	0.81	5.04	7.69	-0.08	1.28	-2.18	2.02	28.92	1.56	26.36	31.48	0.0	0.0					
0.10	7	2.95	1.48	0.52	5.38	0.50	0.46	-0.25	1.25	31.71	1.22	29.72	33.71	4.45	4.45					
0.20	7	1.47	1.61	-1.17	4.11	0.14	0.64	-0.92	1.19	32.40	1.01	30.50	34.12	1.59	6.04					
0.30	7	0.85	1.50	-1.61	3.30	-0.38	0.65	-1.45	0.69	32.40	1.05	30.67	34.82	0.84	6.88					
0.40	7	0.36	1.44	-2.00	2.71	-0.48	0.74	-1.69	0.73	32.38	0.98	30.71	33.92	0.51	7.38					
0.50	7	-0.04	1.52	-2.54	2.46	-0.46	0.73	-1.66	0.75	32.38	0.95	30.89	34.00	0.52	7.80					
0.60	7	-0.25	1.64	-2.94	2.44	-0.53	0.79	-1.82	0.76	32.35	0.97	30.93	34.11	0.23	8.03					
0.70	7	-0.49	1.70	-3.28	2.31	-0.58	0.80	-1.88	0.72	32.35	1.04	30.81	34.22	0.25	8.28					
0.80	7	-0.48	1.78	-3.40	2.44	-0.52	0.95	-2.08	1.04	32.35	1.00	30.82	34.09	0.09	8.37					
0.90	7	-0.31	1.69	-3.08	2.45	-0.57	0.95	-2.14	1.03	32.38	0.95	30.82	33.93	0.19	8.55					
1.00	7	-0.17	1.89	-3.27	2.93	-0.63	0.92	-2.14	0.89	32.37	0.97	30.78	33.97	0.16	8.71					
0.0	7	-0.17	1.89	-3.27	2.93	-0.63	0.92	-2.14	0.89	32.37	0.97	30.78	33.97	0.0	0.0					
0.10	7	2.78	2.09	-0.65	6.21	-0.43	0.61	-1.43	0.56	30.95	1.50	28.49	33.41	3.28	3.28					
0.20	7	4.22	2.26	0.52	7.92	-0.43	0.74	-1.63	0.78	30.23	1.52	27.74	32.72	1.61	4.89					
0.30	7	4.67	1.90	1.54	7.79	-0.51	0.95	-2.07	1.05	29.93	1.43	27.55	32.25	0.56	5.45					
0.40	7	5.15	1.68	2.39	7.90	-0.57	1.12	-2.41	1.26	29.59	1.31	27.54	31.85	0.53	5.98					
0.50	7	5.53	1.45	3.16	7.90	-0.62	1.19	-2.58	1.34	29.53	1.27	27.44	31.62	0.42	6.40					
0.60	7	5.88	1.20	3.90	7.85	-0.50	1.14	-2.37	1.37	29.30	1.21	27.31	31.29	0.43	6.83					
0.70	7	6.05	1.08	4.30	7.83	-0.47	1.36	-2.70	1.76	29.19	1.23	27.17	31.21	0.22	7.05					
0.80	7	6.20	1.09	4.40	7.99	-0.40	1.44	-2.76	1.96	29.04	1.30	26.91	31.17	0.21	7.26					
0.90	7	6.26	1.06	4.53	7.99	-0.26	1.39	-2.53	2.02	28.96	1.40	26.67	31.24	0.18	7.44					
1.00	7	6.36	0.81	5.04	7.69	-0.08	1.28	-2.18	2.02	28.92	1.56	26.36	31.48	0.20	7.64					

(2)

LANDMARK - CERVICALE

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT	INCR	CUM	INCR	CUM	
0.0	7	-0.80	0.98	-2.41	0.82	-2.08	0.83	-3.44	-0.72	23.26	0.85	21.87	24.66	23.26	0.85	21.87	24.66	0.0	0.0	
0.10	7	-1.09	0.77	-2.35	0.17	-2.01	0.68	-3.12	-0.89	23.37	0.85	21.85	24.89	23.37	0.85	21.85	24.89	0.32	0.32	
0.20	7	-1.43	0.92	-2.94	0.09	-2.23	0.66	-3.31	-1.15	23.40	0.95	21.84	24.96	23.40	0.95	21.84	24.96	0.41	0.73	
0.30	7	-1.48	1.00	-3.11	0.15	-2.60	0.79	-3.89	-1.31	23.47	0.98	21.97	25.18	23.47	0.98	21.97	25.18	0.41	1.14	
0.40	7	-1.68	0.69	-2.81	-0.55	-2.60	0.62	-3.62	-1.58	23.49	0.97	21.90	25.08	23.49	0.97	21.90	25.08	0.22	1.35	
0.50	7	-1.92	0.74	-3.13	-0.71	-2.69	0.81	-4.02	-1.35	23.48	0.95	21.93	25.04	23.48	0.95	21.93	25.04	0.20	1.61	
0.60	7	-2.07	0.93	-3.60	-0.54	-2.77	0.90	-4.24	-1.30	23.50	0.92	21.99	25.03	23.50	0.92	21.99	25.03	0.17	1.78	
0.70	7	-2.13	0.79	-3.42	-0.84	-2.70	0.80	-4.01	-1.40	23.48	0.89	22.01	24.95	23.48	0.89	22.01	24.95	0.09	1.87	
0.80	7	-2.12	0.81	-3.46	-0.79	-2.78	1.02	-4.45	-1.11	23.50	0.94	22.03	25.10	23.50	0.94	22.03	25.10	0.11	1.99	
0.90	7	-1.90	0.77	-3.17	-0.63	-2.67	1.05	-4.39	-0.95	23.54	1.00	22.00	25.27	23.54	1.00	22.00	25.27	0.26	2.24	
1.00	7	-1.85	0.75	-3.10	-0.61	-2.83	0.98	-4.43	-1.23	23.54	0.91	22.05	25.04	23.54	0.91	22.05	25.04	0.19	2.43	
0.0	7	-1.85	0.76	-3.10	-0.61	-2.83	0.98	-4.43	-1.23	23.54	0.91	22.05	25.04	23.54	0.91	22.05	25.04	0.0	0.0	
0.10	7	-1.51	0.85	-2.92	0.10	-2.87	0.97	-4.46	-1.28	23.54	0.85	22.14	24.95	23.54	0.85	22.14	24.95	0.35	0.35	
0.20	7	-1.31	0.93	-2.84	0.22	-2.88	0.83	-4.25	-1.52	23.45	0.79	22.15	24.74	23.45	0.79	22.15	24.74	0.57	0.57	
0.30	7	-1.22	0.85	-2.61	0.17	-2.86	0.79	-4.25	-1.56	23.30	0.79	22.06	24.65	23.30	0.79	22.06	24.65	0.70	0.70	
0.40	7	-1.15	0.86	-2.56	0.26	-2.81	0.84	-4.19	-1.43	23.44	0.88	22.00	24.88	23.44	0.88	22.00	24.88	0.82	0.82	
0.50	7	-0.94	0.86	-2.35	0.48	-2.84	0.97	-4.43	-1.25	23.30	0.86	21.95	24.78	23.30	0.86	21.95	24.78	1.05	1.05	
0.60	7	-0.89	0.92	-2.41	0.62	-2.63	0.92	-4.43	-1.11	23.35	0.84	21.97	24.73	23.35	0.84	21.97	24.73	1.27	1.27	
0.70	7	-0.83	1.03	-2.52	0.86	-2.34	1.02	-4.02	-0.66	23.30	0.85	21.97	24.76	23.30	0.85	21.97	24.76	1.56	1.56	
0.80	7	-0.79	1.17	-2.70	1.12	-2.14	1.12	-3.99	-0.30	23.31	0.84	21.93	24.68	23.31	0.84	21.93	24.68	1.77	1.77	
0.90	7	-0.78	1.20	-2.75	1.18	-2.07	1.02	-3.75	-0.39	23.27	0.83	21.92	24.63	23.27	0.83	21.92	24.63	1.85	1.85	
1.00	7	-0.80	0.98	-2.41	0.82	-2.08	0.83	-3.44	-0.72	23.26	0.85	21.87	24.66	23.26	0.85	21.87	24.66	2.02	2.02	

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		CUM	
0.0	7	2.13	0.84	0.76	3.50	-1.66	1.12	-3.50	0.19	22.65	0.98	21.04	24.26	0.0	0.0	0.0	
0.10	7	1.78	0.88	0.34	3.22	-1.53	1.18	-3.48	0.41	22.76	0.94	21.22	24.31	0.38	0.38	0.38	
F 0.20	7	1.52	0.99	-0.09	3.14	-1.55	1.15	-3.43	0.33	22.74	0.80	21.43	24.05	0.26	0.64	0.64	
O 0.30	7	1.42	0.97	-0.16	3.00	-1.80	1.33	-3.98	0.38	22.99	0.84	21.60	24.37	0.37	1.01	1.01	
R 0.40	7	1.11	1.02	-0.57	2.78	-1.79	1.35	-4.01	0.43	22.99	0.85	21.60	24.38	0.31	1.32	1.32	
M 0.50	7	0.94	1.07	-0.82	2.70	-1.61	1.61	-4.46	0.62	23.08	0.79	21.78	24.37	0.19	1.51	1.51	
A 0.60	7	0.76	0.90	-0.72	2.24	-1.93	1.58	-4.52	0.67	23.19	0.73	21.99	24.39	0.24	1.75	1.75	
R 0.70	7	0.58	0.80	-0.64	2.00	-1.75	1.54	-4.27	0.77	23.29	0.73	22.09	24.49	0.22	1.97	1.97	
D 0.80	7	0.54	0.81	-0.69	1.97	-1.83	1.56	-4.38	0.73	23.28	0.88	21.84	24.72	0.09	2.06	2.06	
O 0.90	7	0.76	0.66	-0.33	1.84	-1.80	1.50	-4.25	0.65	23.26	0.88	21.83	24.72	0.12	2.18	2.18	
1.00	7	1.31	1.63	-1.37	3.98	-1.21	0.79	-2.50	0.09	23.20	0.81	21.87	24.52	0.81	3.00	3.00	
0.0	7	1.31	1.63	-1.37	3.98	-1.21	0.79	-2.50	0.09	23.20	0.81	21.87	24.52	0.0	0.0	0.0	
0.10	7	1.16	0.59	0.20	2.13	-1.83	1.24	-3.87	0.21	23.24	0.73	22.01	24.41	0.64	0.64	0.64	
0.20	7	1.27	0.47	0.50	2.04	-1.96	1.35	-4.17	0.25	23.13	0.76	21.89	24.37	0.18	0.83	0.83	
R 0.30	7	1.47	0.60	0.49	2.45	-1.84	1.37	-4.10	0.41	23.00	0.80	21.69	24.31	0.27	1.10	1.10	
E 0.40	7	1.66	0.74	0.25	2.67	-2.02	1.44	-4.38	0.35	23.00	0.89	21.60	24.51	0.18	1.28	1.28	
U 0.50	7	1.59	0.70	0.44	2.74	-2.10	1.26	-4.16	-0.04	23.00	0.96	21.43	24.57	0.16	1.44	1.44	
U 0.60	7	1.73	0.71	0.57	2.89	-2.12	1.31	-4.26	0.02	22.88	1.11	21.06	24.69	0.19	1.63	1.63	
U 0.70	7	1.79	0.90	0.32	3.26	-1.90	1.30	-4.03	0.24	22.84	1.13	20.95	24.66	0.24	1.87	1.87	
N 0.80	7	1.83	0.93	0.30	3.36	-1.73	1.29	-3.85	0.38	22.78	0.99	21.15	24.41	0.17	2.04	2.04	
O 0.90	7	1.91	0.83	0.47	3.34	-1.72	1.27	-3.79	0.36	22.71	0.94	21.23	24.32	0.08	2.12	2.12	
1.00	7	2.13	0.84	0.76	3.50	-1.66	1.12	-3.50	0.19	22.65	0.98	21.04	24.26	0.26	2.38	2.38	

LANDMARK - LT ACROMION (5)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		CUM	
0.0	7	-0.82	0.77	-2.08	0.44	6.59	0.69	5.46	7.71	23.20	0.87	21.77	24.62	0.0	0.0	0.0	
0.10	6	-1.42	0.57	-2.35	-0.50	6.37	0.84	5.00	7.74	23.02	1.11	21.21	24.84	0.66	0.66	0.66	
F 0.20	5	-2.04	0.56	-2.97	-1.12	6.01	1.01	4.35	7.67	23.09	1.11	21.26	24.92	0.72	1.38	1.38	
O 0.30	4	-2.17	0.83	-3.53	-0.81	5.19	1.05	3.47	6.91	23.53	1.45	21.16	25.90	0.94	2.32	2.32	
R 0.40	3	-2.30	0.16	-2.56	-2.04	4.68	0.93	3.16	6.20	24.70	0.99	23.07	26.33	1.28	3.60	3.60	
M 0.50	3	-2.96	0.45	-3.70	-2.23	4.83	0.95	3.28	6.38	24.71	1.12	22.87	26.54	0.68	4.28	4.28	
A 0.60	3	-3.10	0.62	-4.11	-2.09	4.43	1.01	2.78	6.03	24.94	1.38	22.68	27.19	0.48	4.76	4.76	
K 0.70	3	-3.64	1.04	-5.35	-1.93	4.22	1.28	2.12	6.32	25.15	1.62	22.49	27.82	0.62	5.38	5.38	
D 0.80	3	-4.17	1.13	-6.02	-2.32	4.23	1.40	1.93	6.53	25.35	1.80	22.40	28.29	0.56	5.94	5.94	
O 0.90	2	-3.76	0.62	-4.78	-2.73	4.65	1.37	2.41	6.89	24.33	1.80	23.52	25.14	1.17	7.11	7.11	
1.00	2	-3.77	1.23	-5.79	-1.75	4.61	1.39	2.33	6.90	24.33	0.33	23.79	24.88	0.04	7.15	7.15	
0.0	2	-3.77	1.23	-5.79	-1.75	4.61	1.39	2.33	6.90	24.33	0.33	23.79	24.88	0.0	0.0	0.0	
0.10	2	-3.77	1.13	-5.63	-1.90	4.67	1.15	2.78	6.55	24.27	0.41	23.60	24.94	0.08	0.08	0.08	
0.20	2	-3.78	1.15	-5.65	-1.90	4.73	1.17	2.81	6.65	24.39	0.21	24.05	24.74	0.14	0.23	0.23	
R 0.30	2	-3.53	0.84	-4.91	-2.14	4.75	1.30	2.62	6.88	24.42	0.09	24.25	24.57	0.25	0.49	0.49	
E 0.40	3	-2.61	0.85	-4.00	-1.22	4.31	1.34	2.12	6.51	24.54	0.87	23.22	26.07	1.04	1.52	1.52	
T 0.50	3	-1.76	1.14	-3.64	0.11	4.92	1.72	2.11	7.74	24.59	0.68	23.48	25.71	1.04	2.56	2.56	
U 0.60	5	-1.45	0.89	-2.92	0.01	5.48	1.16	3.57	7.39	24.17	0.82	22.83	25.52	0.76	3.32	3.32	
R 0.70	6	-1.17	0.97	-2.76	0.43	5.80	0.99	4.18	7.42	23.44	1.08	21.67	25.22	0.85	4.17	4.17	
N 0.80	7	-0.96	1.02	-2.64	0.72	6.16	0.87	4.71	7.57	23.35	0.96	21.78	24.93	0.43	4.60	4.60	
O 0.90	7	-0.83	1.02	-2.50	0.84	6.38	0.71	5.21	7.55	23.28	0.85	21.89	24.67	0.27	4.87	4.87	
1.00	7	-0.82	0.77	-2.08	0.44	6.59	0.69	5.46	7.71	23.20	0.87	21.77	24.62	0.22	5.09	5.09	

LANDMARK - LT GRIP CENTER (17)														
TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE			MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	
0.0	6	18.83	0.48	18.05	19.61	10.23	1.01	8.57	11.89	12.89	0.28	12.24	13.14	0.0
0.10	7	16.01	3.26	10.67	21.35	10.02	0.86	8.60	11.44	18.22	4.10	11.49	24.95	6.21
F 0.20	7	10.90	5.49	1.90	19.91	9.77	1.20	7.80	11.73	26.23	7.35	14.18	38.29	9.51
D 0.30	7	8.37	3.10	3.29	13.46	9.42	1.17	7.49	11.34	29.50	2.56	25.30	33.70	19.87
W 0.40	7	3.44	2.88	-0.95	7.83	9.21	1.14	7.33	11.08	34.93	2.91	30.15	39.71	27.20
M 0.50	7	-0.82	2.89	-5.55	3.92	9.10	1.40	6.81	11.39	39.82	4.04	33.19	46.46	33.89
A 0.60	7	-2.47	2.28	-6.21	1.27	8.64	1.57	6.06	11.22	42.43	2.09	38.99	45.86	36.81
R 0.70	6	-2.44	1.31	-4.59	-0.30	9.12	0.51	8.28	9.95	44.70	1.87	41.63	47.77	39.13
D 0.80	5	-1.66	0.97	-3.25	-0.07	9.28	0.54	8.40	10.16	44.82	1.09	43.04	46.61	39.94
0.90	4	-1.08	1.01	-2.73	0.57	9.47	0.62	8.46	10.49	45.37	1.26	43.31	47.43	40.75
1.00	3	-1.38	0.70	-2.53	-0.24	9.29	0.45	8.56	10.03	44.97	0.42	44.28	45.66	41.29
0.0	3	-1.38	0.70	-2.53	-0.24	9.29	0.45	8.56	10.03	44.97	0.42	44.28	45.66	0.0
0.10	3	-1.24	1.44	-3.60	1.12	9.03	0.16	8.78	9.28	43.02	1.56	40.46	45.58	1.97
0.20	4	-0.97	1.59	-3.58	1.64	8.71	0.47	7.94	9.48	40.18	1.90	37.07	43.29	2.87
R 0.30	6	1.63	1.65	-1.07	4.32	8.47	0.73	7.28	9.67	36.09	1.78	33.77	39.61	4.84
E 0.40	7	4.69	1.72	1.86	7.52	7.94	1.02	6.27	9.61	33.02	1.95	29.82	36.23	14.00
U 0.50	7	8.93	1.92	5.78	12.08	8.12	0.54	6.58	9.66	23.44	2.97	23.60	33.36	20.22
U 0.60	7	13.61	2.90	8.85	18.37	8.69	1.35	6.49	10.90	22.41	5.03	14.17	30.66	27.91
R 0.70	7	16.58	3.16	11.50	21.86	9.26	1.32	7.10	11.42	17.79	4.01	11.21	24.37	33.49
N 0.80	7	17.81	1.98	14.56	21.06	9.48	0.93	7.96	11.00	15.15	2.92	10.35	19.94	36.37
0.90	6	18.36	0.79	16.76	19.36	9.92	0.88	8.48	11.35	14.04	0.76	12.80	15.29	37.58
1.00	6	18.83	0.48	18.05	19.61	10.23	1.01	8.57	11.89	12.59	0.28	12.24	13.14	39.17

LANDMARK - LT TROCHANTER (19)														
TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE			MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	
0.0	7	4.38	0.38	3.76	5.00	6.74	0.82	5.39	8.09	3.93	0.36	3.34	4.52	0.0
0.10	7	4.26	0.55	3.35	5.16	6.78	0.69	5.65	7.91	3.87	0.35	3.30	4.45	0.14
F 0.20	7	4.15	0.64	3.11	5.20	6.83	0.82	5.48	8.18	3.87	0.35	3.29	4.45	0.26
R 0.30	7	4.04	1.00	2.40	5.68	6.47	0.79	5.18	7.76	3.93	0.41	3.25	4.61	0.84
R 0.40	7	4.21	0.63	3.17	5.25	6.69	0.62	5.68	7.71	3.87	0.39	3.24	4.51	0.92
W 0.50	7	4.31	0.50	3.50	5.13	6.81	0.71	5.65	7.97	3.98	0.35	3.31	4.46	1.08
A 0.60	7	4.33	0.46	3.58	5.08	6.64	0.82	5.29	8.00	3.96	0.40	3.30	4.62	1.26
R 0.70	7	4.29	0.47	3.52	5.06	6.74	0.97	5.14	8.34	3.94	0.40	3.29	4.60	1.56
D 0.80	7	4.29	0.46	3.53	5.05	6.74	0.84	5.36	8.13	3.97	0.40	3.31	4.63	1.83
0.90	7	4.46	0.59	3.49	5.43	6.73	0.68	5.61	7.84	3.90	0.35	3.33	4.47	1.57
1.00	7	4.28	0.39	3.64	4.92	6.68	0.73	5.48	7.88	3.89	0.39	3.25	4.53	1.75
0.0	7	4.28	0.39	3.64	4.92	6.68	0.73	5.48	7.88	3.89	0.39	3.25	4.53	0.0
0.10	7	4.40	0.31	3.88	4.91	6.68	0.70	5.53	7.84	3.89	0.38	3.27	4.51	0.12
0.20	7	4.40	0.32	3.86	4.93	6.72	0.78	5.44	7.99	3.90	0.35	3.32	4.48	0.16
R 0.30	7	4.34	0.41	3.68	5.01	6.81	0.84	5.44	8.18	3.92	0.38	3.33	4.58	0.27
E 0.40	7	4.36	0.53	3.49	5.23	6.64	0.92	5.12	8.16	3.96	0.42	3.27	4.65	0.44
T 0.50	7	4.29	0.76	3.05	5.53	6.66	0.77	5.40	7.92	3.89	0.36	3.30	4.49	0.54
U 0.60	7	4.24	0.95	2.68	5.80	6.91	0.53	5.39	8.44	3.87	0.41	3.24	4.49	0.79
R 0.70	7	4.38	0.62	3.36	5.40	6.78	0.87	5.36	8.21	3.88	0.41	3.22	4.55	0.98
N 0.80	7	4.35	0.46	3.59	5.11	6.76	0.68	5.64	7.88	3.84	0.34	3.28	4.40	1.04
0.90	7	4.31	0.33	3.76	4.85	6.71	0.69	5.58	7.84	3.90	0.35	3.33	4.45	1.13
1.00	7	4.38	0.36	3.76	5.00	6.74	0.82	5.39	7.89	3.93	0.36	3.34	4.52	1.22

LANDMARK - LT KNEE TOP (21)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				-----				DISTANCE				MOVED			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	INCR	INCR	CUM	CUM	CUM	CUM
0.0	7	19.96	0.69	18.82	21.09	5.30	1.00	3.67	6.93	11.43	1.26	9.36	13.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	20.06	0.75	18.83	21.30	5.54	0.78	4.26	6.82	11.40	1.23	9.38	13.42	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
F 0.20	7	19.95	0.83	18.60	21.31	5.57	0.81	4.27	6.93	11.43	1.32	9.27	13.59	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
0 0.30	7	18.14	4.24	11.18	21.09	3.58	4.66	-4.07	11.23	11.51	1.41	9.20	13.91	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
R 0.40	7	18.93	2.30	15.16	22.71	4.38	2.71	-0.06	8.81	11.56	1.29	9.45	13.68	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
W 0.50	7	19.86	0.81	18.53	21.20	5.46	0.83	4.09	6.83	11.50	1.21	9.52	13.47	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
A 0.60	7	19.83	0.81	18.50	21.15	5.44	0.84	4.06	6.82	11.53	1.24	9.49	13.56	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
R 0.70	7	19.98	0.85	18.60	21.37	5.44	0.86	4.03	6.86	11.59	1.21	9.60	13.58	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
D 0.80	7	20.03	0.82	18.67	21.38	5.44	0.75	4.20	6.68	11.57	1.29	9.45	13.69	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0 0.90	7	20.23	0.81	18.89	21.56	5.64	0.76	4.40	6.88	11.48	1.26	9.42	13.54	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
1.00	7	20.08	0.59	19.11	21.06	5.48	0.91	3.98	6.93	11.52	1.25	9.47	13.57	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
0.0	7	20.08	0.59	19.11	21.06	5.48	0.91	3.98	6.93	11.52	1.25	9.47	13.57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	19.99	0.75	18.76	21.23	5.41	0.91	3.91	6.91	11.52	1.25	9.47	13.57	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.20	7	19.96	0.83	18.60	21.32	5.48	0.94	3.94	7.02	11.59	1.28	9.49	13.69	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
R 0.30	7	20.04	0.77	18.77	21.31	5.53	0.82	4.18	6.89	11.56	1.32	9.39	13.73	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
E 0.40	7	20.05	0.79	18.76	21.34	5.28	0.77	4.02	6.55	11.56	1.35	9.34	13.78	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
T 0.50	7	19.98	0.80	18.67	21.29	5.24	0.83	3.88	6.81	11.53	1.27	9.45	13.62	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
U 0.60	7	19.95	0.75	18.73	21.18	5.35	0.92	3.84	6.85	11.48	1.17	9.56	13.39	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
R 0.70	7	20.10	0.79	18.80	21.39	5.40	0.90	3.92	6.89	11.42	1.21	9.43	13.41	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
N 0.80	7	20.04	0.82	18.59	21.39	5.44	0.96	3.86	7.02	11.36	1.22	9.35	13.37	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
0 0.90	7	19.91	0.73	18.71	21.11	5.47	1.06	3.74	7.20	11.33	1.16	9.43	13.23	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
1.00	7	19.96	0.69	18.82	21.09	5.30	1.00	3.67	6.93	11.43	1.26	9.36	13.50	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

LANDMARK - LT SHOULDER CENTER (23)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				DISTANCE				MOVED				MOVED			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	INCR	INCR	CUM	CUM	CUM	CUM	CUM	CUM	CUM	CUM
0.0	7	0.62	0.96	-0.96	2.20	6.73	0.75	5.50	7.96	21.40	0.73	20.21	22.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	0.12	0.44	-0.61	0.85	7.10	0.72	5.93	8.28	21.10	0.68	19.98	22.21	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
F 0.20	7	-0.42	0.53	-1.29	0.45	6.99	0.96	5.41	8.57	21.50	0.65	20.44	22.56	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
0 0.30	7	-0.70	0.70	-1.84	0.44	6.90	1.32	4.74	9.07	22.31	0.84	20.94	23.68	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
R 0.40	7	-1.00	0.61	-1.99	-0.01	6.65	1.35	4.43	8.87	23.07	1.09	21.28	24.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
W 0.50	7	-1.46	0.57	-2.40	-0.52	6.39	1.29	4.27	8.59	23.83	1.32	21.67	25.99	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
A 0.60	7	-1.78	0.72	-2.96	-0.60	6.10	1.22	4.09	8.11	24.37	1.32	22.20	26.53	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
R 0.70	7	-2.01	0.59	-2.97	-1.04	5.73	1.22	3.72	7.73	24.85	1.29	22.74	26.96	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
D 0.80	7	-2.15	0.49	-2.96	-1.35	5.68	1.20	3.71	7.55	25.02	1.19	23.07	26.97	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
0 0.90	7	-2.01	0.53	-2.89	-1.13	5.50	1.11	3.68	7.32	25.04	1.03	23.35	26.74	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
1.00	7	-2.17	1.04	-3.88	-0.46	5.32	1.21	3.33	7.30	25.01	1.09	23.21	26.80	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
0.0	7	-2.17	1.04	-3.88	-0.46	5.32	1.21	3.33	7.30	25.01	1.09	23.21	26.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	-1.85	1.03	-3.54	-0.15	5.47	1.22	3.48	7.47	24.92	1.18	22.99	26.86	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
0.20	7	-1.53	1.14	-3.40	0.34	5.62	1.35	3.41	7.84	24.46	1.08	22.69	26.24	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
R 0.30	7	-1.12	0.82	-2.47	0.23	5.89	1.19	3.94	7.84	23.83	0.86	22.43	25.23	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
E 0.40	7	-0.91	0.82	-2.25	0.43	6.26	1.10	4.45	8.06	23.17	0.89	21.70	24.63	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
T 0.50	7	-0.67	0.76	-1.91	0.56	6.32	1.07	4.55	8.08	22.56	0.81	21.22	23.89	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
U 0.60	7	-0.34	0.72	-1.52	0.85	6.61	1.12	4.78	8.45	22.06	0.78	20.79	23.33	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
R 0.70	7	-0.10	0.79	-1.39	1.18	6.66	1.04	4.95	8.37	21.80	0.81	20.48	23.12	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
N 0.80	7	0.14	0.82	-1.21	1.48	6.73	1.01	5.07	8.40	21.56	0.84	20.18	22.93	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
0 0.90	7	0.31	0.81	-1.03	1.64	6.74	0.92	5.23	8.25	21.45	0.82	20.11	22.79	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
1.00	7	0.62	0.96	-0.96	2.20	6.73	0.75	5.50	7.95	21.40	0.73	20.21	22.60	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	(-----X-----)	(-----Y-----)	(-----Z-----)	(-----CO-ORDINATE-----)	(-----5 PCT-----)	(-----95 PCT-----)	(-----MEAN-----)	(-----SE-----)	(-----5 PCT-----)	(-----95 PCT-----)	(-----CO-ORDINATE-----)	(-----5 PCT-----)	(-----95 PCT-----)	(-----INCR-----)	(-----MOVED-----)
0.0	7	MEAN	MEAN	MEAN	SE	5 PCT	95 PCT	11.84	1.18	9.90	13.77	12.97	1.19	11.03	14.92	0.0
0.10	7	5.21	4.32	6.11	0.55	5.66	6.11	11.94	0.75	11.13	13.56	13.45	1.61	10.80	16.09	0.99
0.20	7	4.50	3.44	5.56	0.65	3.44	5.56	12.33	0.75	11.13	13.56	13.45	1.61	10.80	16.09	0.99
0.30	7	4.18	2.40	5.96	1.09	2.40	5.96	13.09	0.97	11.49	14.69	15.75	2.46	11.71	19.79	2.45
0.40	7	4.05	1.25	6.85	1.71	1.25	6.85	13.68	1.22	11.67	15.68	19.49	2.81	14.89	24.09	3.79
0.50	7	3.26	2.07	6.65	2.07	2.07	6.65	14.22	1.39	11.93	16.50	23.57	2.85	14.89	24.09	3.79
0.60	7	2.06	2.19	6.52	2.19	2.19	6.52	13.94	1.27	11.86	16.02	22.76	2.65	14.89	24.09	3.79
0.70	7	0.60	2.22	6.43	2.22	2.22	6.43	12.98	1.08	11.22	14.74	29.43	1.01	27.78	31.09	3.19
0.80	7	-0.70	2.22	6.43	2.22	2.22	6.43	12.10	0.97	10.51	13.70	30.91	0.81	29.58	32.24	2.15
0.90	7	-1.29	1.98	4.53	1.98	4.53	1.98	11.49	0.86	10.07	12.93	31.59	0.65	30.52	32.66	1.09
1.00	7	-1.11	1.76	4.00	1.76	4.00	1.76	11.21	0.98	9.98	12.83	31.93	0.55	31.00	32.81	0.45
		-1.01	1.66	3.73	1.66	3.73	1.66	11.15	1.04	9.45	12.85	31.94	0.48	31.15	32.73	0.13
0.0	7	-1.01	1.66	3.73	1.66	3.73	1.66	11.15	1.04	9.45	12.85	31.94	0.48	31.15	32.73	0.0
0.10	7	0.08	2.12	3.40	2.12	3.40	2.12	12.08	1.09	10.29	13.87	30.57	0.71	29.41	31.73	1.98
0.20	7	1.56	2.49	2.51	2.49	2.51	2.49	13.23	1.16	11.33	15.14	28.46	1.02	26.79	30.12	2.83
0.30	7	2.92	2.35	-0.94	2.35	-0.94	2.35	13.99	1.08	12.22	15.75	25.51	1.48	23.18	28.04	3.24
0.40	7	3.95	0.36	7.53	1.99	0.36	7.53	14.03	1.19	12.08	15.97	22.13	2.05	18.77	25.49	3.63
0.50	7	4.07	1.77	6.98	1.77	1.77	6.98	13.49	1.23	11.48	15.50	18.57	2.29	14.81	22.32	3.61
0.60	7	4.02	1.30	1.89	1.30	1.89	1.30	13.01	1.19	11.07	14.96	16.22	2.27	12.50	19.94	2.40
0.70	7	4.27	0.91	2.77	0.91	2.77	0.91	12.28	1.19	10.34	14.23	13.85	1.76	10.97	16.74	2.49
0.80	7	4.59	0.76	3.34	0.76	3.34	0.76	12.08	1.14	10.21	13.95	13.46	1.25	11.40	15.51	0.55
0.90	7	4.82	0.57	3.88	0.57	3.88	0.57	11.98	1.29	9.86	14.09	13.34	1.48	10.88	15.73	0.29
1.00	7	5.21	4.32	6.11	0.55	4.32	6.11	11.84	1.18	9.90	13.77	12.97	1.19	11.03	14.92	0.53

175

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	(-----X-----)	(-----Y-----)	(-----Z-----)	(-----CO-ORDINATE-----)	(-----5 PCT-----)	(-----95 PCT-----)	(-----MEAN-----)	(-----SE-----)	(-----5 PCT-----)	(-----95 PCT-----)	(-----CO-ORDINATE-----)	(-----5 PCT-----)	(-----95 PCT-----)	(-----INCR-----)	(-----MOVED-----)
0.0	4	MEAN	MEAN	MEAN	SE	5 PCT	95 PCT	10.62	0.63	9.26	11.98	12.23	0.35	11.65	12.81	0.0
0.10	4	15.22	0.26	14.79	0.85	14.79	15.65	10.74	0.35	10.18	11.31	15.97	2.08	12.55	19.38	4.29
0.20	4	13.13	0.85	11.73	0.85	11.73	14.53	10.92	0.66	9.83	12.01	22.31	1.81	19.34	25.28	7.10
0.30	4	7.45	3.08	2.41	3.08	2.41	12.50	10.55	1.07	8.79	12.31	28.01	3.16	22.83	33.19	6.23
0.40	4	5.16	1.66	2.43	1.66	2.43	7.88	10.52	1.09	8.73	12.31	31.46	1.63	28.79	34.14	4.15
0.50	4	2.01	1.66	0.71	1.66	0.71	4.73	10.27	1.16	8.36	12.18	36.09	1.39	33.81	38.37	5.60
0.60	4	-0.95	2.01	-4.24	2.01	-4.24	2.35	9.79	1.09	7.99	11.58	43.04	1.87	36.96	43.11	4.96
0.70	4	-2.09	1.38	-4.36	1.38	-4.36	0.18	9.63	1.06	7.90	11.37	42.02	2.14	38.32	45.53	2.30
0.80	4	-1.54	1.57	-4.11	1.57	-4.11	1.03	9.88	1.12	8.04	11.72	41.50	0.67	40.39	42.60	0.80
0.90	4	-1.26	1.29	-3.38	1.29	-3.38	0.86	10.02	0.87	8.60	11.45	41.90	0.52	41.05	42.75	0.51
1.00	4	-0.84	1.15	-2.73	1.15	-2.73	1.04	10.17	0.59	9.23	11.14	41.74	0.36	41.14	42.34	0.47
0.0	6	-0.84	1.15	-2.73	1.15	-2.73	1.04	10.17	0.59	9.23	11.14	41.74	0.36	41.14	42.34	0.0
0.10	6	-0.28	1.79	-3.23	1.79	-3.23	2.66	9.84	0.72	8.66	11.01	40.34	1.05	38.62	42.07	1.54
0.20	6	1.99	1.30	-0.15	1.30	-0.15	4.13	9.54	0.72	8.36	10.72	36.19	1.64	33.53	38.88	4.74
0.30	6	4.98	1.20	3.02	1.20	3.02	6.95	9.47	0.75	8.04	10.69	31.52	3.36	26.01	37.02	5.55
0.40	6	6.62	2.29	2.86	2.29	2.86	10.38	9.42	0.84	8.04	10.80	29.26	2.50	25.68	32.84	2.79
0.50	6	8.56	1.42	6.24	1.42	6.24	10.88	9.48	0.93	7.96	11.03	26.01	2.27	22.93	29.73	3.78
0.60	6	10.48	0.34	9.91	0.34	9.91	11.04	4.84	1.26	7.78	11.93	21.10	2.88	16.43	25.89	5.23
0.70	6	12.63	0.51	11.76	0.51	11.76	13.44	10.09	1.13	8.23	11.94	16.94	1.52	14.44	19.43	4.73
0.80	6	13.61	1.14	11.74	1.14	11.74	15.48	10.18	1.26	8.11	12.25	14.86	2.38	10.98	18.78	2.29
0.90	6	15.05	1.93	11.78	1.93	11.78	18.32	10.81	1.18	8.87	12.75	11.36	3.11	6.26	16.46	3.85
1.00	6	15.22	0.26	14.79	0.26	14.79	15.65	10.62	0.83	9.26	11.98	12.23	0.35	11.65	12.81	0.91

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +47.3 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +15.0, -13.0, +4.8.

MOTION NUMBER - 22230
BACK ANGLE - 13

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
LEFT FWD	0.89	0.07	0.80 TO 1.00 SECS.
LEFT REV	0.74	0.10	0.60 TO 0.90 SECS.

LANDMARK - NASION (1)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCH		CUM	
0.0	7	5.87	1.01	4.21	7.52	0.12	1.25	-1.93	2.17	29.20	1.13	27.34	31.06	0.0	0.0	0.0	
0.10	7	3.03	1.78	0.10	5.95	0.62	0.62	-0.40	1.65	31.55	1.21	29.67	33.63	3.78	3.78	0.0	
F 0.20	7	1.57	2.03	-1.77	4.90	0.26	0.62	-0.70	1.27	32.10	0.96	30.52	33.68	1.57	5.35	3.78	
U 0.30	7	0.78	1.91	-2.36	3.92	0.07	0.64	-0.99	1.12	32.25	0.99	30.63	33.87	0.82	6.16	5.35	
R 0.40	7	0.14	1.81	-2.83	3.10	-0.04	0.73	-1.24	1.16	32.69	1.03	30.60	33.97	0.66	6.83	6.16	
W 0.50	7	-0.36	1.84	-3.39	2.66	-0.15	0.84	-1.52	1.23	32.38	0.98	30.78	33.99	0.52	7.35	6.83	
A 0.60	7	-0.72	1.86	-3.78	2.33	-0.19	0.78	-1.47	1.23	32.38	1.04	30.67	34.09	0.36	7.71	7.35	
R 0.70	7	-0.82	2.07	-4.22	2.58	-0.15	0.70	-1.47	1.23	32.38	1.12	30.52	34.19	0.18	7.90	7.71	
D 0.80	7	-0.60	2.12	-4.28	2.67	-0.50	0.68	-1.62	0.80	32.35	1.03	30.64	34.01	0.15	8.05	7.90	
U 0.90	7	-0.74	2.04	-4.38	2.61	-0.61	0.51	-1.45	0.23	32.27	0.91	30.78	33.75	0.15	8.20	8.05	
1.00	7	-0.21	1.99	-3.47	3.05	-0.53	0.58	-1.48	0.42	32.38	0.91	30.58	33.58	0.57	8.77	8.20	
0.0	7	-0.21	1.99	-3.47	3.05	-0.53	0.58	-1.48	0.42	32.38	0.91	30.58	33.58	0.0	0.0	0.0	
0.10	7	2.43	2.13	-1.07	5.92	-0.35	0.79	-1.64	0.94	30.94	1.21	28.92	32.89	2.89	2.89	0.0	
0.20	7	3.70	2.00	0.43	6.98	-0.34	0.89	-1.80	1.11	30.30	1.33	28.12	32.48	1.41	4.30	2.89	
R 0.30	7	4.18	1.51	1.69	6.66	-0.40	0.98	-2.01	1.21	30.09	1.29	27.97	32.21	0.52	4.82	4.30	
E 0.40	7	4.59	1.21	2.60	6.58	-0.38	1.20	-2.35	1.59	29.91	1.22	27.91	31.91	0.45	5.27	4.82	
T 0.50	7	4.94	0.93	3.41	6.46	-0.44	1.25	-2.49	1.61	29.71	1.15	27.83	31.59	0.40	5.68	5.27	
U 0.60	7	5.34	0.88	3.89	6.79	-0.32	1.29	-2.44	1.79	29.58	1.07	27.82	31.34	0.44	6.12	5.68	
K 0.70	7	5.54	1.03	3.85	7.22	-0.15	1.41	-2.46	2.15	29.48	1.08	27.71	31.24	0.29	6.40	6.12	
N 0.80	7	5.65	1.08	3.88	7.44	-0.03	1.35	-2.25	2.19	29.35	1.11	27.53	31.17	0.21	6.61	6.40	
U 0.90	7	5.82	1.06	4.37	7.56	0.05	1.28	-2.06	2.15	29.22	1.18	27.28	31.15	0.22	6.83	6.61	
1.00	7	5.87	1.01	4.21	7.52	0.12	1.25	-1.93	2.17	29.20	1.13	27.34	31.06	0.09	6.92	6.83	

LANDMARK - CERVICAL (2)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCH		CUM	
0.0	7	-0.47	1.37	-3.21	1.28	-1.92	1.29	-4.03	0.19	23.48	0.97	21.89	25.08	0.0	0.0	0.0	
U 0.10	7	-1.39	0.84	-2.77	-0.02	-1.47	0.88	-2.92	-0.02	23.49	0.95	21.93	25.05	0.62	0.62	0.0	
F 0.20	7	-1.85	0.73	-3.04	-0.65	-1.74	0.69	-2.87	-0.60	23.52	1.01	21.96	25.27	0.54	1.16	0.62	
D 0.30	7	-1.99	0.67	-3.09	-0.90	-1.96	0.98	-3.57	-0.36	23.52	1.02	21.86	25.19	0.28	1.45	1.16	
R 0.40	7	-2.07	0.79	-3.36	-0.78	-2.14	0.93	-3.67	-0.61	23.50	1.06	21.77	25.23	0.20	1.64	1.45	
W 0.50	7	-2.40	0.79	-3.70	-1.11	-2.05	1.01	-3.70	-0.39	23.53	0.99	21.91	25.15	0.35	1.99	1.64	
A 0.60	7	-2.43	0.78	-3.71	-1.15	-2.15	1.09	-3.94	-0.36	23.53	1.04	21.87	25.27	0.11	2.10	1.99	
R 0.70	7	-2.43	0.71	-3.60	-1.27	-2.35	1.01	-4.01	-0.69	23.54	1.06	21.89	25.38	0.21	2.31	2.10	
D 0.80	7	-2.45	0.80	-3.77	-1.13	-2.44	0.83	-3.81	-1.07	23.57	0.99	22.06	25.29	0.10	2.41	2.31	
U 0.90	7	-2.58	0.83	-3.93	-1.22	-2.57	1.03	-4.25	-0.88	23.64	0.97	22.05	25.24	0.18	2.59	2.41	
1.00	7	-2.26	0.76	-3.50	-1.02	-2.41	0.79	-3.71	-1.11	23.58	1.04	21.87	25.28	0.36	2.95	2.59	
0.0	7	-2.26	0.76	-3.50	-1.02	-2.41	0.79	-3.71	-1.11	23.58	1.04	21.87	25.28	0.0	0.0	0.0	
0.10	7	-2.19	0.72	-3.38	-1.01	-2.34	1.04	-4.04	-0.65	23.59	0.90	22.12	25.06	0.09	0.09	0.0	
0.20	7	-2.34	0.87	-3.47	-0.60	-2.39	1.22	-4.40	-0.39	23.54	0.85	22.24	25.04	0.17	0.27	0.09	
R 0.30	7	-1.90	0.99	-3.53	-0.28	-2.49	1.14	-4.36	-0.62	23.55	0.88	22.22	25.09	0.16	0.43	0.27	
E 0.40	7	-1.65	0.98	-3.10	-0.21	-2.47	1.00	-4.31	-0.83	23.52	0.83	22.26	24.98	0.25	0.69	0.43	
T 0.50	7	-1.43	1.02	-3.10	0.25	-2.47	1.01	-4.14	-0.81	23.58	0.89	22.23	25.14	0.23	0.92	0.69	
U 0.60	7	-1.26	1.11	-3.08	0.55	-2.36	1.17	-4.29	-0.44	23.53	0.97	22.03	25.22	0.21	1.13	0.92	
R 0.70	7	-1.18	1.10	-2.99	0.62	-2.07	1.25	-4.11	-0.33	23.57	0.99	21.95	25.20	0.31	1.44	1.13	
N 0.80	7	-1.04	1.27	-3.13	1.05	-2.02	1.26	-4.08	0.04	23.53	0.91	22.04	25.01	0.16	1.59	1.44	
U 0.90	7	-0.94	1.40	-3.23	1.35	-1.95	1.24	-3.99	0.09	23.45	0.91	21.96	24.94	0.15	1.74	1.59	
1.00	7	-0.97	1.37	-3.21	1.28	-1.92	1.29	-4.03	0.19	23.48	0.97	21.89	25.03	0.06	1.74	1.74	

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE, N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	2.62	1.62	-0.04	5.29	-0.86	1.10	-2.66	0.93	22.54	0.91	21.05	24.03	0.0	0.0	0.0	0.0
0.10	7	2.30	1.47	-0.11	4.72	-0.65	1.20	-2.63	1.32	22.74	0.92	21.23	24.03	0.0	0.0	0.0	0.0
F 0.20	7	1.93	1.65	-0.77	4.63	-1.03	0.79	-2.33	1.32	22.74	0.92	21.23	24.03	0.0	0.0	0.0	0.0
D 0.30	7	1.63	1.76	-1.26	4.52	-1.16	0.80	-2.46	1.15	23.01	0.75	21.58	24.57	0.62	1.06	0.44	0.44
R 0.40	7	1.42	1.57	-1.16	3.99	-1.38	0.87	-2.81	0.05	23.01	0.75	21.58	24.57	0.62	1.06	0.44	0.44
W 0.50	7	1.19	1.41	-1.13	3.51	-1.20	0.92	-2.72	0.31	23.04	0.70	21.82	24.11	0.31	1.70	0.33	1.39
A 0.60	7	4.35	7.98	-8.74	17.43	-4.45	9.63	-20.25	11.34	23.34	0.68	21.92	24.15	0.31	1.70	0.33	1.70
R 0.70	7	6.90	14.48	-16.85	30.65	-7.19	16.22	-33.79	19.42	23.38	1.03	21.70	25.07	4.54	6.55	3.75	10.29
D 0.80	7	0.93	1.59	-1.69	3.54	-1.58	1.03	-3.27	0.11	23.60	1.45	21.22	25.98	3.75	10.29	8.20	18.49
0.90	7	1.00	1.69	-1.77	3.71	-1.37	1.21	-3.36	0.61	23.27	0.86	21.86	24.63	0.22	18.71	0.22	18.71
1.00	7	1.16	1.63	-1.51	3.82	-1.17	1.21	-3.15	0.82	23.25	0.90	21.91	24.72	0.26	18.97	0.26	18.97
0.0	7	1.16	1.63	-1.51	3.82	-1.17	1.21	-3.15	0.82	23.25	0.90	21.91	24.72	0.26	18.97	0.26	18.97
0.10	7	1.51	1.61	-1.12	4.15	-1.26	1.30	-3.38	0.87	23.16	0.78	21.89	24.44	0.38	0.38	0.38	0.38
0.20	7	1.70	1.58	-0.89	4.29	-1.25	1.27	-3.34	0.83	23.14	0.74	21.93	24.35	0.18	0.56	0.18	0.56
R 0.30	7	1.75	1.53	-0.76	4.27	-1.29	1.24	-3.33	0.75	23.13	0.75	21.89	24.35	0.07	0.63	0.07	0.63
E 0.40	7	1.94	1.57	-0.63	4.51	-1.42	0.57	-3.01	0.17	23.04	0.81	21.71	24.38	0.24	0.87	0.24	0.87
T 0.50	7	2.19	1.57	-0.38	4.76	-1.33	1.11	-3.15	0.50	22.94	1.00	21.29	24.59	0.29	1.16	0.29	1.16
U 0.60	7	2.39	1.61	-0.25	5.03	-1.26	1.03	-2.95	0.43	22.92	0.77	21.65	24.19	0.21	1.37	0.21	1.37
R 0.70	7	2.52	1.74	-0.34	5.38	-1.13	1.06	-2.88	0.61	22.84	0.76	21.56	24.05	0.22	1.59	0.22	1.59
N 0.80	7	2.57	1.84	-0.46	5.59	-1.02	1.08	-2.79	0.75	22.63	0.77	21.37	23.89	0.21	1.80	0.21	1.80
0.90	7	2.65	1.77	-0.26	5.55	-0.96	1.10	-2.76	0.83	22.58	0.80	21.27	23.89	0.11	1.91	0.11	1.91
1.00	7	2.62	1.62	-0.04	5.29	-0.86	1.10	-2.66	0.93	22.54	0.91	21.05	24.03	0.11	2.02	0.11	2.02

LANDMARK - LT ACRUMION (5)

TIME T	SAMPLE SIZE, N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	-0.56	0.84	-1.94	0.81	5.29	1.06	4.55	8.03	22.63	0.86	21.23	24.04	0.0	0.0	0.0	0.0
0.10	6	-1.32	0.80	-2.62	0.01	6.22	0.97	4.64	7.80	22.89	0.81	21.52	24.18	0.79	0.79	0.79	0.79
F 0.20	6	-1.95	1.00	-3.59	-0.31	5.67	1.13	3.81	7.52	23.19	1.00	21.55	24.84	0.91	1.69	0.91	1.69
R 0.30	4	-2.41	0.77	-3.68	-1.15	5.03	0.84	3.65	6.40	23.44	1.32	21.27	25.61	0.83	2.52	0.83	2.52
R 0.40	3	-3.21	0.99	-4.83	-1.59	4.73	1.15	2.85	6.62	23.43	1.60	20.82	26.05	0.85	3.37	0.85	3.37
W 0.50	3	-2.94	0.75	-4.18	-1.71	4.11	1.47	1.70	6.53	23.54	1.63	20.87	26.22	0.68	4.05	0.68	4.05
A 0.60	1	-1.39	0.0	-1.39	-1.39	1.63	0.0	1.63	1.39	25.10	0.0	25.10	25.10	3.32	7.38	3.32	7.38
R 0.70	1	-1.45	0.0	-1.45	-1.45	1.39	0.0	1.39	1.39	25.03	0.0	25.03	25.03	0.25	7.63	0.25	7.63
D 0.80	1	-1.48	0.0	-1.48	-1.48	1.46	0.0	1.46	1.46	25.08	0.0	25.08	25.08	0.09	7.72	0.09	7.72
0.90	1	-2.59	0.0	-2.59	-2.59	2.61	0.0	2.61	2.61	25.96	0.0	25.96	25.96	1.82	9.53	1.82	9.53
1.00	1	-6.30	0.0	-6.30	-6.30	5.62	0.0	5.62	5.62	28.32	0.0	28.32	28.32	5.95	15.49	5.95	15.49
0.0	1	-6.30	0.0	-6.30	-6.30	5.62	0.0	5.62	5.62	28.32	0.0	28.32	28.32	0.0	0.0	0.0	0.0
0.10	1	-3.02	0.0	-3.02	-3.02	3.36	0.0	3.36	3.36	26.38	0.0	26.38	26.38	5.01	5.01	5.01	5.01
0.20	1	-1.55	0.0	-1.55	-1.55	1.98	0.0	1.98	1.98	25.37	0.0	25.37	25.37	2.25	7.27	2.25	7.27
R 0.30	1	-1.40	0.0	-1.40	-1.40	2.01	0.0	2.01	2.01	25.09	0.0	25.09	25.09	0.32	7.58	0.32	7.58
E 0.40	2	-1.79	1.00	-3.43	-0.15	4.16	3.09	-0.91	9.22	24.32	1.00	25.68	25.95	0.31	9.89	0.31	9.89
T 0.50	2	-1.22	0.76	-2.46	0.02	4.36	2.85	-0.31	9.03	24.37	1.42	21.75	26.43	0.65	10.55	0.65	10.55
U 0.60	3	-1.11	0.83	-2.47	0.25	4.82	1.73	1.99	7.65	23.79	1.24	21.76	25.82	0.55	11.10	0.55	11.10
R 0.70	5	-1.12	0.97	-2.71	0.46	5.97	1.51	3.50	8.45	23.52	0.99	22.05	24.99	1.18	12.28	1.18	12.28
N 0.80	5	-0.97	1.01	-2.62	0.69	6.33	1.40	4.03	8.62	23.44	0.67	22.23	24.44	0.43	12.71	0.43	12.71
0.90	5	-2.76	1.00	-2.40	0.87	6.39	1.21	4.42	8.37	23.14	0.55	22.24	24.04	0.29	13.01	0.29	13.01
1.00	6	-0.56	0.84	-1.94	0.81	6.29	1.06	4.55	8.03	22.63	0.86	21.23	24.04	0.55	13.56	0.55	13.56

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE	-----X-----	-----Y-----	-----Z-----	-----	DISTANCE
T	SIZE/N	MEAN	SE	5 PCT	95 PCT	INCR
0.0	5	17.77	0.53	18.65	16.90	0.0
0.0	5	16.61	0.68	15.49	17.73	0.0
0.10	6	12.14	1.91	9.79	15.28	4.61
0.20	6	6.47	3.46	3.00	10.32	9.30
0.30	6	3.42	1.44	1.06	5.78	9.30
0.40	6	3.42	1.44	1.06	5.78	9.30
0.50	6	0.64	1.55	-1.90	3.19	3.97
0.60	6	-2.70	2.98	-7.59	2.19	3.91
0.70	6	-2.33	1.14	-4.19	-0.47	3.91
0.80	6	-1.93	0.98	-3.53	-0.32	0.94
0.90	5	-1.58	0.85	-2.98	-0.19	1.34
1.00	4	-0.83	0.36	-1.42	-0.24	1.08
0.0	4	-0.83	0.36	-1.42	-0.24	0.63
0.10	4	0.18	0.47	-0.60	0.95	0.0
0.20	5	1.35	1.10	-0.45	3.16	3.44
0.30	5	3.16	2.10	-0.28	6.60	3.62
0.40	5	6.65	2.92	1.86	11.43	2.63
0.50	6	9.49	3.82	3.22	15.75	5.56
0.60	6	13.33	4.08	6.64	20.02	5.25
0.70	6	15.75	3.34	10.27	24.24	7.03
0.80	6	16.54	1.49	14.10	18.99	4.42
0.90	5	17.10	0.62	16.08	18.12	1.99
1.00	5	17.77	0.53	18.65	16.90	2.16
0.0	4	-0.83	0.36	-1.42	-0.24	0.63
0.10	4	0.18	0.47	-0.60	0.95	0.0
0.20	5	1.35	1.10	-0.45	3.16	3.44
0.30	5	3.16	2.10	-0.28	6.60	3.62
0.40	5	6.65	2.92	1.86	11.43	2.63
0.50	6	9.49	3.82	3.22	15.75	5.56
0.60	6	13.33	4.08	6.64	20.02	5.25
0.70	6	15.75	3.34	10.27	24.24	7.03
0.80	6	16.54	1.49	14.10	18.99	4.42
0.90	5	17.10	0.62	16.08	18.12	1.99
1.00	5	17.77	0.53	18.65	16.90	2.16

LANDMARK - LT TROCHANTER (19)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----CO-ORDINATE-----				DISTANCE		MOVES CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DECR					
0.0	7	4.22	0.72	3.05	5.40	6.53	0.43	5.82	3.90	0.35	3.33	4.47	0.0	0.0	0.0					
0.10	7	4.38	0.68	3.27	5.49	6.74	0.47	5.96	3.90	0.34	3.34	4.46	0.26	0.0	0.0					
0.20	7	4.42	0.66	3.34	5.51	6.75	0.69	5.96	3.92	0.35	3.34	4.50	0.05	0.31	0.31					
0.30	7	4.49	0.68	3.38	5.60	6.74	0.95	5.18	8.30	3.90	3.29	4.50	0.07	0.38	0.38					
0.40	7	4.34	0.67	3.23	5.44	6.46	0.73	5.27	7.66	3.91	3.29	4.54	0.31	0.73	0.73					
0.50	7	4.29	0.71	3.12	5.46	6.49	0.61	5.49	7.48	3.93	3.43	4.55	0.09	0.79	0.79					
0.60	7	4.36	0.67	3.26	5.46	6.54	0.58	5.59	7.53	0.29	3.58	4.53	0.12	0.90	0.90					
0.70	7	4.39	0.63	3.35	5.43	6.47	0.64	5.41	7.52	0.30	3.51	4.50	0.10	1.00	1.00					
0.80	7	4.33	0.75	3.10	5.56	6.42	0.70	5.26	7.57	0.29	3.48	4.43	0.09	1.09	1.09					
0.90	7	4.28	0.72	3.10	5.47	6.38	0.66	5.30	7.46	0.32	3.49	4.55	0.09	1.18	1.18					
1.00	7	4.39	0.60	3.41	5.38	6.72	0.60	5.73	7.71	0.20	3.54	4.20	0.39	1.57	1.57					
0.0	7	4.39	0.60	3.41	5.38	6.72	0.60	5.73	7.71	0.20	3.54	4.20	0.0	0.0	0.0					
0.10	7	4.41	0.55	3.51	5.31	6.65	0.46	5.89	7.41	0.18	3.61	4.21	0.09	0.09	0.09					
0.20	7	4.42	0.61	3.43	5.41	6.63	0.46	5.87	7.39	0.19	3.60	4.23	0.02	0.11	0.11					
0.30	7	4.37	0.74	3.16	5.57	6.58	0.66	5.49	7.65	0.29	3.45	4.41	0.08	0.19	0.19					
0.40	7	4.30	0.76	3.06	5.55	6.45	0.72	5.28	7.63	0.37	3.33	4.55	0.14	0.32	0.32					
0.50	7	4.27	0.76	3.02	5.51	6.42	0.65	5.36	7.48	0.32	3.36	4.41	0.07	0.39	0.39					
0.60	7	4.38	0.68	3.27	5.50	6.49	0.55	5.63	7.32	0.33	3.34	4.43	0.14	0.53	0.53					
0.70	7	4.38	0.66	3.30	5.47	6.58	0.52	5.73	7.43	0.35	3.31	4.47	0.10	0.63	0.63					
0.80	7	4.34	0.68	3.23	5.45	6.55	0.60	5.56	7.54	0.36	3.34	4.51	0.06	0.69	0.69					
0.90	7	4.35	0.75	3.12	5.58	6.52	0.52	5.67	7.37	0.35	3.32	4.46	0.05	0.74	0.74					
1.00	7	4.22	0.72	3.05	5.40	6.53	0.43	5.82	7.24	0.35	3.33	4.47	0.12	0.84	0.84					

LANDMARK - LT KNEE TOP (21)

TIME	SAMPLE T SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVES
		MEAN SE 5 PCT 95 PCT	MEAN SE 5 PCT 95 PCT	MEAN SE 5 PCT 95 PCT	INCR U.O	U.O
0.0	4	20.32 0.99	18.71 0.99	11.35 1.59	13.96 13.96	0.0
0.10	5	20.57 0.63	19.54 0.63	7.49 1.53	13.98 13.98	0.33
0.20	5	20.27 0.71	19.11 0.71	11.56 1.50	14.01 14.01	0.41
0.30	5	20.20 0.83	18.75 0.83	11.53 1.45	13.99 13.99	0.08
0.40	5	20.25 1.03	18.55 1.03	11.53 1.37	13.79 13.79	0.09
0.50	5	20.40 1.01	18.74 1.01	11.52 1.39	13.80 13.80	0.19
0.60	5	20.39 0.93	18.87 0.93	11.52 1.45	13.80 13.80	0.14
0.70	5	20.37 0.93	18.84 0.93	11.57 1.48	13.99 13.99	0.09
0.80	5	20.41 0.97	18.81 0.97	11.53 1.41	13.84 13.84	0.09
0.90	5	20.29 0.97	18.71 0.97	11.51 1.40	13.81 13.81	0.13
1.00	5	20.46 0.81	19.13 0.81	11.53 1.45	13.81 13.81	0.28
0.0	5	20.46 0.81	19.13 0.81	11.43 1.45	13.81 13.81	0.0
0.10	5	20.45 0.75	19.22 0.75	11.56 1.43	13.89 13.89	0.13
0.20	5	20.48 0.82	19.14 0.82	11.56 1.40	13.86 13.86	0.11
0.30	5	20.41 0.89	18.94 0.89	11.49 1.35	13.70 13.70	0.10
0.40	5	20.40 1.00	18.77 1.00	11.50 1.35	13.71 13.71	0.02
0.50	5	20.36 1.08	18.60 1.08	11.52 1.32	13.69 13.69	0.07
0.60	5	20.41 0.86	19.00 0.86	11.51 1.41	13.82 13.82	0.14
0.70	5	20.33 0.79	19.04 0.79	11.52 1.56	14.07 14.07	0.10
0.80	5	20.30 0.91	18.80 0.91	11.46 1.55	14.00 14.00	0.06
0.90	5	20.35 1.01	18.69 1.01	11.53 1.76	14.41 14.41	0.20
1.00	4	20.32 0.99	18.94 0.99	11.35 1.59	13.96 13.96	0.18

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE, N	(-X - CO-ORDINATE-)			(-Y - CO-ORDINATE-)			(-Z - CO-ORDINATE-)			DISTANCE		
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCH	MOVES	
0.0	6	0.58	0.81	-0.74	6.93	1.14	5.06	8.80	0.81	19.69	22.36	0.0	
0.0	6	-0.37	0.76	-1.61	6.91	0.88	5.48	8.35	0.73	20.14	22.54	0.0	
0.20	7	1.37	0.82	-2.35	0.32	1.37	4.88	9.37	21.52	1.13	19.76	0.99	
0.30	7	1.02	0.67	-2.13	0.08	1.48	4.74	9.59	21.97	1.11	20.37	0.74	
0.40	7	0.85	0.31	-1.36	0.34	1.24	4.82	8.87	23.03	1.25	20.98	1.73	
0.50	7	-1.22	0.70	-2.37	-0.07	6.66	4.53	8.79	23.99	1.07	22.23	3.21	
0.60	7	1.62	0.87	-3.05	-0.20	6.26	4.12	8.61	24.44	0.89	22.97	4.26	
0.70	7	1.91	0.72	-3.10	-0.73	6.09	3.69	7.49	24.93	0.87	23.51	4.94	
0.80	7	-2.02	0.76	-3.27	-0.77	5.86	3.74	7.98	25.08	0.86	23.66	5.57	
0.90	7	-2.18	0.69	-3.31	-1.05	5.84	4.07	7.61	25.21	1.03	23.52	5.87	
1.00	7	-1.98	0.69	-3.11	-0.84	5.63	3.68	7.59	25.05	1.06	23.32	6.07	
0.0	7	-1.98	0.69	-3.11	-0.84	5.63	3.68	7.59	25.05	1.06	23.32	6.39	
0.10	7	-1.73	1.00	-3.37	-0.09	6.05	3.85	7.56	25.05	1.06	23.32	0.0	
0.20	7	-1.35	0.89	-2.82	0.11	6.37	3.49	8.65	24.55	0.72	23.76	0.50	
0.30	7	-1.15	0.66	-2.24	-0.07	6.57	4.42	8.35	23.85	0.66	23.48	0.63	
0.40	7	-1.01	0.63	-2.04	0.01	6.61	4.36	8.85	22.94	0.77	22.59	0.70	
0.50	7	-0.90	0.78	-2.18	0.37	6.72	4.61	8.84	22.37	0.92	21.42	0.92	
0.60	7	-0.56	0.90	-2.03	0.91	6.79	4.74	8.63	22.68	1.05	20.64	2.81	
0.70	7	-0.16	0.73	-1.35	1.03	6.79	4.90	8.68	21.17	0.99	19.94	3.40	
0.80	7	0.04	0.68	-1.09	1.16	6.87	5.07	8.67	21.12	0.98	19.51	4.17	
0.90	6	0.36	0.78	-0.92	1.63	6.70	5.06	8.34	19.84	0.98	19.51	4.82	
1.00	6	0.58	0.81	-0.74	1.90	6.93	5.06	8.30	21.93	0.81	19.69	5.04	
0.0	6	0.58	0.81	-0.74	1.90	6.93	5.06	8.30	21.93	0.81	19.69	5.70	

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	(-X - CO-ORDINATE- - - - -)					(-Y - CO-ORDINATE- - - - -)					(-Z - CO-ORDINATE- - - - -)					DISTANCE		MOVED												
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	CUM	CUM										
0.0	6	4.81	1.00	3.17	6.45	11.30	0.66	10.23	12.38	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	0.0	0.0
0.10	5	4.57	0.64	3.52	5.63	12.17	0.99	10.54	13.80	14.29	1.02	12.62	15.95	14.29	1.02	12.62	15.95	14.29	1.02	12.62	15.95	14.29	1.02	12.62	15.95	14.29	1.02	12.62	15.95	1.44	1.44
0.20	5	4.22	0.61	3.22	5.22	13.44	1.16	11.54	15.34	16.15	0.72	14.96	17.33	16.15	0.72	14.96	17.33	16.15	0.72	14.96	17.33	16.15	0.72	14.96	17.33	16.15	0.72	14.96	17.33	2.28	2.28
0.30	6	4.09	0.84	2.71	5.47	13.91	0.96	12.34	15.49	19.51	2.30	15.84	23.38	19.51	2.30	15.84	23.38	19.51	2.30	15.84	23.38	19.51	2.30	15.84	23.38	19.51	2.30	15.84	23.38	3.50	3.50
0.40	6	3.37	1.27	1.29	5.45	14.33	0.98	12.72	15.95	24.24	3.77	18.03	30.41	24.24	3.77	18.03	30.41	24.24	3.77	18.03	30.41	24.24	3.77	18.03	30.41	24.24	3.77	18.03	30.41	4.68	4.68
0.50	6	2.20	1.41	-0.11	4.51	14.19	0.95	12.64	15.75	26.49	0.84	25.11	27.88	26.49	0.84	25.11	27.88	26.49	0.84	25.11	27.88	26.49	0.84	25.11	27.88	26.49	0.84	25.11	27.88	2.56	2.56
0.60	6	0.73	1.43	-1.62	3.07	13.43	0.82	12.08	14.79	28.92	1.10	27.01	30.62	28.92	1.10	27.01	30.62	28.92	1.10	27.01	30.62	28.92	1.10	27.01	30.62	28.92	1.10	27.01	30.62	2.85	2.85
0.70	6	-0.41	1.27	-2.49	1.67	12.58	0.88	11.15	14.02	30.26	0.97	28.67	31.85	30.26	0.97	28.67	31.85	30.26	0.97	28.67	31.85	30.26	0.97	28.67	31.85	30.26	0.97	28.67	31.85	2.02	2.02
0.80	6	-0.97	1.16	-2.87	0.93	11.97	0.99	10.34	13.59	31.24	0.82	29.87	32.56	31.24	0.82	29.87	32.56	31.24	0.82	29.87	32.56	31.24	0.82	29.87	32.56	31.24	0.82	29.87	32.56	1.26	1.26
0.90	6	-1.15	1.12	-2.99	0.68	11.43	0.97	9.83	13.02	31.77	0.49	30.96	32.57	31.77	0.49	30.96	32.57	31.77	0.49	30.96	32.57	31.77	0.49	30.96	32.57	31.77	0.49	30.96	32.57	0.80	0.80
1.00	6	-0.70	1.25	-2.76	1.35	11.36	0.99	9.73	12.99	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	0.69	0.69
0.0	6	-0.70	1.25	-2.76	1.35	11.36	0.99	9.73	12.99	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	32.28	0.60	31.29	33.27	0.0	0.0
0.10	6	0.84	1.47	-1.57	3.25	12.41	1.04	10.71	14.10	30.38	0.60	29.40	31.36	30.38	0.60	29.40	31.36	30.38	0.60	29.40	31.36	30.38	0.60	29.40	31.36	30.38	0.60	29.40	31.36	2.66	2.66
0.20	6	2.64	1.67	-0.10	5.38	13.30	1.02	11.62	14.98	27.54	1.23	25.53	29.55	27.54	1.23	25.53	29.55	27.54	1.23	25.53	29.55	27.54	1.23	25.53	29.55	27.54	1.23	25.53	29.55	3.48	3.48
0.30	6	4.15	1.94	0.97	7.33	13.74	1.33	11.55	15.93	23.41	3.50	17.68	29.15	23.41	3.50	17.68	29.15	23.41	3.50	17.68	29.15	23.41	3.50	17.68	29.15	23.41	3.50	17.68	29.15	4.41	4.41
0.40	6	4.43	1.30	2.31	6.56	13.45	1.56	10.89	16.00	19.95	6.44	9.40	30.51	19.95	6.44	9.40	30.51	19.95	6.44	9.40	30.51	19.95	6.44	9.40	30.51	19.95	6.44	9.40	30.51	3.48	3.48
0.50	6	4.40	0.97	2.80	5.99	13.19	1.45	10.81	15.56	16.70	3.21	13.44	23.96	16.70	3.21	13.44	23.96	16.70	3.21	13.44	23.96	16.70	3.21	13.44	23.96	16.70	3.21	13.44	23.96	1.28	1.28
0.60	6	4.44	1.03	2.75	6.12	12.64	1.29	10.52	14.76	16.38	2.84	11.72	21.04	16.38	2.84	11.72	21.04	16.38	2.84	11.72	21.04	16.38	2.84	11.72	21.04	16.38	2.84	11.72	21.04	2.38	2.38
0.70	6	4.06	0.97	3.07	6.26	12.26	1.00	10.61	13.91	14.92	2.40	10.99	18.85	14.92	2.40	10.99	18.85	14.92	2.40	10.99	18.85	14.92	2.40	10.99	18.85	14.92	2.40	10.99	18.85	1.52	1.52
0.80	6	4.89	0.85	3.49	6.28	11.94	0.79	10.64	13.24	13.91	1.87	10.84	16.98	13.91	1.87	10.84	16.98	13.91	1.87	10.84	16.98	13.91	1.87	10.84	16.98	13.91	1.87	10.84	16.98	1.08	1.08
0.90	5	4.99	1.08	3.22	6.77	11.48	0.68	10.37	12.63	13.30	1.77	10.40	16.19	13.30	1.77	10.40	16.19	13.30	1.77	10.40	16.19	13.30	1.77	10.40	16.19	13.30	1.77	10.40	16.19	0.77	0.77
1.00	6	4.81	1.00	3.17	6.45	11.30	0.66	10.23	12.38	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	13.17	1.64	10.47	15.86	0.29	0.29

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	(-X - CO-ORDINATE- - - - -)					(-Y - CO-ORDINATE- - - - -)					(-Z - CO-ORDINATE- - - - -)					DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	INCR	INCR	CUM	CUM
0.0	4	14.74	0.54	13.86	15.62	10.31	0.94	8.77	11.86	13.21	0.55	12.30	14.11	13.21	0.55	12.30	14.11	0.0	0.0	0.0
0.10	5	13.98	0.46	13.24	14.73	11.22	0.83	9.86	12.58	15.50	1.20	13.63	17.58	15.50	1.20	13.63	17.58	2.67	2.67	2.67
0.20	5	10.56	1.32	8.40	12.73	11.24	0.78	9.96	12.52	21.91	0.85	20.51	23.31	21.91	0.85	20.51	23.31	7.17	7.17	9.84
0.30	6	6.78	2.94	1.96	11.61	11.24	0.99	9.61	12.87	28.33	3.08	23.29	33.38	28.33	3.08	23.29	33.38	7.45	7.45	17.30
0.40	6	4.94	1.24	2.92	6.97	11.18	0.86	9.77	12.60	31.90	0.72	30.72	33.08	31.90	0.72	30.72	33.08	4.01	4.01	21.31
0.50	6	2.14	0.84	0.77	3.52	10.86	0.73	9.67	12.06	35.94	1.17	33.62	37.47	35.94	1.17	33.62	37.47	4.61	4.61	25.92
0.60	5	-1.58	2.69	-6.00	2.84	10.08	0.95	8.52	11.63	40.51	5.17	32.13	49.09	40.51	5.17	32.13	49.09	6.34	6.34	32.25
0.70	5	-1.00	1.34	-3.20	1.20	10.24	0.73	9.05	11.43	39.35	1.09	37.76	41.34	39.35	1.09	37.76	41.34	1.22	1.22	33.47
0.80	5	-1.38	1.29	-3.49	0.74	10.14	0.78	8.85	11.42	40.70	0.59	39.73	41.66	40.70	0.59	39.73	41.66	1.21	1.21	34.68
0.90	4	-1.34	1.27	-3.41	0.74	10.07	0.63	9.04	11.09	41.50	0.43	40.79	42.22	41.50	0.43	40.79	42.22	0.81	0.81	35.49
1.00	4	-0.75	0.96	-2.32	0.83	10.29	0.52	9.45	11.14	41.59	0.36	41.00	42.18	41.59	0.36	41.00	42.18	0.64	0.64	36.13
0.0	4	-0.75	0.96	-2.32	0.83	10.29	0.52	9.45	11.14	41.59	0.36	41.00	42.18	41.59	0.36	41.00	42.18	0.0	0.0	0.0
0.10	4	1.02	1.78	-1.90	3.93	10.14	0.26	9.72	10.56	38.53	2.45	34.62	42.65	38.53	2.45	34.62	42.65	3.44	3.44	3.44
0.20	6	2.79	1.79	-0.14	5.72	9.72	0.70	8.56	10.88	35.53	3.58	29.66	41.40	35.53	3.58	29.66	41.40	7.04	7.04	7.04
0.30	7	4.04	1.73	1.20	6.88	9.57	0.90	8.10	11.04	33.00	3.24	27.69	38.31	33.00	3.24	27.69	38.31	2.83	2.83	9.87
0.40	5	4.89	1.92	1.74	8.03	9.48	0.94	7.95	11.01	31.88	2.04	27.84	34.52	31.88	2.04	27.84	34.52	2.01	2.01	11.68
0.50	5	7.42	1.69	4.65	10.19	9.23	0.86	7.82	10.64	27.09	2.18	23.52	30.66	27.09	2.18	23.52	30.66	4.82	4.82	16.70
0.60	5	10.32	1.59	7.72	12.93	9.49	0.67	8.39	10.60	22.45	3.23	17.16	27.74	22.45	3.23	17.16	27.74	5.48	5.48	22.17
0.70	5	12.80	2.68	8.40	17.19	9.84	1.14	7.97	11.71	17.96	4.73	10.21	25.72	17.96	4.73	10.21	25.72	4.73	4.73	27.31
0.80	4	13.25	0.63	12.21	14.28	9.87	0.88	8.42	11.31	16.83	1.73	14.00	19.66	16.83	1.73	14.00	19.66	1.22	1.22	28.53
0.90	4	14.14	0.66	13.06	15.21	10.20	1.08	8.44	11.97	14.74	1.11	42.91	16.54	14.74	1.11	42.91	16.54	2.31	2.31	30.84
1.00	4	14.74	0.54	13.86	15.62	10.31	0.94	8.77	11.86	13.21	0.55	12.30	14.11	13.21	0.55	12.30	14.11	1.63	1.63	32.49

MOVEMENT: RIGHT HAND MOVES FROM STICK CONTROLLER AT +20.0, 0.0, +12.4 TO PANEL CONTROLLER AT +24.7, +10.0, +23.0 AND RETURNS. THIS MOVEMENT IS PRECEDED BY LEFT HAND MOVING FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO STICK CONTROLLER AND IS FOLLOWED BY LEFT HAND RETURNING BACK TO STICK CONTROLLER.

MOTION NUMBER - 11140
 BACK ANGLE - 13

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
RGHT FWD	0.80	0.16	0.50 TO 1.00 SECS.
RGHT REV	0.89	0.11	0.70 TO 1.00 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	
0.0	7	7.18	1.14	5.31	9.04	0.0
0.10	7	6.22	0.95	4.65	7.78	0.0
0.20	7	6.14	1.18	4.19	8.08	1.20
0.30	7	6.05	1.19	4.09	8.01	1.85
0.40	7	5.84	1.27	3.76	7.91	2.45
0.50	7	5.66	1.29	3.54	7.78	2.93
0.60	7	5.58	1.42	3.26	7.50	3.42
0.70	7	5.68	1.32	3.51	7.85	3.76
0.80	7	5.59	1.51	3.11	8.07	3.84
0.90	7	5.52	1.76	2.64	8.40	4.09
1.00	7	5.61	1.77	2.71	8.50	4.26
						4.47
0.0	7	5.61	1.77	2.71	8.50	0.0
0.10	7	5.97	1.56	3.41	8.53	0.87
0.20	7	6.37	1.03	4.69	8.05	1.43
0.30	7	6.62	0.93	5.09	8.15	1.89
0.40	7	6.69	1.01	5.03	8.34	2.22
0.50	7	6.69	0.98	5.08	8.30	2.49
0.60	7	6.69	1.00	5.04	8.33	2.61
0.70	7	6.90	0.95	5.34	8.46	2.89
0.80	7	7.00	1.03	5.32	8.68	3.29
0.90	7	7.17	1.13	5.32	9.02	3.71
1.00	7	7.18	1.14	5.31	9.04	3.99
						4.09

LANDMARK - CERVICAL

(2)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	
0.0	7	-0.81	1.07	-2.57	0.95	0.0
0.10	7	-1.28	0.61	-2.29	-0.27	0.0
0.20	7	-0.98	0.77	-2.25	0.28	0.62
0.30	7	-0.94	0.79	-2.24	0.35	0.97
0.40	7	-1.12	0.78	-2.39	0.15	1.27
0.50	7	-1.03	0.69	-2.17	0.11	1.46
0.60	7	-0.93	0.83	-2.29	0.42	1.69
0.70	7	-0.48	0.75	-1.71	0.75	1.84
0.80	7	-0.47	1.05	-2.19	1.26	2.40
0.90	7	-0.55	1.04	-2.26	1.16	2.50
1.00	7	-0.33	0.95	-1.88	1.23	2.60
						2.93
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	1.54
0.70	7	-0.56	1.08	-2.33	1.20	1.81
0.80	7	-0.66	1.12	-2.49	1.18	2.23
0.90	7	-0.66	1.16	-2.57	1.24	2.33
1.00	7	-0.81	1.07	-2.57	0.95	2.61
0.0	7	-0.33	0.95	-1.88	1.23	0.0
0.10	7	-0.83	1.12	-2.67	1.01	0.54
0.20	7	-0.74	1.00	-2.39	0.90	0.70
0.30	7	-0.70	1.04	-2.36	0.96	0.81
0.40	7	-0.63	1.08	-2.40	1.13	1.07
0.50	7	-0.74	1.06	-2.47	1.00	1.37
0.60	7	-0.69	1.02	-2.36	0.99	

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	3.77	1.19	1.81	5.73	-0.24	1.11	-2.06	1.58	22.35	1.18	20.41	24.29	0.0	0.0	
0.10	7	3.47	1.12	1.63	5.30	0.06	0.99	-1.58	1.69	22.25	1.12	20.42	24.08	0.43	0.43	
0.20	7	3.57	1.23	1.54	5.59	0.20	0.94	-1.35	1.75	22.25	1.15	20.36	24.14	0.18	0.61	
0.30	7	3.56	1.20	1.59	5.53	0.30	0.90	-1.17	1.77	22.37	1.02	20.69	24.05	0.16	0.77	
0.40	7	3.36	1.25	1.31	5.41	0.48	0.86	-0.92	1.88	22.40	1.01	20.74	24.06	0.27	1.04	
0.50	7	3.36	1.32	1.19	5.53	0.66	0.95	-0.89	2.22	22.43	1.04	20.73	24.13	0.19	1.23	
0.60	7	3.45	1.25	1.41	5.50	0.72	0.89	-0.73	2.18	22.55	1.18	20.61	24.49	0.17	1.39	
0.70	7	3.50	1.33	1.32	5.68	1.07	0.80	-0.25	2.39	22.84	1.05	21.13	24.56	0.46	1.85	
0.80	7	3.55	1.37	1.31	5.79	1.40	0.97	-0.19	2.98	22.87	1.32	20.70	25.03	0.33	2.18	
0.90	7	3.79	1.14	1.92	5.66	1.63	1.12	-0.21	3.47	23.15	1.29	21.04	25.27	0.44	2.63	
1.00	7	3.90	1.11	2.08	5.72	1.79	1.22	-0.20	3.79	23.11	1.25	21.05	25.16	0.20	2.82	
0.0	7	3.90	1.11	2.08	5.72	1.79	1.22	-0.20	3.79	23.11	1.25	21.05	25.16	0.0	0.0	
0.10	7	3.89	0.86	2.47	5.31	1.47	1.03	-0.22	3.16	23.13	1.18	21.19	25.07	0.32	0.32	
0.20	7	3.95	0.96	2.37	5.53	1.53	0.90	0.06	3.03	23.05	1.13	21.11	24.99	0.11	0.44	
0.30	7	3.93	1.02	2.26	5.60	1.26	0.91	-0.24	2.79	22.85	1.18	20.92	24.78	0.34	0.78	
0.40	7	3.93	1.07	2.16	5.69	1.04	0.99	-0.59	2.65	22.75	1.09	20.96	24.54	0.25	1.02	
0.50	7	3.78	1.12	1.95	5.61	0.90	1.11	-0.91	2.72	22.76	0.88	21.32	24.21	0.20	1.22	
0.60	7	3.85	0.97	2.25	5.44	0.77	1.26	-1.30	2.84	22.70	0.98	21.09	24.31	0.16	1.38	
0.70	7	3.85	1.11	2.04	5.68	0.44	1.14	-1.43	2.31	22.80	1.04	20.95	24.37	0.34	1.72	
0.80	7	3.74	1.09	1.95	5.53	0.04	0.99	-1.58	1.65	22.54	1.09	20.76	24.33	0.44	2.15	
0.90	7	3.85	1.11	2.02	5.67	-0.05	0.88	-1.49	1.38	22.41	1.19	20.46	24.37	0.19	2.34	
1.00	7	3.77	1.19	1.81	5.73	-0.24	1.11	-2.06	1.58	22.35	1.18	20.41	24.29	0.22	2.56	

186

LANDMARK - RT ACROMION (4)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	1.55	1.00	-0.08	3.19	-7.90	0.97	-9.49	-6.31	22.40	1.38	20.13	24.66	0.0	0.0	
0.10	7	0.86	0.96	-0.92	2.24	-7.60	1.02	-9.27	-5.93	22.54	1.61	19.89	25.18	0.95	0.95	
0.20	7	0.86	0.97	-0.72	2.45	-7.47	0.99	-9.09	-5.85	22.50	1.70	19.88	25.44	0.27	1.23	
0.30	7	1.04	0.90	-0.44	2.51	-7.22	0.87	-8.65	-5.78	22.90	1.73	20.05	25.74	0.38	1.61	
0.40	7	1.08	0.91	-0.42	2.58	-7.09	0.84	-8.48	-5.71	23.20	1.70	20.42	25.98	0.33	1.94	
0.50	7	1.39	1.02	-0.29	3.06	-6.78	0.84	-8.16	-5.39	23.55	1.65	20.85	26.25	0.56	2.51	
0.60	7	1.87	1.07	0.12	3.63	-6.34	0.84	-7.71	-4.97	23.97	1.52	21.48	26.46	0.78	3.28	
0.70	7	2.35	1.03	0.65	4.04	-5.93	0.73	-7.13	-4.73	24.38	1.30	22.25	26.51	0.74	4.03	
0.80	7	2.81	0.93	1.29	4.33	-5.64	0.66	-6.71	-4.55	24.72	1.16	22.82	26.62	0.65	4.68	
0.90	5	4.45	2.75	-0.05	8.97	-3.74	3.72	-9.84	2.35	24.71	0.82	23.37	26.06	2.51	7.19	
1.00	5	3.15	0.74	1.95	4.36	-4.92	0.92	-6.42	-3.42	24.56	0.87	23.22	26.09	1.76	8.95	
0.0	5	3.15	0.74	1.95	4.36	-4.92	0.92	-6.42	-3.42	24.56	0.87	23.22	26.09	0.0	0.0	
0.10	6	2.63	0.58	1.68	3.57	-5.11	1.28	-7.20	-3.02	24.35	0.90	23.48	26.43	0.63	0.63	
0.20	7	2.48	0.66	1.40	3.57	-5.51	1.31	-7.66	-3.36	24.50	0.86	23.25	26.06	0.22	1.15	
0.30	7	2.19	0.72	1.01	3.38	-5.99	1.31	-8.15	-3.83	24.25	0.84	22.87	25.62	0.69	1.85	
0.40	7	1.90	0.71	0.74	3.07	-6.40	1.17	-8.31	-4.49	23.89	0.85	22.50	25.29	0.61	2.46	
0.50	7	1.68	0.89	0.22	3.15	-6.72	1.09	-8.50	-4.94	23.55	0.97	21.95	25.14	0.52	2.98	
0.60	7	1.84	0.90	0.16	3.11	-7.15	1.18	-9.09	-5.22	23.25	1.02	21.55	24.90	0.54	3.52	
0.70	7	1.72	0.95	0.16	3.27	-7.41	0.98	-9.02	-5.80	22.95	1.14	21.08	24.82	0.39	3.91	
0.80	7	1.69	0.95	0.13	3.25	-7.69	0.93	-9.22	-6.16	22.71	1.29	20.59	24.83	0.37	4.28	
0.90	7	1.64	0.92	0.12	3.15	-7.81	0.92	-9.32	-6.30	22.53	1.34	20.33	24.73	0.22	4.50	
1.00	7	1.55	1.00	-0.08	3.19	-7.90	0.97	-9.49	-6.31	22.40	1.38	20.13	24.66	0.18	4.68	

MVMT NO. 11140/13

LANDMARK - RT GRIP CENTER (16)														
TIME	SAMPLE	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR
0.0	6	18.76	0.61	17.76	19.76	-2.04	0.29	-2.52	-1.57	12.48	0.36	11.89	13.07	0.0
0.10	6	18.09	1.00	16.46	19.73	-2.35	1.21	-4.34	-0.37	13.52	3.38	8.07	19.17	0.0
F 0.20	7	17.96	1.28	15.86	20.05	-2.49	1.83	-5.48	0.51	14.54	4.08	7.85	21.23	1.36
O 0.30	7	17.98	1.63	15.30	20.65	-2.35	2.61	-6.63	1.93	16.02	4.30	8.97	23.07	0.94
R 0.40	7	18.13	1.96	14.92	21.35	-1.79	3.48	-7.51	3.92	18.38	4.29	11.34	25.41	1.48
W 0.50	7	18.60	2.10	15.15	22.04	0.25	3.63	-5.70	6.20	21.36	3.12	16.23	26.48	2.42
A 0.60	7	19.35	1.96	16.14	22.56	3.41	3.05	-1.60	8.41	23.77	1.84	20.75	26.78	6.21
U 0.70	6	20.07	1.65	17.36	22.79	5.96	1.75	3.08	8.83	25.02	1.42	22.58	27.36	3.65
D 0.80	5	21.13	1.60	18.50	23.76	8.04	0.95	6.49	9.59	25.04	1.13	23.36	27.05	4.04
O 0.90	5	22.45	0.88	21.01	23.89	9.42	0.65	8.35	10.50	24.72	0.96	23.15	26.29	2.93
1.00	4	23.31	0.48	22.52	24.11	9.68	0.81	8.36	11.01	23.81	0.68	22.70	24.92	1.98
0.0	4	23.31	0.48	22.52	24.11	9.68	0.81	8.36	11.01	23.81	0.68	22.70	24.92	1.29
0.10	4	21.52	0.89	20.06	22.97	7.01	1.10	5.21	8.81	24.47	1.52	21.98	26.96	0.0
0.20	5	20.50	1.76	17.61	23.39	3.60	1.81	0.64	6.57	23.42	1.05	21.70	25.14	3.28
R 0.30	7	20.44	2.13	16.95	23.94	1.27	2.49	-2.80	5.35	21.36	1.86	18.31	22.41	3.71
E 0.40	7	19.92	2.19	16.33	23.50	-1.81	0.91	-3.30	-0.31	18.25	2.63	13.93	22.57	3.11
T 0.50	7	19.65	1.65	16.95	22.35	-2.07	0.89	-3.54	-0.61	16.05	3.58	10.19	21.92	10.10
U 0.60	7	19.30	1.15	17.42	21.18	-2.62	0.89	-4.08	-1.17	14.24	2.34	10.41	18.08	4.41
R 0.70	7	18.99	0.79	17.69	20.29	-2.35	0.85	-3.74	-0.95	13.04	0.89	11.58	14.50	14.51
N 0.80	7	18.81	0.72	17.63	19.99	-2.20	0.50	-3.02	-1.38	12.31	0.57	11.37	13.25	1.93
O 0.90	6	18.82	0.77	17.55	20.09	-2.08	0.32	-2.60	-1.56	12.54	0.34	12.03	13.06	1.27
1.00	6	18.76	0.61	17.76	19.76	-2.04	0.29	-2.52	-1.57	12.48	0.36	11.89	13.07	0.77

LANDMARK - RT TROCHANTER (18)														
TIME	SAMPLE	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR
0.0	7	3.74	0.57	2.81	4.68	-7.62	0.71	-8.79	-6.45	3.72	0.50	2.90	4.53	0.0
0.10	7	3.77	0.59	2.81	4.73	-7.49	0.83	-8.85	-6.13	3.79	0.58	2.85	4.74	0.0
F 0.20	7	3.84	0.64	2.79	4.90	-7.60	0.71	-8.76	-6.44	3.77	0.56	2.85	4.68	0.16
O 0.30	7	3.84	0.55	2.94	4.74	-7.40	0.86	-8.80	-5.99	3.82	0.59	2.85	4.78	0.14
R 0.40	7	3.61	0.47	2.83	4.38	-7.41	0.81	-8.73	-6.09	3.81	0.64	2.76	4.85	0.29
W 0.50	7	3.55	0.47	2.79	4.31	-7.68	0.74	-8.69	-6.26	3.84	0.59	2.84	4.78	0.21
A 0.60	7	3.69	0.49	2.88	4.50	-7.45	0.67	-8.54	-6.35	3.82	0.57	2.89	4.76	0.23
U 0.70	7	3.75	0.52	2.91	4.60	-7.52	0.71	-8.67	-6.36	3.83	0.52	2.97	4.69	0.09
D 0.80	7	3.75	0.54	2.85	4.64	-7.58	0.66	-8.66	-6.51	3.78	0.64	2.73	4.83	0.14
O 0.90	7	3.79	0.56	2.87	4.71	-7.52	0.83	-8.88	-6.16	3.78	0.62	2.77	4.80	0.08
1.00	7	3.90	0.50	3.08	4.73	-7.54	0.73	-8.74	-6.34	3.59	0.54	2.80	4.59	1.21
0.0	7	3.90	0.50	3.08	4.73	-7.54	0.73	-8.74	-6.34	3.59	0.54	2.80	4.59	0.0
0.10	7	3.90	0.56	2.98	4.82	-7.50	0.98	-9.10	-5.89	3.69	0.54	2.97	4.73	0.0
0.20	7	4.00	0.59	3.04	4.97	-7.52	1.01	-9.18	-5.87	3.65	0.54	2.97	4.73	0.16
R 0.30	7	3.82	0.65	2.76	4.89	-7.65	0.92	-9.15	-5.87	3.82	0.52	2.98	4.67	0.11
E 0.40	7	3.73	0.43	3.03	4.44	-7.69	0.77	-8.99	-6.14	3.79	0.57	2.85	4.73	0.27
U 0.50	7	3.69	0.48	2.90	4.47	-7.69	0.79	-8.98	-6.40	3.81	0.54	2.92	4.70	0.49
O 0.60	7	3.65	0.56	2.72	4.57	-7.65	0.88	-9.10	-6.20	3.74	0.54	2.85	4.63	0.61
R 0.70	7	3.74	0.48	2.95	4.54	-7.71	0.79	-9.00	-6.20	3.73	0.57	2.79	4.67	0.09
N 0.80	7	3.76	0.53	2.89	4.62	-7.74	0.73	-8.93	-6.41	3.74	0.61	2.75	4.73	0.76
O 0.90	7	3.73	0.50	2.91	4.56	-7.70	0.75	-8.92	-6.54	3.75	0.61	2.75	4.73	0.11
1.00	7	3.74	0.57	2.81	4.68	-7.62	0.71	-8.79	-6.45	3.74	0.58	2.76	4.66	0.91

LANDMARK - RT KNEE TOP (20)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUY
0.0	6	19.25	1.05	17.53	20.97	-6.41	0.81	-7.74	-5.03	11.44	1.07	9.66	13.16	13.02	0.0	0.0	0.0
0.10	7	18.98	1.25	16.93	21.02	-6.29	0.72	-7.47	-5.13	11.54	0.92	9.99	13.02	13.04	0.31	0.31	0.31
0.20	7	19.28	1.08	17.51	21.05	-6.65	1.17	-8.58	-4.73	11.49	0.94	9.94	13.04	13.04	0.48	0.48	0.48
0.30	7	19.36	1.14	17.50	21.23	-6.55	1.25	-8.61	-4.52	11.49	1.02	9.82	13.06	13.06	0.13	0.13	0.13
0.40	7	19.23	1.12	17.39	21.07	-6.56	1.25	-8.61	-4.52	11.49	0.98	9.94	13.06	13.06	0.11	0.11	0.11
0.50	7	19.15	1.09	17.37	20.93	-6.63	1.20	-8.59	-4.67	11.46	0.91	9.97	12.96	12.96	0.05	0.05	0.05
0.60	7	19.18	1.05	17.45	20.93	-6.63	1.22	-8.68	-4.68	11.46	0.90	9.99	12.94	12.94	0.04	0.04	0.04
0.70	7	19.19	1.05	17.47	20.91	-6.69	1.23	-8.70	-4.68	11.43	0.97	9.84	13.02	13.02	0.09	0.09	0.09
0.80	7	19.23	1.06	17.48	20.97	-6.77	1.21	-8.75	-4.79	11.41	1.09	9.53	13.19	13.19	0.10	0.10	0.10
0.90	7	19.31	1.09	17.52	21.10	-6.72	1.24	-8.76	-4.69	11.42	1.07	9.68	13.17	13.17	0.17	0.17	0.17
1.00	7	19.30	1.06	17.57	21.04	-6.57	1.35	-8.79	-4.35	11.34	0.95	9.79	12.90	12.90	0.0	0.0	0.0
0.0	7	19.30	1.06	17.57	21.04	-6.57	1.35	-8.79	-4.35	11.34	0.95	9.79	12.90	12.90	0.0	0.0	0.0
0.10	7	19.35	1.02	17.67	21.03	-6.58	1.26	-8.64	-4.51	11.50	1.07	9.74	13.26	13.26	0.16	0.16	0.16
0.20	7	19.48	0.99	17.87	21.15	-6.52	1.25	-8.57	-4.47	11.51	1.04	9.83	13.21	13.21	0.15	0.15	0.15
0.30	7	19.39	1.07	17.64	21.15	-6.60	1.14	-8.47	-4.74	11.49	1.05	9.77	13.21	13.21	0.12	0.12	0.12
0.40	7	19.25	1.07	17.51	21.00	-6.84	1.12	-8.68	-5.03	11.51	1.06	9.77	13.24	13.24	0.17	0.17	0.17
0.50	7	19.18	1.06	17.44	20.93	-6.82	1.18	-8.77	-4.88	11.53	1.07	9.77	13.28	13.28	0.07	0.07	0.07
0.60	7	19.18	0.99	17.55	20.80	-6.83	1.21	-8.80	-4.85	11.53	1.04	9.80	13.20	13.20	0.03	0.03	0.03
0.70	7	19.20	1.05	17.43	20.92	-6.81	1.18	-8.74	-4.88	11.48	1.05	9.75	13.21	13.21	0.03	0.03	0.03
0.80	7	19.22	1.03	17.52	20.91	-6.85	1.16	-8.75	-4.96	11.47	1.05	9.75	13.19	13.19	0.05	0.05	0.05
0.90	6	19.29	1.13	17.43	21.14	-6.37	0.90	-7.84	-4.93	11.40	1.11	9.58	13.22	13.22	0.50	0.50	0.50
1.00	6	19.25	1.05	17.53	20.97	-6.41	0.81	-7.74	-5.08	11.41	1.07	9.66	13.16	13.16	0.06	0.06	0.06

LANDMARK - RT SHOULDER CENTER (22)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUY
0.0	6	2.19	1.13	0.33	4.04	-7.13	0.50	-7.95	-6.30	20.40	1.29	18.30	22.51	22.51	0.0	0.0	0.0
0.10	7	1.94	1.01	0.29	3.59	-7.35	0.65	-8.75	-5.95	20.17	1.37	17.92	22.84	22.84	0.41	0.41	0.41
0.20	7	2.06	1.33	-0.11	4.23	-7.19	0.79	-8.49	-5.89	20.31	1.55	17.77	23.25	23.25	0.51	0.51	0.51
0.30	7	2.42	1.30	0.29	4.56	-6.90	0.72	-8.07	-5.72	20.51	1.67	17.77	23.62	23.62	0.43	0.43	0.43
0.40	7	2.70	1.32	0.53	4.86	-6.86	0.80	-8.18	-5.55	20.84	1.70	18.05	24.20	24.20	0.63	0.63	0.63
0.50	7	3.07	1.53	0.56	5.58	-6.67	1.02	-8.34	-5.00	21.30	1.76	18.41	24.52	24.52	1.01	1.01	1.01
0.60	7	3.75	1.57	1.17	6.32	-6.26	1.07	-8.01	-4.50	21.92	1.58	19.32	24.51	24.51	0.89	0.89	0.89
0.70	7	4.35	1.33	2.16	6.34	-5.88	0.89	-7.35	-4.42	22.46	1.25	20.41	24.52	24.52	0.63	0.63	0.63
0.80	7	4.71	1.40	2.41	7.01	-5.66	0.94	-7.21	-4.12	22.92	0.97	21.33	24.52	24.52	0.36	0.36	0.36
0.90	7	4.79	1.53	2.28	7.31	-5.42	0.92	-6.92	-3.91	23.17	0.72	21.99	24.58	24.58	0.38	0.38	0.38
1.00	7	5.07	1.65	2.35	7.78	-5.16	1.04	-6.86	-3.46	23.23	0.76	21.99	24.58	24.58	0.35	0.35	0.35
0.0	7	5.07	1.65	2.35	7.78	-5.16	1.04	-6.86	-3.46	23.23	0.76	21.99	24.58	24.58	0.35	0.35	0.35
0.10	7	4.63	1.63	1.95	7.31	-5.17	1.03	-6.85	-3.48	23.13	0.62	22.11	24.15	24.15	0.45	0.45	0.45
0.20	7	4.19	1.73	1.36	7.02	-5.36	1.09	-7.16	-3.57	22.57	0.74	21.45	23.89	23.89	0.67	0.67	0.67
0.30	7	3.48	1.44	1.12	5.63	-5.87	0.86	-7.27	-4.46	22.13	0.74	20.91	23.55	23.55	1.02	1.02	1.02
0.40	7	2.92	1.08	1.15	4.68	-6.40	0.69	-7.54	-5.27	21.57	0.89	20.21	23.13	23.13	0.90	0.90	0.90
0.50	7	2.86	0.85	1.46	4.25	-6.67	0.69	-7.79	-5.54	21.44	0.84	20.03	22.78	22.78	0.38	0.38	0.38
0.60	7	2.79	0.85	1.61	3.98	-6.82	0.73	-8.02	-5.61	21.06	1.09	19.27	22.85	22.85	0.38	0.38	0.38
0.70	7	2.61	0.73	1.31	3.90	-6.82	0.81	-8.15	-5.43	20.79	1.09	19.00	22.58	22.58	0.33	0.33	0.33
0.80	7	2.62	1.02	0.95	4.29	-7.02	0.79	-8.32	-5.73	20.51	1.17	18.69	22.53	22.53	0.27	0.27	0.27
0.90	6	2.41	1.10	0.62	4.21	-6.89	0.50	-7.71	-6.07	20.54	1.28	18.43	22.65	22.65	0.25	0.25	0.25
1.00	6	2.19	1.13	0.33	4.04	-7.13	0.50	-7.95	-6.30	20.40	1.29	18.30	22.51	22.51	0.35	0.35	0.35

LANDMARK - RT ELBOW CENTER (24)

TIME T	SAMPLE SIZE, N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	7.26	0.97	5.63	8.85	-6.66	0.80	-7.97	-5.34	10.58	1.58	7.98	13.18	0.0	0.0	0.0
0.10	7	6.92	1.80	3.96	9.88	-7.41	1.04	-9.12	-5.70	11.09	2.45	7.07	15.11	0.97	0.97	0.97
0.20	7	7.00	2.52	2.86	11.14	-7.31	1.30	-9.64	-5.38	11.38	2.99	6.48	16.28	0.32	1.29	1.29
0.30	7	7.22	2.64	2.88	11.55	-7.28	1.56	-9.84	-4.72	11.94	3.48	6.24	17.64	0.64	1.93	1.93
0.40	7	8.08	2.70	3.66	12.50	-7.02	1.63	-9.70	-4.34	12.95	3.95	6.47	19.42	1.35	3.29	3.29
0.50	7	10.15	2.43	6.16	14.14	-6.13	1.96	-9.34	-2.93	14.82	3.94	8.36	21.27	2.93	6.21	6.21
0.60	7	12.14	1.35	9.93	14.35	-5.02	1.89	-8.13	-0.39	17.03	3.13	11.90	22.16	3.18	9.39	9.39
0.70	7	13.80	0.90	12.32	15.27	-3.04	2.09	-6.46	0.39	19.52	2.35	15.67	23.37	3.59	12.98	12.98
0.80	7	14.27	0.65	13.21	15.33	-1.81	1.02	-3.49	-0.14	20.90	1.84	18.71	23.09	1.90	14.88	14.88
0.90	7	14.37	0.70	13.22	15.52	-0.82	0.74	-2.03	0.38	21.48	0.95	19.93	23.03	1.15	16.04	16.04
1.00	7	14.46	0.66	13.38	15.54	-0.04	0.60	-1.03	0.95	21.62	0.88	20.17	23.07	0.80	16.84	16.84
0.0	7	14.46	0.66	13.38	15.54	-0.04	0.60	-1.03	0.95	21.62	0.88	20.17	23.07	0.0	0.0	0.0
0.10	7	14.11	0.71	12.94	15.27	-2.20	1.38	-4.46	0.06	20.55	1.36	18.31	22.78	2.44	2.44	2.44
0.20	7	13.22	1.09	11.43	15.01	-4.03	1.62	-6.68	-1.38	18.31	2.15	14.79	21.83	3.03	5.47	5.47
0.30	7	11.47	2.35	7.62	15.31	-5.61	1.38	-7.86	-3.35	15.86	2.58	11.63	20.09	3.40	8.87	8.87
0.40	7	9.51	2.39	5.59	13.42	-6.79	0.77	-8.05	-5.53	13.84	2.21	10.21	17.47	3.05	11.92	11.92
0.50	7	8.10	1.66	5.38	10.82	-7.44	0.98	-9.05	-8.83	12.23	1.56	9.67	14.79	2.24	14.15	14.15
0.60	7	7.82	1.01	6.16	9.48	-7.31	0.73	-8.50	-8.12	11.70	1.71	8.90	14.50	0.61	14.77	14.77
0.70	7	7.42	0.75	6.19	8.65	-7.08	0.77	-8.33	-8.78	11.10	1.60	8.47	13.72	0.76	15.53	15.53
0.80	7	7.28	0.86	5.88	8.69	-6.92	0.70	-8.07	-5.78	10.76	1.63	8.08	13.44	0.39	15.92	15.92
0.90	7	7.35	0.85	5.95	8.74	-6.69	0.78	-7.98	-5.41	10.51	1.61	7.97	13.25	0.29	16.21	16.21
1.00	7	7.26	0.97	5.68	8.85	-6.66	0.80	-7.97	-5.34	10.58	1.58	7.98	13.18	0.09	16.30	16.30

LANDMARK - RT WRIST CENTER (26)

TIME T	SAMPLE SIZE, N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	6	15.74	0.48	14.96	16.53	-2.73	0.77	-4.00	-1.46	11.86	0.55	10.97	12.76	0.0	0.0	0.0
0.10	7	15.21	1.19	13.26	17.16	-2.99	1.06	-4.73	-1.26	12.39	2.94	8.06	17.72	1.19	1.19	1.19
0.20	7	15.07	1.56	12.50	17.63	-3.19	1.54	-5.71	-0.67	13.50	3.69	7.62	19.71	0.81	2.00	2.00
0.30	7	15.19	1.86	12.14	18.24	-2.98	2.19	-6.57	0.62	15.01	4.02	8.42	21.60	1.37	3.37	3.37
0.40	7	15.45	2.13	11.86	19.05	-2.41	2.94	-7.24	2.41	16.99	4.08	10.30	23.69	2.08	5.45	5.45
0.50	7	16.35	2.43	12.36	20.34	-0.75	3.14	-5.91	4.41	19.36	3.35	13.86	24.86	3.03	8.48	8.48
0.60	6	17.03	1.75	14.15	19.90	1.77	3.05	-3.23	6.77	21.59	2.56	17.50	25.88	3.50	11.97	11.97
0.70	5	18.01	1.55	15.46	20.55	3.79	1.88	0.70	6.88	22.92	1.62	20.27	25.58	2.56	14.53	14.53
0.80	5	19.25	1.26	17.18	21.31	5.76	0.82	4.41	7.11	23.51	1.39	21.33	25.90	2.43	16.96	16.96
0.90	5	20.10	1.24	18.36	22.13	6.73	0.27	6.28	7.18	23.51	1.20	21.64	25.57	1.29	18.25	18.25
1.00	5	20.76	0.90	19.28	22.24	7.21	0.51	6.37	8.04	23.08	1.00	21.43	24.72	0.98	19.23	19.23
0.0	5	20.76	0.90	19.28	22.24	7.21	0.51	6.37	8.04	23.08	1.00	21.43	24.72	0.0	0.0	0.0
0.10	5	19.74	1.03	18.05	21.43	5.24	1.36	3.01	7.47	23.24	1.52	20.75	25.74	2.22	2.22	2.22
0.20	5	18.34	1.56	15.77	20.90	2.38	2.24	-1.29	6.04	21.50	1.60	19.05	24.28	3.56	5.78	5.78
0.30	6	17.66	2.06	14.28	21.04	-0.03	2.58	-4.26	4.20	19.88	2.50	15.78	23.98	3.07	8.85	8.85
0.40	6	17.04	2.23	13.43	20.65	-2.21	1.90	-5.32	0.91	17.40	3.25	12.12	22.79	3.32	12.17	12.17
0.50	7	16.74	1.60	14.11	19.37	-3.40	0.81	-4.72	-2.07	15.13	2.88	10.44	19.86	2.63	14.80	14.80
0.60	7	16.36	1.07	14.61	18.11	-3.76	0.95	-5.31	-2.21	13.54	1.89	10.44	16.65	1.67	16.47	16.47
0.70	6	16.15	0.77	14.89	17.40	-3.63	1.20	-5.60	-1.67	12.67	0.92	11.17	14.18	0.91	17.38	17.38
0.80	6	15.97	0.70	14.81	17.12	-3.19	1.08	-4.97	-1.41	12.11	0.62	11.10	13.12	0.74	18.11	18.11
0.90	6	15.94	0.53	15.07	16.81	-2.81	0.52	-4.32	-1.29	11.90	0.55	10.98	12.83	0.44	18.55	18.55
1.00	6	15.74	0.46	14.96	16.53	-2.73	0.77	-4.00	-1.46	11.86	0.55	10.97	12.76	0.22	18.77	18.77

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT
+15.0, -13.0, +4.8 TO PANEL CONTROLLER AT
+24.7, +10.0, +23.0 AND RETURNS. LEFT HAND
REMAINS AT THROTTLE CONTROLLER AT +20.0,
+10.0, +12.4.

MOTION NUMBER - 12140
 BACK ANGLE - 13

SUB--MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.71	0.04	0.70 TO 0.80 SECS.
RIGHT REV	0.93	0.15	0.70 TO 1.10 SECS.

LANDMARK - NASION

(1)

TIME	SAMPLE	SIZE	Y	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	DISTANCE	MOVED
T																		INCR	CUM
0.0		7	7.48	1.51	5.00	9.97	-3.43	1.00	-5.08	-1.79	28.38	1.38	26.11	30.65	0.0	0.0	0.0	0.0	0.0
0.10		7	6.66	1.36	4.43	8.89	0.21	1.17	-1.71	2.13	29.37	1.27	27.78	31.96	4.02	4.02	4.02	4.02	4.02
0.20	F	7	6.56	1.43	4.21	8.91	1.64	1.62	-1.02	4.31	30.47	1.25	28.41	32.52	1.56	5.58	5.58	5.58	5.58
0.30	O	7	6.72	1.54	4.19	9.24	1.80	1.86	-1.26	4.85	30.54	1.25	28.49	32.59	0.23	5.81	5.81	5.81	5.81
0.40	R	7	6.33	1.37	4.09	8.57	2.18	1.78	-0.73	5.10	30.54	1.18	28.60	32.43	0.55	6.35	6.35	6.35	6.35
0.50	W	7	6.38	1.22	4.08	8.08	2.66	1.83	-0.34	5.65	30.57	1.17	28.66	32.49	0.54	6.89	6.89	6.89	6.89
0.60	A	7	5.98	1.23	3.96	8.00	2.99	1.73	0.15	5.84	30.57	1.19	28.71	32.63	0.36	7.26	7.26	7.26	7.26
0.70	R	7	5.92	1.27	3.83	8.01	3.27	1.79	0.34	6.23	30.56	1.22	28.66	32.63	0.28	7.54	7.54	7.54	7.54
0.80	D	7	6.05	1.29	3.93	8.16	3.44	1.90	0.33	6.55	30.53	1.30	28.51	32.76	0.22	7.76	7.76	7.76	7.76
0.90	U	7	6.18	1.28	4.09	8.28	3.52	1.91	0.39	6.65	30.58	1.32	28.40	32.75	0.17	7.92	7.92	7.92	7.92
1.00		7	6.20	1.15	4.31	8.09	3.48	1.78	0.57	6.40	30.47	1.29	28.36	32.58	0.11	8.03	8.03	8.03	8.03
0.0		7	6.20	1.15	4.31	8.09	3.48	1.78	0.57	6.40	30.47	1.29	28.36	32.58	0.0	0.0	0.0	0.0	0.0
0.10		7	6.04	1.57	3.47	8.61	1.83	2.10	-1.61	5.27	29.38	1.28	27.79	31.97	1.76	1.76	1.76	1.76	1.76
0.20		7	6.48	2.27	2.75	10.21	0.70	1.91	-2.44	3.83	29.39	1.35	27.18	31.61	1.31	3.07	3.07	3.07	3.07
0.30	R	7	6.58	2.35	2.72	10.44	0.03	1.97	-3.20	3.27	29.19	1.39	26.91	31.48	0.70	3.77	3.77	3.77	3.77
0.40	E	7	6.80	2.05	3.44	10.16	-0.60	1.46	-2.99	1.79	29.31	1.43	26.67	31.35	0.69	4.47	4.47	4.47	4.47
0.50	T	7	7.14	1.81	4.17	10.11	-1.44	1.02	-3.12	0.23	28.79	1.38	26.52	31.06	0.94	5.40	5.40	5.40	5.40
0.60	U	7	7.26	1.72	4.43	10.09	-2.07	0.94	-3.61	-0.53	28.58	1.42	26.35	31.01	0.65	6.05	6.05	6.05	6.05
0.70	R	7	7.27	1.76	4.38	10.16	-2.52	0.96	-4.10	-0.95	28.53	1.45	26.25	31.00	0.46	6.51	6.51	6.51	6.51
0.80	N	7	7.39	1.69	4.62	10.16	-3.06	0.87	-4.48	-1.63	28.59	1.41	26.28	30.90	0.55	7.05	7.05	7.05	7.05
0.90		7	7.48	1.48	5.05	9.91	-3.38	0.90	-4.86	-1.89	28.42	1.40	26.12	30.71	0.38	7.43	7.43	7.43	7.43
1.00		7	7.48	1.51	5.00	9.97	-3.43	1.00	-5.08	-1.79	28.38	1.38	26.11	30.65	0.07	7.50	7.50	7.50	7.50

LANDMARK - CERVICAL

(2)

TIME	SAMPLE	SIZE	Y	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	DISTANCE	MOVED
T																		INCR	CUM
0.0		7	-0.32	1.58	-2.91	2.27	-0.14	0.70	-1.69	1.03	23.76	1.33	21.58	25.94	0.0	0.0	0.0	0.0	0.0
0.10		7	-0.92	1.47	-3.33	1.49	0.37	0.44	-0.34	1.09	23.92	1.20	21.85	25.79	0.79	0.79	0.79	0.79	0.79
0.20	F	7	-1.14	1.54	-3.67	1.38	0.75	0.58	-0.20	1.71	23.92	1.14	22.04	25.79	0.45	1.24	1.24	1.24	1.24
0.30	O	7	-1.11	1.63	-3.78	1.57	0.99	0.63	-0.04	2.02	24.03	1.13	22.17	25.89	0.27	1.51	1.51	1.51	1.51
0.40	R	7	-0.98	1.47	-3.40	1.44	0.93	0.57	-0.66	2.52	24.03	1.09	22.22	25.79	0.15	1.66	1.66	1.66	1.66
0.50	W	7	-0.81	1.47	-3.23	1.60	1.21	0.86	-0.21	2.63	24.07	1.05	22.34	25.80	0.33	2.00	2.00	2.00	2.00
0.60	A	7	-0.70	1.46	-3.09	1.69	1.51	0.70	0.36	2.84	24.15	1.02	22.48	25.82	0.33	2.33	2.33	2.33	2.33
0.70	R	7	-0.57	1.41	-2.88	1.73	1.63	0.74	0.41	2.84	24.33	1.07	22.58	26.08	0.25	2.58	2.58	2.58	2.58
0.80	D	7	-0.42	1.51	-2.89	2.06	1.74	1.02	0.07	3.43	24.43	1.18	22.49	26.37	0.21	2.79	2.79	2.79	2.79
0.90		7	-0.28	1.63	-2.95	2.39	1.80	1.22	-0.20	3.80	24.46	1.22	22.46	26.47	0.16	2.95	2.95	2.95	2.95
1.00		7	-0.27	1.44	-2.63	2.08	1.70	1.04	-0.01	3.40	24.53	1.23	22.51	26.55	0.12	3.08	3.08	3.08	3.08
0.0		7	-0.27	1.44	-2.63	2.08	1.70	1.04	-0.01	3.40	24.53	1.23	22.51	26.55	0.0	0.0	0.0	0.0	0.0
0.10		7	-0.36	1.24	-2.40	1.68	1.95	0.88	0.51	3.39	24.45	1.27	22.37	26.53	0.28	0.28	0.28	0.28	0.28
0.20		7	-0.45	1.33	-2.64	1.74	1.81	0.86	0.40	3.22	24.29	1.27	22.21	26.36	0.23	0.51	0.51	0.51	0.51
0.30	R	7	-0.49	1.36	-2.72	1.74	1.73	0.72	0.56	2.91	24.13	1.20	22.16	26.10	0.18	0.69	0.69	0.69	0.69
0.40	E	7	-0.65	1.48	-3.08	1.77	1.69	0.74	0.47	2.91	24.13	1.17	22.11	25.96	0.19	0.87	0.87	0.87	0.87
0.50	T	7	-0.68	1.30	-2.81	1.66	1.31	0.60	0.32	2.30	24.11	1.11	22.22	25.94	0.39	1.28	1.28	1.28	1.28
0.60	U	7	-0.60	1.41	-2.91	1.70	0.84	0.80	-0.47	2.15	24.07	1.26	22.00	26.14	0.47	1.75	1.75	1.75	1.75
0.70	R	7	-0.61	1.38	-2.88	1.65	0.81	0.95	-1.04	2.06	23.99	1.22	22.00	25.98	0.34	2.09	2.09	2.09	2.09
0.80	N	7	-0.41	1.38	-2.66	1.85	0.09	0.59	-0.88	1.66	23.93	1.33	21.74	26.11	0.47	2.57	2.57	2.57	2.57
0.90		7	-0.34	1.30	-2.47	1.80	-0.05	0.51	-0.69	0.79	23.35	1.37	21.61	26.09	0.17	2.74	2.74	2.74	2.74
1.00		7	-0.32	1.58	-2.91	2.27	-0.14	0.70	-1.29	1.03	23.76	1.33	21.58	25.94	0.14	2.88	2.88	2.88	2.88

TIME T	SAMPLE SIZE/N	LANDMARK - SUPRASTERNALE				(3)				DISTANCE					
		-----X-----		-----Y-----		-----Z-----		-----		-----					
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED
0.0	7	3.38	1.40	1.08	5.67	-0.08	0.89	-1.53	1.37	22.45	1.14	20.59	24.32	0.0	0.0
0.10	7	3.31	1.01	1.36	4.66	0.41	0.69	-0.73	1.55	22.74	1.12	20.90	24.57	0.68	0.68
0.20	7	2.93	1.10	1.11	4.70	0.66	0.92	-0.85	2.18	22.87	1.03	21.09	24.64	0.30	0.98
0.30	7	2.91	1.16	1.03	4.83	0.75	1.02	-0.92	2.42	22.89	1.03	21.21	24.58	0.09	1.07
0.40	7	3.03	0.90	1.55	4.50	0.70	1.31	-1.44	2.86	22.82	0.98	21.22	24.43	0.13	1.20
0.50	7	3.10	0.98	1.48	4.71	0.95	1.27	-1.14	3.03	22.69	0.96	21.31	24.46	0.27	1.47
0.60	7	3.09	1.02	1.43	4.76	1.35	1.26	-0.71	3.41	22.76	0.96	21.38	24.54	0.41	1.88
0.70	7	3.27	0.85	1.88	4.67	1.49	1.14	-0.38	3.35	23.20	1.08	21.43	24.97	0.32	2.20
0.80	7	3.45	1.02	1.77	5.12	1.51	1.27	-0.57	3.60	23.39	1.19	21.44	25.34	0.26	2.47
0.90	7	3.63	1.14	1.76	5.49	1.65	1.42	-0.68	3.99	23.58	1.28	21.47	25.68	0.29	2.76
1.00	7	3.83	0.98	2.22	5.44	1.73	1.19	-0.22	3.67	23.75	1.35	21.53	25.97	0.27	3.03
0.0	7	3.83	0.98	2.22	5.44	1.73	1.19	-0.22	3.67	23.75	1.35	21.53	25.97	0.0	0.0
0.10	7	3.29	1.10	1.48	5.10	1.90	1.15	0.00	3.79	23.32	1.31	21.18	25.46	0.71	0.71
0.20	7	3.14	1.37	0.89	5.38	1.98	1.20	0.01	3.94	23.10	1.31	20.95	25.25	0.28	0.99
0.30	7	3.00	1.61	0.37	5.64	1.76	1.06	0.02	3.51	22.94	1.26	20.87	25.01	0.30	1.29
0.40	7	2.76	1.43	0.40	5.11	1.76	1.03	0.07	3.45	22.85	1.34	20.66	25.04	0.26	1.55
0.50	7	2.79	1.46	0.40	5.18	1.30	0.92	-0.21	2.82	22.90	1.18	20.97	24.83	0.46	2.01
0.60	7	2.94	1.50	0.48	5.40	0.88	0.98	-0.72	2.48	22.78	1.20	20.82	24.74	0.46	2.01
0.70	7	3.12	1.57	0.54	5.70	0.62	1.06	-1.11	2.36	22.68	1.18	20.75	24.60	0.33	2.80
0.80	7	3.18	1.38	0.91	5.45	0.33	1.03	-1.37	2.03	22.55	1.18	20.72	24.58	0.30	3.10
0.90	7	3.34	1.48	0.92	5.76	0.09	0.97	-1.51	1.69	22.57	1.21	20.58	24.56	0.30	3.40
1.00	7	3.38	1.40	1.08	5.67	-0.08	0.89	-1.53	1.37	22.45	1.14	20.59	24.32	0.21	3.61

TIME T	SAMPLE SIZE: N	LANDMARK - RT ACROMION										(4)										DISTANCE			
		X - CO-ORDINATE					Y - CO-ORDINATE					Z - CO-ORDINATE					5 PCT					INCR	MOVED		
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED						
0.0	7	0.97	0.64	-0.07	2.02	-7.63	0.57	-8.88	-6.71	21.39	1.26	19.33	23.45	0.0	0.0										
0.10	7	0.45	0.62	-0.56	1.46	-7.63	0.57	-8.88	-6.71	21.39	1.26	19.33	23.45	0.0	0.0										
0.20	7	0.29	0.87	-1.45	1.72	-7.20	0.72	-8.39	-6.01	22.40	1.05	20.47	23.92	1.21	1.21										
0.30	7	0.34	1.09	-1.45	2.13	-7.00	0.75	-8.24	-5.77	23.06	0.85	21.19	24.22	0.69	1.90										
0.40	7	0.67	1.26	-1.41	2.74	-6.98	1.03	-8.67	-5.30	23.37	0.80	22.05	24.66	0.41	2.31										
0.50	7	1.23	1.04	-0.48	2.94	-6.70	0.88	-8.15	-5.30	23.37	0.80	22.05	24.66	0.44	2.75										
0.60	7	1.87	0.94	0.32	3.42	-6.19	0.87	-7.63	-4.75	24.35	0.87	22.19	25.04	0.68	3.43										
0.70	7	2.53	0.74	1.32	3.75	-5.64	0.85	-7.03	-4.25	24.48	0.78	23.19	25.76	0.97	5.32										
0.80	7	3.03	0.74	1.82	4.23	-5.15	1.02	-6.83	-3.47	24.85	0.75	23.63	26.07	0.79	6.11										
0.90	6	3.09	0.49	2.29	3.89	-5.08	1.12	-6.93	-3.24	24.91	0.88	23.46	26.35	0.11	6.21										
1.00	6	3.44	0.59	2.48	4.40	-4.85	1.06	-6.60	-3.11	24.98	0.82	23.64	26.32	0.43	6.64										
0.0	6	3.44	0.59	2.48	4.40	-4.85	1.06	-6.60	-3.11	24.98	0.82	23.64	26.32	0.0	0.0										
0.10	7	2.77	0.66	1.69	3.85	-4.92	0.74	-6.12	-3.71	24.76	0.76	23.51	26.01	0.70	0.70										
0.20	7	1.92	0.87	0.50	3.35	-5.57	0.82	-6.91	-4.22	24.22	1.01	22.57	25.88	1.20	1.50										
0.30	7	1.24	1.23	-0.78	3.26	-6.12	0.97	-7.72	-4.53	23.74	1.13	21.89	25.59	1.01	2.91										
0.40	7	0.83	1.21	-1.16	2.81	-6.37	0.82	-7.71	-5.02	23.41	1.02	21.74	25.08	0.58	3.43										
0.50	7	0.42	1.23	-1.61	2.44	-6.86	0.68	-7.98	-5.74	23.10	0.99	21.47	24.72	0.51	4.20										
0.60	7	0.07	1.10	-1.72	1.87	-7.05	0.88	-8.49	-5.60	22.63	0.93	21.10	24.15	0.61	4.81										
0.70	7	-0.74	3.13	-5.88	4.41	-6.50	3.14	-11.46	-4.35	21.65	1.71	18.83	24.46	1.38	6.20										
0.80	7	0.11	1.53	-2.41	2.63	-7.55	1.46	-9.95	-5.16	21.50	1.11	19.78	23.41	1.35	7.55										
0.90	7	0.85	0.59	-0.11	1.82	-8.32	0.33	-8.86	-7.79	21.54	1.26	19.44	23.64	1.07	8.62										
1.00	7	0.97	0.64	-0.07	2.02	-8.36	0.32	-8.88	-7.84	21.39	1.26	19.33	23.45	0.20	8.82										

LANDMARK - RT GRIP CENTER (16)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	13.96	0.64	12.92	15.01	-12.96	0.41	-14.25	-12.91	3.88	0.66	2.79	4.97	0.0	0.0	0.0	
0.10	7	13.25	0.87	11.82	14.68	-13.26	1.17	-14.88	-11.05	7.75	1.41	5.44	10.07	3.98	3.98	3.98	
F 0.20	7	13.60	1.10	11.80	15.40	-10.96	1.58	-13.54	-8.37	11.67	1.95	8.47	14.87	4.41	8.40	8.40	
O 0.30	7	13.07	1.33	12.49	16.86	-10.78	1.75	-10.78	-5.02	15.56	1.99	12.30	18.82	5.06	13.46	13.46	
W 0.40	7	15.93	1.91	12.80	19.05	-4.31	1.63	-6.99	-1.63	19.33	1.97	15.80	22.26	5.15	18.61	18.61	
M 0.50	7	17.32	1.87	14.25	20.40	-0.37	1.63	-3.05	2.30	21.59	1.83	18.60	22.26	4.90	23.51	23.51	
A 0.60	7	18.65	1.33	16.48	20.83	3.48	1.43	1.13	5.83	23.50	1.43	21.15	25.85	4.50	28.01	28.01	
R 0.70	7	20.15	0.85	18.76	21.54	6.54	1.10	4.74	8.33	24.55	0.79	23.26	25.84	3.57	31.58	31.58	
D 0.80	5	21.39	0.87	19.97	22.81	8.22	0.67	7.12	9.31	24.75	0.52	23.90	25.60	2.09	33.67	33.67	
0.90	3	21.98	0.72	20.80	23.15	9.47	0.43	8.77	10.18	24.38	0.30	23.89	24.87	1.44	35.11	35.11	
1.00	3	22.68	1.06	20.94	24.41	10.01	0.24	9.61	10.41	24.18	0.25	23.77	24.59	0.91	36.01	36.01	
0.0	3	22.68	1.06	20.94	24.41	10.01	0.24	9.61	10.41	24.18	0.25	23.77	24.59	0.0	0.0	0.0	
0.10	3	21.46	0.90	19.99	22.94	8.59	0.77	7.33	9.84	24.75	0.47	23.97	25.53	1.96	1.96	1.96	
0.20	7	19.54	2.31	15.75	23.33	4.40	0.87	2.97	5.83	24.25	1.10	22.44	26.06	4.64	6.59	6.59	
R 0.30	7	17.84	3.00	12.92	22.76	0.29	1.38	-1.97	2.55	22.60	1.24	20.57	24.63	4.74	11.34	11.34	
E 0.40	7	16.27	3.02	11.32	21.22	-5.03	2.18	-8.61	-1.45	19.35	1.80	16.10	22.00	6.59	17.92	17.92	
T 0.50	7	14.56	3.18	9.35	19.77	-9.90	3.72	-15.99	-3.81	14.66	4.11	7.92	21.39	6.77	24.70	24.70	
U 0.60	7	13.27	3.13	8.14	18.40	-13.34	2.99	-18.24	-8.44	10.34	4.62	2.44	17.58	5.92	30.62	30.62	
R 0.70	7	12.91	1.87	9.84	15.97	-13.99	1.39	-16.27	-11.71	7.97	1.99	4.71	11.23	2.17	32.80	32.80	
N 0.80	7	13.17	1.17	11.24	15.09	-14.35	0.87	-15.77	-12.93	5.52	1.56	3.05	8.18	2.39	35.19	35.19	
0.90	7	13.79	0.96	12.22	15.36	-13.88	0.35	-14.45	-13.31	4.33	1.11	2.51	6.16	1.50	36.69	36.69	
1.00	7	13.96	0.64	12.92	15.01	-13.58	0.41	-14.25	-12.91	3.88	0.66	2.79	4.97	0.57	37.26	37.26	

LANDMARK - RT TROCHANTER (18)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	3.80	0.42	3.11	4.50	-7.45	0.89	-8.90	-5.99	3.98	0.53	3.11	4.84	0.0	0.0	0.0	
0.10	7	3.66	0.33	3.11	4.21	-7.51	0.85	-8.90	-6.13	4.03	0.52	3.17	4.89	0.17	0.17	0.17	
F 0.20	7	3.65	0.45	2.91	4.40	-7.45	0.82	-8.80	-6.11	4.02	0.51	3.18	4.86	0.06	0.23	0.23	
O 0.30	7	3.68	0.51	2.84	4.51	-7.35	0.81	-8.67	-6.03	4.01	0.49	3.20	4.82	0.10	0.33	0.33	
R 0.40	7	3.79	0.38	3.16	4.42	-7.55	0.97	-9.14	-5.96	4.01	0.49	3.20	4.81	0.22	0.56	0.56	
W 0.50	7	3.85	0.53	2.98	4.71	-7.58	0.85	-8.97	-6.19	3.99	0.49	3.18	4.79	0.07	0.63	0.63	
A 0.60	7	3.73	0.57	2.79	4.66	-7.52	0.76	-8.76	-6.27	3.98	0.49	3.18	4.78	0.14	0.76	0.76	
R 0.70	7	3.71	0.67	2.62	4.81	-7.44	0.79	-8.73	-6.15	3.97	0.52	3.12	4.83	0.08	0.84	0.84	
D 0.80	7	3.91	0.70	2.76	5.05	-7.33	0.80	-8.64	-6.03	4.06	0.52	3.21	4.91	0.24	1.08	1.08	
0.90	7	3.98	0.68	2.86	5.10	-7.30	0.85	-8.69	-5.91	4.11	0.52	3.26	4.97	0.10	1.17	1.17	
1.00	7	3.74	0.43	3.04	4.44	-7.45	0.92	-8.97	-5.94	4.14	0.55	3.24	5.04	0.28	1.46	1.46	
0.0	7	3.74	0.43	3.04	4.44	-7.45	0.92	-8.97	-5.94	4.14	0.55	3.24	5.04	0.0	0.0	0.0	
0.10	7	3.60	0.72	2.43	4.78	-7.40	0.81	-8.73	-6.08	3.51	1.53	1.00	6.02	0.64	0.64	0.64	
0.20	7	3.52	0.60	2.54	4.50	-7.38	0.85	-8.77	-5.93	3.57	1.35	1.36	5.78	0.10	0.75	0.75	
R 0.30	7	3.55	0.45	2.81	4.28	-7.48	0.81	-8.80	-6.15	3.48	1.51	1.01	5.96	0.13	0.83	0.83	
E 0.40	7	3.56	0.52	2.70	4.41	-7.48	0.70	-8.63	-6.33	3.73	0.73	2.24	5.23	0.25	1.13	1.13	
T 0.50	7	3.59	0.42	2.89	4.28	-7.58	0.73	-8.78	-6.38	4.05	0.54	3.17	4.93	0.33	1.46	1.46	
U 0.60	7	3.67	0.53	2.80	4.54	-7.55	0.82	-8.90	-6.20	4.01	0.56	3.09	4.94	0.09	1.55	1.55	
R 0.70	7	3.70	0.53	2.84	4.57	-7.49	0.84	-8.86	-6.12	3.98	0.53	3.10	4.85	0.07	1.63	1.63	
N 0.80	7	3.76	0.43	3.06	4.46	-7.58	0.90	-9.05	-6.11	4.30	0.48	3.21	4.78	0.11	1.73	1.73	
0.90	7	3.74	0.59	2.77	4.70	-7.63	0.90	-9.10	-6.16	3.97	0.57	3.03	4.91	0.06	1.79	1.79	
1.00	7	3.80	0.42	3.11	4.50	-7.45	0.89	-8.90	-5.99	3.78	0.53	3.11	4.84	0.19	1.98	1.98	

MMT NO. 12140/13

LANDMARK - RT KNEE TOP (20)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE-----					Y - CO-ORDINATE-----					Z - CO-ORDINATE-----					DISTANCE			MOVED CUM
		MEAN	SE	5 PCT	95 PCT	99 PCT	MEAN	SE	5 PCT	95 PCT	99 PCT	MEAN	SE	5 PCT	95 PCT	99 PCT	INCR	INCR	INCR	
0.0	7	19.28	0.88	17.83	20.73	21.32	-6.21	1.32	-8.37	-4.04	-11.54	0.75	0.84	10.31	12.76	12.97	0.0	0.0	0.0	0.0
0.10	7	19.23	0.95	17.66	20.79	21.36	-6.32	1.38	-8.58	-4.07	11.59	0.84	0.84	10.21	12.97	12.97	0.14	0.14	0.14	0.14
F 0.20	7	19.26	1.08	17.48	21.03	21.36	-6.32	1.38	-8.58	-4.07	11.59	0.84	0.84	10.21	12.97	12.97	0.03	0.03	0.03	0.17
O 0.30	7	19.28	1.19	17.33	21.23	21.36	-6.24	1.33	-8.42	-4.06	11.58	0.81	0.81	10.25	12.90	12.90	0.08	0.08	0.08	0.25
O 0.40	7	19.34	1.09	17.55	21.12	21.36	-6.47	1.52	-8.97	-3.98	11.60	0.91	0.91	10.10	13.09	13.09	0.24	0.24	0.24	0.49
W 0.50	7	19.28	1.15	17.39	21.16	21.36	-6.47	1.41	-8.77	-4.16	11.57	0.93	0.93	10.04	13.09	13.09	0.07	0.07	0.07	0.55
A 0.60	7	19.22	1.32	17.06	21.39	21.36	-6.34	1.29	-8.46	-4.23	11.57	0.92	0.92	10.07	13.08	13.08	0.14	0.14	0.14	0.69
R 0.70	7	19.18	1.36	16.95	21.42	21.36	-6.31	1.39	-8.59	-4.03	11.63	0.90	0.90	10.15	13.10	13.10	0.07	0.07	0.07	0.76
O 0.80	7	19.22	1.32	17.05	21.39	21.36	-6.23	1.40	-8.52	-3.93	11.65	0.84	0.84	10.28	13.03	13.03	0.10	0.10	0.10	0.86
D 0.90	7	19.26	1.24	17.23	21.29	21.36	-6.20	1.38	-8.47	-3.93	11.65	0.80	0.80	10.34	12.96	12.96	0.05	0.05	0.05	0.91
1.00	7	19.18	1.00	17.54	20.82	21.36	-6.35	1.27	-8.44	-4.27	11.60	0.78	0.78	10.32	12.88	12.88	0.18	0.18	0.18	1.09
0.0	7	19.18	1.00	17.54	20.82	21.36	-6.35	1.27	-8.44	-4.27	11.60	0.78	0.78	10.32	12.88	12.88	0.0	0.0	0.0	0.0
0.10	7	19.33	1.22	17.32	21.34	21.36	-6.25	1.27	-8.33	-4.17	11.58	0.79	0.79	10.28	12.88	12.88	0.18	0.18	0.18	0.18
0.20	7	19.16	1.16	17.27	21.07	21.36	-6.32	1.25	-8.37	-4.27	11.57	0.88	0.88	10.13	13.01	13.01	0.17	0.17	0.17	0.35
R 0.30	7	19.17	1.16	17.25	21.06	21.36	-6.30	1.25	-8.34	-4.25	11.58	0.90	0.90	10.10	13.06	13.06	0.03	0.03	0.03	0.38
E 0.40	7	19.12	1.27	17.03	21.21	21.36	-6.12	1.19	-8.08	-4.16	11.57	0.86	0.86	10.16	12.98	12.98	0.18	0.18	0.18	0.56
T 0.50	7	19.14	1.24	17.10	21.17	21.36	-6.17	1.15	-8.07	-4.16	11.54	0.89	0.89	10.09	13.00	13.00	0.06	0.06	0.06	0.62
U 0.60	7	19.18	1.21	17.19	21.17	21.36	-6.16	1.23	-8.18	-4.13	11.57	0.85	0.85	10.19	12.96	12.96	0.06	0.06	0.06	0.68
R 0.70	7	19.24	1.21	17.25	21.22	21.36	-6.25	1.24	-8.28	-4.22	11.64	0.82	0.82	10.23	13.05	13.05	0.13	0.13	0.13	0.81
N 0.80	7	19.24	1.15	17.31	21.09	21.36	-6.30	1.24	-8.34	-4.27	11.65	0.82	0.82	10.31	12.99	12.99	0.07	0.07	0.07	0.88
O 0.90	7	19.38	1.14	17.51	21.24	21.36	-6.32	1.26	-8.39	-4.25	11.63	0.78	0.78	10.36	12.90	12.90	0.18	0.18	0.18	1.06
1.00	7	19.28	0.88	17.83	20.73	21.36	-6.21	1.32	-8.37	-4.04	11.54	0.75	0.75	10.31	12.76	12.76	0.18	0.18	0.18	1.24

LANDMARK - RT SHOULDER CENTER (22)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE-----					Y - CO-ORDINATE-----					Z - CO-ORDINATE-----					DISTANCE			MOVED CUM
		MEAN	SE	5 PCT	95 PCT	99 PCT	MEAN	SE	5 PCT	95 PCT	99 PCT	MEAN	SE	5 PCT	95 PCT	99 PCT	INCR	INCR	INCR	
0.0	7	1.67	0.65	0.61	2.73	2.73	-7.88	0.28	-8.33	-7.43	19.21	0.97	0.97	17.63	20.79	20.79	0.0	0.0	0.0	0.0
0.10	7	1.22	0.68	0.44	2.00	2.00	-7.26	0.59	-8.23	-6.30	19.85	1.06	1.06	18.10	21.59	21.59	0.99	0.99	0.99	0.99
F 0.20	7	1.15	0.65	0.09	2.22	2.22	-6.96	0.79	-8.25	-5.66	20.31	1.17	1.17	18.39	22.24	22.24	0.56	0.56	0.56	1.55
O 0.30	7	1.39	0.85	-0.01	2.79	2.79	-6.85	0.73	-8.06	-5.65	20.58	1.12	1.12	18.84	22.52	22.52	0.45	0.45	0.45	2.00
O 0.40	7	2.04	1.20	0.07	4.01	4.01	-6.83	0.87	-8.26	-5.41	20.98	1.12	1.12	19.15	22.81	22.81	0.71	0.71	0.71	2.72
W 0.50	7	2.71	1.31	0.56	4.87	4.87	-6.63	0.80	-7.95	-5.32	21.48	1.05	1.05	19.75	23.20	23.20	0.86	0.86	0.86	3.58
A 0.60	7	3.22	1.15	1.34	5.10	5.10	-6.35	0.94	-7.88	-4.81	21.96	0.94	0.94	20.43	23.50	23.50	0.76	0.76	0.76	4.34
R 0.70	7	3.80	1.15	1.91	5.70	5.70	-5.75	1.11	-7.58	-3.93	22.49	0.84	0.84	21.11	23.87	23.87	0.99	0.99	0.99	5.32
D 0.80	7	4.47	1.31	2.33	6.62	6.62	-5.04	1.26	-7.11	-2.97	22.95	0.72	0.72	21.78	24.13	24.13	1.08	1.08	1.08	6.40
O 0.90	7	4.85	1.55	2.31	7.39	7.39	-4.83	1.05	-6.55	-3.11	23.07	0.82	0.82	21.73	24.41	24.41	0.45	0.45	0.45	6.85
1.00	7	4.83	1.57	2.25	7.41	7.41	-4.75	1.02	-6.42	-3.09	23.11	0.79	0.79	21.81	24.41	24.41	0.09	0.09	0.09	6.94
0.0	7	4.83	1.57	2.25	7.41	7.41	-4.75	1.02	-6.42	-3.09	23.11	0.79	0.79	21.81	24.41	24.41	0.0	0.0	0.0	0.0
0.10	7	4.14	1.41	1.82	6.45	6.45	-4.83	1.01	-6.56	-3.23	22.81	0.77	0.77	21.55	24.06	24.06	0.77	0.77	0.77	0.77
0.20	7	3.42	1.51	0.94	5.90	5.90	-7.12	0.85	-7.12	-4.35	22.17	0.88	0.88	20.72	23.62	23.62	1.28	1.28	1.28	2.05
R 0.30	7	2.65	1.32	0.48	4.82	4.82	-6.09	0.77	-7.35	-4.84	21.75	0.96	0.96	20.17	23.33	23.33	0.94	0.94	0.94	2.99
E 0.40	7	2.05	1.25	0.01	4.09	4.09	-6.52	0.56	-7.43	-5.60	21.39	0.99	0.99	19.78	23.01	23.01	0.82	0.82	0.82	3.81
T 0.50	7	1.42	1.09	-0.37	3.21	3.21	-7.03	0.52	-7.65	-6.15	21.03	0.85	0.85	19.63	22.43	22.43	0.88	0.88	0.88	4.68
U 0.60	7	1.16	0.92	-0.34	2.67	2.67	-7.47	0.49	-8.28	-6.56	20.56	0.71	0.71	19.24	21.89	21.89	0.71	0.71	0.71	5.39
R 0.70	7	1.06	0.73	-0.13	2.25	2.25	-7.54	0.34	-8.09	-6.98	20.24	0.81	0.81	18.95	21.52	21.52	0.35	0.35	0.35	5.74
O 0.80	7	1.31	0.56	0.40	2.23	2.23	-7.89	0.46	-8.66	-7.13	19.70	0.95	0.95	18.14	21.26	21.26	0.70	0.70	0.70	6.44
N 0.90	7	1.65	0.56	0.73	2.57	2.57	-8.04	0.49	-8.84	-7.23	19.30	0.94	0.94	17.76	20.84	20.84	0.54	0.54	0.54	6.98
1.00	7	1.67	0.65	0.61	2.73	2.73	-7.88	0.28	-8.33	-7.43	19.21	0.97	0.97	17.63	20.79	20.79	0.18	0.18	0.18	7.16

LANDMARK - RT ELBOW CENTER (24)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
																		INCR	CUM
0.0	T	7		2.79	1.09	1.01	4.57	-11.51	-9.56	0.55	-11.51	-8.43	8.72	8.72	1.58	6.12	11.32	0.0	0.0
0.10	F	7		1.73	1.08	0.04	3.50	-11.23	-9.52	1.04	-11.23	-7.81	9.59	1.32	1.32	7.53	11.86	1.51	1.51
0.20	R	7		2.06	1.14	0.19	3.94	-11.20	-9.29	1.17	-11.20	-7.38	10.44	1.32	1.32	8.28	12.61	0.85	2.36
0.30	T	7		3.58	1.43	1.23	5.94	-11.05	-9.18	1.14	-11.05	-7.30	11.17	1.49	1.49	8.72	13.62	1.69	4.05
0.40	R	7		6.53	1.77	3.63	9.44	-10.04	-8.76	0.78	-10.04	-7.48	12.45	1.74	1.74	9.59	15.30	3.24	7.29
0.50	W	7		9.43	1.63	6.75	12.11	-7.38	-7.38	0.09	-7.38	-6.86	14.39	2.04	2.04	11.03	17.74	3.75	11.04
0.60	A	7		11.77	1.21	9.78	13.76	-5.44	-5.44	0.86	-5.44	-4.04	16.60	2.22	2.22	12.97	20.24	3.76	14.80
0.70	R	7		13.39	0.85	12.00	14.79	-3.32	-3.32	0.76	-3.32	-2.07	18.71	1.97	1.97	15.49	21.94	3.41	18.20
0.80	D	7		14.22	0.93	12.68	15.75	-2.91	-2.91	0.70	-2.91	-0.60	19.36	1.33	1.33	17.78	22.14	2.16	20.37
0.90		6		14.85	0.99	13.22	16.47	-0.78	-0.78	0.46	-0.78	-0.02	20.71	1.01	1.01	19.05	22.36	1.38	21.75
1.00		6		14.90	0.56	13.98	15.82	-0.05	-0.05	0.32	-0.05	0.47	21.12	0.88	0.88	19.69	22.56	0.84	22.59
0.0		6		14.90	0.56	13.98	15.82	-0.05	-0.05	0.32	-0.05	0.47	21.12	0.88	0.88	19.69	22.56	0.0	0.0
0.10		6		14.44	0.87	13.01	15.87	-2.61	-2.61	0.46	-2.61	-1.09	20.27	1.08	1.08	18.51	22.04	2.04	2.04
0.20		6		12.60	1.46	10.21	14.99	-4.73	-4.73	1.03	-4.73	-3.09	17.74	1.62	1.62	15.09	20.39	4.25	6.30
0.30	R	7		9.64	3.22	4.35	14.92	-7.44	-7.44	1.90	-7.44	-4.32	14.59	3.12	3.12	9.57	19.81	5.04	11.34
0.40	E	7		6.36	2.76	2.33	11.39	-8.99	-8.99	1.55	-8.99	-6.45	13.16	2.16	2.16	9.61	16.71	3.53	14.86
0.50	T	7		3.39	3.15	-1.77	8.56	-10.43	-10.43	1.74	-10.43	-7.38	11.33	1.85	1.85	8.79	14.86	3.99	18.85
0.60	U	7		1.62	2.68	-2.78	6.01	-10.70	-10.70	1.52	-10.70	-8.21	11.03	1.49	1.49	8.60	13.47	1.96	20.82
0.70	R	7		1.20	1.78	-1.72	4.11	-10.55	-10.55	1.24	-10.55	-8.52	10.21	1.46	1.46	7.81	12.61	0.94	21.75
0.80	N	7		1.79	1.32	-0.39	3.96	-10.54	-10.54	0.93	-10.54	-9.02	9.54	1.70	1.70	6.74	12.34	0.89	22.64
0.90		7		2.49	0.89	1.03	3.95	-10.25	-10.25	0.72	-10.25	-8.07	9.33	1.67	1.67	6.29	11.77	0.92	23.56
1.00		7		2.79	1.09	1.01	4.57	-11.51	-9.96	0.95	-11.51	-8.43	8.72	1.58	1.58	6.12	11.32	0.53	24.08

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
																		INCR	CUM
0.0	T	6		10.66	0.44	9.93	11.38	-12.77	-12.77	0.53	-12.77	-11.91	4.42	0.99	0.99	2.79	6.05	0.0	0.0
0.10	F	6		10.13	0.88	8.69	11.56	-11.88	-11.88	0.92	-11.88	-10.37	7.31	1.90	1.90	4.80	11.02	3.64	3.64
0.20	R	6		11.01	1.37	8.76	13.25	-9.54	-9.54	1.63	-9.54	-6.87	12.09	1.77	1.77	9.19	14.99	4.87	8.51
0.30	O	6		12.58	1.95	9.39	15.78	-6.59	-6.59	2.86	-6.59	-1.91	15.87	2.77	2.77	11.33	20.42	5.05	13.56
0.40	R	6		14.25	2.59	10.01	18.49	-3.27	-3.27	4.03	-3.27	-0.88	19.26	4.56	4.56	11.77	26.75	5.03	18.59
0.50	W	6		15.32	1.69	12.54	18.10	-1.34	-1.34	1.48	-1.34	1.08	19.38	1.43	1.43	17.64	22.32	2.32	20.91
0.60	A	6		16.97	1.23	14.95	18.99	1.74	1.74	1.31	-0.41	3.89	21.82	1.44	1.44	19.47	24.18	3.95	24.86
0.70	R	6		18.37	0.84	16.99	19.74	4.38	4.38	0.94	2.54	5.82	23.06	1.19	1.19	21.11	25.01	3.23	28.09
0.80	D	4		19.72	0.97	18.13	21.31	5.79	5.79	0.68	4.58	6.90	23.59	0.85	0.85	22.19	24.99	2.03	30.12
0.90		2		20.29	1.02	18.62	21.95	6.95	6.95	0.72	5.77	8.13	23.38	0.58	0.58	22.43	24.33	1.30	31.42
1.00		2		20.31	1.47	18.50	23.32	7.40	7.40	0.42	6.72	8.09	23.16	0.43	0.43	22.46	23.87	0.80	32.23
0.0		2		20.91	1.47	18.50	23.32	7.40	7.40	0.42	6.72	8.09	23.16	0.43	0.43	22.46	23.87	0.0	0.0
0.10		3		19.27	1.01	17.61	20.92	6.20	6.20	0.51	5.36	7.04	23.06	0.68	0.68	21.95	24.17	2.04	2.04
0.20		6		17.74	2.22	14.11	21.38	2.05	2.05	0.84	0.66	3.43	21.73	1.16	1.16	19.83	23.64	4.62	6.66
0.30	R	7		13.50	2.93	10.61	20.39	-2.01	-2.01	1.37	-4.26	0.24	19.83	2.01	2.01	16.53	23.13	5.01	11.67
0.40	E	7		13.06	3.78	6.86	19.25	-7.02	-7.02	3.03	-11.99	-2.05	16.23	3.36	3.36	10.72	21.74	6.64	18.31
0.50	T	7		12.09	3.03	7.12	17.06	-9.20	-9.20	2.07	-12.59	-5.81	13.39	2.17	2.17	10.34	17.44	3.34	21.65
0.60	U	7		10.47	2.95	5.63	15.31	-11.95	-11.95	2.14	-15.46	-8.43	10.16	3.25	3.25	4.82	15.49	4.91	26.56
0.70	R	7		9.88	1.88	6.80	12.95	-12.91	-12.91	1.35	-15.11	-10.70	8.02	1.88	1.88	4.94	11.09	2.42	28.98
0.80	N	7		10.30	1.12	8.16	11.84	-13.31	-13.31	0.94	-14.85	-11.78	6.13	1.69	1.69	3.36	8.91	1.93	30.91
0.90		6		10.54	0.45	9.81	11.27	-13.08	-13.08	0.59	-14.05	-12.10	4.96	1.47	1.47	2.55	7.36	1.32	32.22
1.00		6		10.66	0.44	9.93	11.38	-12.77	-12.77	0.53	-12.77	-11.91	4.42	0.99	0.99	2.79	6.05	0.63	32.85

MOVEMENT: LEFT HAND FROM THROTTLE CONTROLLER AT +20.0,
+10.0, +12.4 TO PANEL CONTROLLER AT +24.7,
+10.0, +23.0 AND RETURNS. RIGHT HAND REMAINS
AT STICK CONTROLLER AT +20.0, 0.0, +12.4.

MOTION NUMBER - 21240
 BACK ANGLE - 13

SUB--MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
LEFT FWD	0.50	0.09	0.40 TO 0.60 SECS.
LEFT REV	0.50	0.18	0.20 TO 0.70 SECS.

LANDMARK - NASION (1)														
TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE		MOVED CUM	
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	INCR		
0.0	6	6.49	1.16	4.59	8.40	0.67	-0.46	29.17	1.23	27.16	31.16	0.0	0.0	
0.10	6	6.45	1.22	4.45	8.45	0.66	-0.66	29.26	1.15	27.37	31.16	0.11	0.11	
0.20	6	6.41	1.28	4.32	8.51	0.62	-0.93	29.34	1.12	27.50	31.17	0.09	0.20	
0.30	6	6.33	1.25	4.27	8.38	0.63	-0.90	29.33	1.11	27.51	31.14	0.09	0.29	
0.40	6	6.21	1.23	4.19	8.23	0.69	-0.83	29.33	1.09	27.55	31.11	0.13	0.42	
0.50	6	6.14	1.27	4.05	8.22	0.70	-0.89	29.33	1.14	27.54	31.29	0.11	0.53	
0.60	6	6.13	1.34	3.90	8.30	0.65	-0.90	29.41	1.19	27.52	31.42	0.09	0.62	
0.70	6	6.13	1.40	3.83	8.43	0.67	-0.92	29.51	1.20	27.54	31.47	0.05	0.67	
0.80	6	6.18	1.38	3.92	8.45	0.73	-0.88	29.54	1.22	27.54	31.53	0.08	0.75	
0.90	6	6.13	1.35	3.92	8.33	0.71	-0.93	29.56	1.21	27.58	31.54	0.06	0.82	
1.00	6	6.06	1.34	3.85	8.26	0.66	-0.79	29.59	1.20	27.62	31.57	0.09	0.91	
0.0	6	6.06	1.34	3.85	8.26	0.66	-0.79	29.59	1.20	27.62	31.57	0.0	0.0	
0.10	6	6.26	1.32	4.09	8.42	0.66	-0.62	29.42	1.18	27.49	31.36	0.26	0.26	
0.20	6	6.37	1.30	4.24	8.49	0.62	-0.60	29.31	1.20	27.33	31.28	0.16	0.43	
0.30	6	6.32	1.35	4.10	8.54	0.60	-0.78	29.29	1.24	27.26	31.33	0.06	0.48	
0.40	6	6.28	1.41	3.96	8.59	0.60	-0.81	29.27	1.24	27.24	31.30	0.04	0.53	
0.50	6	6.25	1.33	4.06	8.43	0.56	-0.55	29.19	1.20	27.21	31.16	0.09	0.63	
0.60	6	6.31	1.17	4.39	8.23	0.50	-0.54	29.16	1.16	27.25	31.06	0.10	0.72	
0.70	6	6.36	1.12	4.53	8.20	0.54	-0.63	29.15	1.14	27.27	31.03	0.07	0.79	
0.80	6	6.40	1.09	4.61	8.20	0.63	-0.38	29.13	1.13	27.28	30.99	0.10	0.89	
0.90	6	6.45	1.11	4.63	8.26	0.66	-0.64	29.15	1.17	27.23	31.06	0.06	0.95	
1.00	6	6.49	1.16	4.59	8.40	0.67	-0.46	29.17	1.23	27.16	31.18	0.05	1.00	

LANDMARK - CERVICALE (2)														
TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE		MOVED CUM	
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	INCR		
0.0	6	-1.13	1.46	-3.52	-1.06	0.87	-2.50	23.49	1.00	21.84	25.13	0.0	0.0	
U 0.10	6	-1.18	1.45	-3.56	-0.98	0.77	-2.24	23.44	0.98	21.83	25.05	0.11	0.11	
F 0.20	6	-1.21	1.44	-3.58	-0.91	0.74	-2.11	23.38	0.96	21.81	24.96	0.10	0.21	
O 0.30	6	-1.23	1.44	-3.59	-0.83	0.77	-2.08	23.36	0.97	21.76	24.96	0.08	0.29	
R 0.40	6	-1.26	1.53	-3.76	-0.79	0.80	-2.11	23.37	0.99	21.75	24.98	0.05	0.34	
W 0.50	6	-1.26	1.67	-3.99	-0.83	0.83	-2.18	23.40	1.04	21.70	25.10	0.05	0.39	
A 0.60	6	-1.20	1.63	-3.89	-0.87	0.84	-2.25	23.46	1.07	21.71	25.21	0.09	0.48	
R 0.70	6	-1.15	1.60	-3.77	-0.90	0.84	-2.27	23.47	1.02	21.80	25.13	0.06	0.54	
D 0.80	6	-1.15	1.55	-3.69	-0.90	0.82	-2.24	23.48	0.98	21.87	25.09	0.01	0.56	
O 0.90	6	-1.19	1.57	-3.77	-0.91	0.79	-2.20	23.46	0.99	21.83	25.09	0.04	0.60	
1.00	6	-1.23	1.63	-3.91	-0.92	0.78	-2.20	23.43	1.02	21.76	25.11	0.06	0.65	
0.0	6	-1.23	1.63	-3.91	-0.92	0.78	-2.20	23.43	1.02	21.76	25.11	0.0	0.0	
U 0.10	6	-1.13	1.60	-3.75	-0.96	0.78	-2.23	23.42	0.99	21.79	25.05	0.11	0.11	
O 0.20	6	-1.11	1.56	-3.68	-0.99	0.77	-2.26	23.44	0.99	21.82	25.06	0.04	0.16	
R 0.30	6	-1.23	1.56	-3.78	-1.02	0.81	-2.36	23.52	0.99	21.89	25.15	0.15	0.30	
E 0.40	6	-1.31	1.56	-3.86	-1.07	0.88	-2.51	23.54	1.02	21.87	25.21	0.10	0.40	
T 0.50	6	-1.36	1.49	-3.80	-1.10	0.85	-2.50	23.48	1.04	21.76	25.19	0.09	0.49	
U 0.60	6	-1.33	1.45	-3.77	-1.11	0.82	-2.30	23.42	0.97	21.83	25.01	0.10	0.59	
R 0.70	6	-1.24	1.45	-3.62	-1.15	0.75	-2.20	23.41	0.93	21.88	24.94	0.11	0.70	
N 0.80	6	-1.12	1.41	-3.44	-1.01	0.73	-2.21	23.44	0.98	21.83	25.05	0.13	0.83	
O 0.90	6	-1.10	1.44	-3.46	-1.04	0.80	-2.35	23.47	1.00	21.83	25.11	0.05	0.87	
1.00	6	-1.13	1.46	-3.52	-1.06	0.87	-2.50	23.49	1.00	21.84	25.13	0.05	0.92	

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	MOVED	CUM
0.0	5	3.17	0.82	1.83	4.52	-0.25	0.72	-1.44	3.93	22.14	0.84	20.76	23.52	0.0	0.0	0.0	0.0
0.10	5	3.34	0.95	1.79	4.90	-0.00	1.12	-1.84	1.84	22.13	0.81	20.80	23.46	0.30	0.30	0.30	0.30
F 0.20	6	3.57	1.09	1.79	5.35	0.07	1.18	-1.86	2.01	22.08	0.71	20.91	23.25	0.25	0.25	0.55	0.55
U 0.30	6	3.41	1.06	1.67	5.14	-0.08	0.89	-1.54	1.38	22.07	0.73	20.87	23.27	0.23	0.23	0.78	0.78
R 0.40	6	3.37	1.06	1.63	5.11	-0.12	0.83	-1.47	1.24	22.05	0.78	20.78	23.32	0.06	0.06	0.83	0.83
W 0.50	6	3.36	1.00	1.72	5.00	-0.12	0.83	-1.49	1.24	22.07	0.88	20.62	23.52	0.03	0.03	0.86	0.86
A 0.60	6	3.30	1.07	1.56	5.05	-0.17	0.78	-1.45	1.10	22.19	0.81	20.86	23.53	0.15	0.15	1.01	1.01
R 0.70	6	3.43	1.17	1.41	5.25	-0.19	0.74	-1.40	1.03	22.20	0.72	21.02	23.39	0.03	0.03	1.04	1.04
D 0.80	6	3.41	1.14	1.53	5.28	-0.20	0.74	-1.41	1.02	22.14	0.76	20.90	23.38	0.10	0.10	1.14	1.14
U 0.90	6	3.40	0.96	1.82	4.98	-0.20	0.76	-1.44	1.04	22.20	0.79	20.91	23.50	0.06	0.06	1.20	1.20
1.00	6	3.39	0.82	2.06	4.73	-0.21	0.82	-1.56	1.14	22.29	0.80	20.97	23.61	0.09	0.09	1.29	1.29
0.0	6	3.39	0.82	2.06	4.73	-0.21	0.82	-1.56	1.14	22.29	0.80	20.97	23.61	0.0	0.0	0.0	0.0
0.10	6	3.47	0.86	2.05	4.89	-0.25	0.70	-1.40	0.91	22.24	0.83	20.88	23.59	0.10	0.10	0.10	0.10
0.20	6	3.51	0.93	1.98	5.04	-0.32	0.64	-1.36	0.73	22.07	0.77	20.80	23.33	0.19	0.19	0.29	0.29
R 0.30	6	3.44	1.03	1.75	5.14	-0.36	0.63	-1.39	0.67	21.66	1.19	19.71	23.62	0.41	0.41	0.70	0.70
E 0.40	6	3.27	1.04	1.55	4.98	-0.32	0.64	-1.37	0.72	21.84	1.01	20.15	23.46	0.23	0.23	0.93	0.93
T 0.50	6	3.18	1.10	1.38	4.98	-0.28	0.72	-1.46	0.90	22.18	0.80	20.86	23.50	0.38	0.38	1.31	1.31
U 0.60	6	3.24	1.04	1.53	4.95	-0.30	0.71	-1.46	0.86	22.16	0.80	20.85	23.48	0.07	0.07	1.38	1.38
R 0.70	6	3.27	0.90	1.80	4.74	-0.27	0.64	-1.32	0.78	22.13	0.81	20.81	23.47	0.05	0.05	1.43	1.43
N 0.80	5	3.15	0.75	1.93	4.38	-0.29	0.65	-1.52	0.93	22.13	0.96	20.55	23.71	0.12	0.12	1.55	1.55
0.90	5	3.17	0.77	1.91	4.42	-0.31	0.77	-1.57	0.96	22.12	0.93	20.60	23.65	0.02	0.02	1.57	1.57
1.00	5	3.17	0.82	1.83	4.52	-0.25	0.72	-1.44	0.93	22.14	0.84	20.76	23.52	0.06	0.06	1.63	1.63

LANDMARK - LT ACROMION (5)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	MOVED	CUM
0.0	6	-0.43	0.97	-2.03	1.17	6.75	0.63	5.72	7.78	22.57	1.04	20.86	24.28	0.0	0.0	0.0	0.0
0.10	6	-0.58	0.93	-2.11	0.35	6.77	0.65	5.71	7.82	22.55	1.01	20.90	24.21	0.15	0.15	0.15	0.15
F 0.20	6	-0.71	0.87	-2.14	0.72	6.78	0.67	5.68	7.88	22.53	0.98	20.92	24.14	0.14	0.14	0.28	0.28
D 0.30	6	-0.75	0.84	-2.12	0.63	6.80	0.71	5.63	7.97	22.56	1.05	20.83	24.29	0.05	0.05	0.34	0.34
R 0.40	6	-0.73	0.82	-2.07	0.61	6.83	0.74	5.62	8.04	22.53	1.08	20.86	24.40	0.08	0.08	0.42	0.42
W 0.50	6	-0.69	0.81	-2.03	0.64	6.87	0.79	5.57	8.17	22.75	1.10	20.95	24.55	0.14	0.14	0.55	0.55
A 0.60	6	-0.56	0.83	-1.92	0.79	6.82	0.69	5.69	7.96	22.84	1.13	20.99	24.69	0.16	0.16	0.72	0.72
R 0.70	6	-0.40	0.88	-1.85	1.04	6.77	0.68	5.65	7.89	22.86	1.11	21.04	24.69	0.17	0.17	0.89	0.89
D 0.80	6	-0.26	0.92	-1.77	1.24	6.75	0.81	5.43	8.07	22.90	1.11	21.09	24.72	0.15	0.15	1.03	1.03
0.90	5	-0.04	0.70	-1.19	1.12	6.82	0.80	5.51	8.13	23.23	1.04	21.53	24.93	0.40	0.40	1.44	1.44
1.00	5	-0.07	0.79	-1.36	1.22	6.81	0.72	5.63	8.00	23.31	1.04	21.61	25.01	0.09	0.09	1.52	1.52
0.0	5	-0.07	0.79	-1.36	1.22	6.81	0.72	5.63	8.00	23.31	1.04	21.61	25.01	0.0	0.0	0.0	0.0
0.10	5	-0.00	0.66	-1.08	1.09	6.72	0.64	5.68	7.77	23.23	0.95	21.66	24.79	0.14	0.14	0.14	0.14
0.20	6	-0.25	0.86	-1.65	1.16	6.59	0.55	5.68	7.49	22.39	1.05	21.16	24.51	0.44	0.44	0.59	0.59
R 0.30	6	-0.39	0.94	-1.94	1.16	6.57	0.63	5.54	7.59	22.80	1.00	21.22	24.49	0.15	0.15	0.74	0.74
E 0.40	6	-0.53	0.94	-2.08	1.02	6.59	0.69	5.47	7.72	22.84	1.01	21.18	24.50	0.14	0.14	0.88	0.88
T 0.50	6	-0.60	0.90	-2.09	0.88	6.56	0.62	5.55	7.57	22.75	1.04	21.04	24.46	0.12	0.12	1.00	1.00
U 0.60	6	-0.53	0.88	-1.97	0.91	6.55	0.53	5.67	7.43	22.62	1.00	20.98	24.26	0.15	0.15	1.15	1.15
R 0.70	6	-0.49	0.88	-1.93	0.96	6.62	0.60	5.63	7.61	22.51	0.97	20.92	24.11	0.14	0.14	1.29	1.29
N 0.80	6	-0.43	0.90	-1.90	1.03	6.59	0.64	5.64	7.73	22.52	1.02	20.84	24.20	0.08	0.08	1.37	1.37
0.90	6	-0.41	0.92	-1.92	1.10	6.74	0.60	5.75	7.72	22.51	1.04	20.80	24.22	0.06	0.06	1.43	1.43
1.00	6	-0.43	0.97	-2.03	1.17	6.75	0.63	5.72	7.78	22.57	1.04	20.86	24.28	0.07	0.07	1.49	1.49

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
																	INCR	CUM
0.0		5	18.71	0.97	17.11	20.30	9.82	0.54	8.93	10.72	12.67	0.43	11.97	13.37	16.13	1.60	0.0	0.0
0.10		5	18.52	0.68	17.41	19.64	9.65	0.55	8.75	10.54	14.25	1.15	12.37	16.13	1.60	1.60	1.60	1.60
0.20	F	6	18.47	0.36	17.87	19.07	9.54	0.63	8.50	10.58	15.89	1.64	13.52	18.25	1.64	3.24	3.24	3.24
0.30	U	6	18.70	0.20	18.37	19.02	9.57	0.71	8.41	10.73	18.14	0.96	16.57	21.91	2.27	5.51	5.51	5.51
0.40	R	6	19.27	0.34	18.71	19.84	9.60	0.71	8.41	10.73	20.23	1.02	18.55	21.91	2.16	7.67	7.67	7.67
0.50	W	6	19.86	0.67	18.75	20.97	9.60	0.64	8.55	10.66	21.34	1.01	19.69	23.00	1.26	8.93	8.93	8.93
0.60	A	6	21.15	1.16	19.24	23.05	9.77	0.62	8.75	10.78	22.98	2.33	19.16	26.80	2.09	11.02	11.02	11.02
0.70	R	6	21.67	0.72	20.50	22.85	9.98	0.56	9.07	10.89	22.69	0.98	21.09	24.29	0.64	11.66	11.66	11.66
0.80	D	6	22.35	0.69	21.21	23.48	10.22	0.55	9.32	11.11	22.81	0.90	21.33	24.28	0.72	12.39	12.39	12.39
0.90		6	22.58	0.71	21.40	23.75	10.33	0.49	9.53	11.13	22.74	0.99	21.28	24.19	0.26	12.65	12.65	12.65
1.00		6	22.76	0.81	21.43	24.09	10.41	0.41	9.73	11.09	22.64	0.90	21.17	24.11	0.22	12.87	12.87	12.87
0.0		6	22.76	0.81	21.43	24.09	10.41	0.41	9.73	11.09	22.64	0.90	21.17	24.11	0.0	0.0	0.0	0.0
0.10		6	22.04	0.58	21.09	23.00	10.20	0.54	9.32	11.09	22.27	1.27	20.18	24.36	0.83	0.83	0.83	0.83
0.20		6	21.11	0.62	20.09	22.14	9.93	0.68	8.81	11.05	21.31	1.77	18.91	24.71	1.07	1.90	1.90	1.90
0.30	R	6	19.97	0.78	18.70	21.24	9.64	0.66	8.56	10.72	20.99	2.26	17.18	24.60	1.50	3.40	3.40	3.40
0.40	E	6	19.18	0.80	17.87	20.50	9.45	0.62	8.44	10.46	19.53	2.28	15.79	23.26	1.58	4.98	4.98	4.98
0.50	U	6	18.62	0.80	17.31	19.94	9.44	0.57	8.50	10.38	17.92	2.06	14.53	21.30	1.70	6.69	6.69	6.69
0.60	U	6	18.59	0.99	16.97	20.22	9.53	0.54	8.64	10.42	16.25	1.51	13.78	18.72	1.67	8.36	8.36	8.36
0.70	R	6	18.45	1.13	16.59	20.31	9.81	0.60	8.83	10.79	14.92	0.80	13.61	16.23	1.37	9.73	9.73	9.73
0.80	N	6	18.46	1.13	16.61	20.30	9.87	0.45	9.13	10.61	13.92	0.55	13.01	14.83	1.00	10.73	10.73	10.73
0.90		5	18.60	1.03	16.92	20.29	9.83	0.43	9.12	10.53	13.25	0.40	12.60	13.91	0.68	11.41	11.41	11.41
1.00		5	18.71	0.97	17.11	20.30	9.82	0.54	8.93	10.72	12.67	0.43	11.97	13.37	0.59	12.00	12.00	12.00

LANDMARK - LT TROCHANTER (19)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
																	INCR	CUM
0.0		6	4.49	0.59	3.52	5.46	6.57	0.85	5.18	7.95	3.74	0.31	3.23	4.25	0.0	0.0	0.0	0.0
0.10		6	4.44	0.58	3.49	5.39	6.64	0.84	5.27	8.02	3.73	0.34	3.17	4.29	0.09	0.09	0.09	0.09
0.20	F	6	4.35	0.54	3.46	5.25	6.71	0.84	5.33	8.09	3.72	0.36	3.13	4.31	0.11	0.20	0.20	0.20
0.30	R	6	4.26	0.47	3.49	5.02	6.73	0.87	5.30	8.16	3.74	0.31	3.23	4.26	0.10	0.30	0.30	0.30
0.40	R	6	4.30	0.47	3.52	5.08	6.64	0.90	5.17	8.12	3.79	0.29	3.31	4.27	0.11	0.41	0.41	0.41
0.50	W	6	4.40	0.50	3.58	5.23	6.56	0.93	5.03	8.09	3.82	0.30	3.32	4.31	0.13	0.54	0.54	0.54
0.60	A	6	4.44	0.51	3.60	5.28	6.62	0.93	5.09	8.14	3.81	0.31	3.29	4.32	0.07	0.61	0.61	0.61
0.70	R	6	4.56	0.65	3.49	5.63	6.55	0.99	4.93	8.17	3.80	0.34	3.24	4.35	0.14	0.75	0.75	0.75
0.80	D	6	4.79	1.10	2.99	6.59	6.34	1.15	4.46	8.23	3.81	0.35	3.24	4.38	0.31	1.06	1.06	1.06
0.90		5	4.29	0.37	3.68	4.90	6.59	1.03	4.90	8.29	3.84	0.31	3.37	4.39	0.56	1.63	1.63	1.63
1.00		5	4.21	0.39	3.57	4.85	6.59	0.98	4.99	8.19	3.90	0.27	3.46	4.35	0.09	1.71	1.71	1.71
0.0		5	4.21	0.39	3.57	4.85	6.59	0.98	4.99	8.19	3.90	0.27	3.46	4.35	0.0	0.0	0.0	0.0
0.10		5	4.29	0.34	3.72	4.85	6.59	1.02	4.92	8.27	3.88	0.29	3.40	4.35	0.09	0.09	0.09	0.09
0.20		6	4.45	0.55	3.56	5.35	6.52	0.94	4.98	8.07	3.80	0.34	3.25	4.35	0.20	0.20	0.20	0.20
0.30	R	6	4.35	0.64	3.31	5.39	6.55	0.97	4.96	8.14	3.85	0.33	3.21	4.40	0.14	0.40	0.40	0.40
0.40	E	6	4.22	0.61	3.22	5.22	6.59	0.93	5.06	8.12	3.86	0.35	3.28	4.44	0.09	0.54	0.54	0.54
0.50	T	6	4.15	0.55	3.25	5.06	6.62	0.89	5.17	8.07	3.82	0.38	3.20	4.44	0.09	0.62	0.62	0.62
0.60	U	6	4.24	0.56	3.33	5.16	6.64	0.92	5.17	8.11	3.79	0.35	3.22	4.36	0.09	0.72	0.72	0.72
0.70	R	6	4.30	0.58	3.35	5.25	6.69	0.98	5.09	8.29	3.76	0.31	3.25	4.27	0.08	0.80	0.80	0.80
0.80	N	6	4.39	0.59	3.43	5.36	6.68	0.92	5.16	8.19	3.76	0.30	3.28	4.25	0.09	0.89	0.89	0.89
0.90		6	4.45	0.59	3.49	5.42	6.63	0.87	5.20	8.05	3.76	0.31	3.25	4.26	0.08	0.97	0.97	0.97
1.00		6	4.49	0.59	3.52	5.46	6.57	0.85	5.18	7.96	3.74	0.31	3.23	4.25	0.07	1.04	1.04	1.04

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE, N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVES
0.0	6	23.18	0.92	18.67	21.68	5.57	0.96	3.99	7.14	11.38	1.37	9.13	13.63	0.0	0.0
0.10	6	20.20	0.86	18.79	21.62	5.60	0.94	4.06	7.13	11.38	1.39	9.10	13.67	0.04	0.04
0.20	6	20.25	0.84	18.88	21.63	5.63	0.92	4.12	7.13	11.41	1.61	8.47	13.75	0.28	0.32
0.30	6	20.23	1.02	18.57	21.90	5.59	0.98	3.98	7.21	10.36	3.04	5.38	15.34	0.75	1.07
0.40	6	20.15	1.17	18.23	22.08	5.52	1.08	3.76	7.29	10.58	2.50	6.59	14.77	0.34	1.41
0.50	6	20.15	1.09	18.36	21.95	5.50	1.11	3.68	7.31	11.52	1.39	9.23	13.80	0.84	2.24
0.60	6	20.19	0.98	18.58	21.81	5.54	1.06	3.80	7.28	11.51	1.36	9.28	13.75	0.06	2.30
0.70	6	20.21	0.97	18.62	21.79	5.55	1.05	3.82	7.27	11.47	1.36	9.24	13.70	0.04	2.35
0.80	6	20.24	0.97	18.65	21.82	5.49	1.00	3.84	7.14	11.46	1.39	9.18	13.75	0.07	2.41
0.90	6	20.13	0.85	18.73	21.53	5.47	0.89	4.02	6.93	11.52	1.42	9.20	13.85	0.12	2.53
1.00	6	20.00	0.78	18.73	21.28	5.47	0.80	4.16	6.78	11.57	1.45	9.19	13.95	0.14	2.67
0.0	6	20.00	0.78	18.73	21.28	5.47	0.80	4.16	6.78	11.57	1.45	9.19	13.95	0.0	0.0
0.10	6	20.14	0.89	18.67	21.60	5.47	0.99	3.86	7.09	11.52	1.44	9.16	13.87	0.14	0.14
0.20	6	20.20	1.00	18.57	21.84	5.44	1.12	3.61	7.28	11.50	1.44	9.13	13.86	0.08	0.22
0.30	6	20.13	0.99	18.50	21.76	5.37	1.15	3.48	7.26	11.52	1.42	9.19	13.85	0.11	0.33
0.40	6	19.96	1.00	18.32	21.60	5.26	1.12	3.43	7.10	11.52	1.41	9.20	13.84	0.20	0.53
0.50	6	19.85	1.09	18.06	21.64	5.23	1.19	3.28	7.17	11.49	1.40	9.21	13.78	0.12	0.65
0.60	6	19.97	1.02	18.30	21.63	5.33	1.13	3.49	7.18	11.38	1.41	9.13	13.75	0.17	0.82
0.70	6	20.08	0.97	18.48	21.67	5.44	1.13	3.58	7.30	11.44	1.40	9.09	13.67	0.17	0.99
0.80	6	20.15	0.95	18.59	21.72	5.46	1.07	3.71	7.21	11.36	1.41	9.04	13.68	0.08	1.07
0.90	6	20.19	0.94	18.64	21.74	5.52	1.00	3.88	7.16	11.36	1.41	9.10	13.62	0.07	1.14
1.00	6	20.18	0.92	18.67	21.68	5.57	0.96	3.99	7.14	11.38	1.37	9.13	13.63	0.06	1.19

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVES CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	6	0.68	0.65	-0.39	1.76	7.07	0.93	5.54	8.61	20.43	1.24	18.40	22.46	0.0	0.0	
0.10	6	0.63	0.74	-0.59	1.85	6.92	0.96	5.35	8.49	20.57	1.19	18.61	22.52	0.21	0.21	
0.20	6	0.59	0.80	-0.72	1.89	6.80	1.05	5.08	8.52	20.66	1.20	18.70	22.62	0.16	0.37	
0.30	6	0.66	0.72	-0.53	1.84	6.94	1.10	5.14	8.75	20.66	1.29	18.54	22.78	0.16	0.52	
0.40	6	0.75	0.76	-0.49	2.00	7.08	1.11	5.25	8.91	20.78	1.21	18.79	22.77	0.21	0.73	
0.50	6	0.88	0.87	-0.55	2.31	7.10	1.13	5.24	9.06	21.00	1.10	19.20	22.81	0.26	0.99	
0.60	6	1.09	0.65	0.02	2.16	7.11	1.16	5.20	9.92	21.13	1.14	19.26	23.00	0.24	1.23	
0.70	6	1.26	0.62	0.24	2.29	7.13	1.16	5.23	8.93	21.23	1.12	19.38	23.07	0.20	1.43	
0.80	6	1.35	0.76	0.11	2.60	7.11	1.11	5.28	8.93	21.32	1.11	19.52	23.13	0.13	1.57	
0.90	6	1.37	0.35	-0.03	2.77	7.14	1.09	5.35	8.92	21.39	1.11	19.58	23.21	0.08	1.65	
1.00	6	1.45	0.90	-0.02	2.92	7.16	1.10	5.36	8.97	21.38	1.19	19.43	23.34	0.08	1.73	
0.0	6	1.45	0.90	-0.02	2.92	7.16	1.10	5.36	8.97	21.38	1.19	19.43	23.34	0.0	0.0	
0.10	6	1.45	0.85	0.05	2.84	7.11	1.16	5.22	9.01	21.29	1.12	19.45	23.12	0.11	0.11	
0.20	6	1.34	0.81	0.01	2.67	7.05	1.19	5.09	9.00	21.18	1.07	19.43	22.93	0.16	0.28	
0.30	6	1.07	0.67	-0.03	2.18	6.91	1.14	5.05	8.77	21.04	1.14	19.17	22.91	0.33	0.60	
0.40	6	0.82	0.71	-0.35	2.00	6.85	1.10	5.04	8.66	20.95	1.25	18.90	22.99	0.27	0.83	
0.50	6	0.53	0.79	-0.76	1.82	6.91	1.07	5.16	9.67	20.88	1.26	18.82	22.94	0.31	1.19	
0.60	6	0.51	0.74	-0.71	1.82	6.90	1.03	5.21	8.59	20.85	1.14	18.98	22.71	0.04	1.23	
0.70	6	0.61	0.75	-0.62	1.84	6.88	0.96	5.30	8.45	20.75	1.15	18.87	22.63	0.14	1.38	
0.80	6	0.73	0.64	-0.32	1.78	6.87	0.91	5.37	8.37	20.63	1.24	18.61	22.66	0.17	1.54	
0.90	6	0.73	0.62	-0.29	1.75	6.95	0.94	5.42	8.49	20.53	1.24	18.50	22.57	0.13	1.68	
1.00	6	0.68	0.65	-0.39	1.76	7.07	0.93	5.54	8.61	20.43	1.24	18.40	22.46	0.16	1.83	

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DISTANCE	MOVED	CUM
0.0	6	5.69	0.82	4.35	7.03	11.94	0.67	10.85	13.04	12.35	1.63	9.68	15.03	0.0	0.0	0.0	0.0
0.10	6	5.88	0.62	4.87	6.89	11.81	0.67	10.71	12.91	12.10	2.04	8.76	15.44	0.34	0.34	0.34	0.34
0.20	6	6.12	0.60	5.13	7.11	11.72	0.80	10.41	13.02	12.21	2.19	8.62	15.79	0.28	0.62	0.62	0.62
0.30	6	6.70	0.67	5.60	7.80	11.80	0.97	10.22	13.39	13.32	1.52	10.83	15.81	1.26	1.88	1.88	1.88
0.40	6	7.49	0.65	6.43	8.56	11.89	1.08	10.12	13.66	14.39	1.27	12.32	16.47	1.33	3.22	3.22	3.22
0.50	6	8.35	0.61	7.35	9.35	11.91	1.20	9.95	13.99	15.42	1.32	13.25	17.55	1.34	4.55	4.55	4.55
0.60	6	9.09	0.67	7.99	10.18	11.88	1.11	10.06	13.69	16.36	1.46	13.98	18.75	1.20	5.76	5.76	5.76
0.70	6	9.72	0.65	8.65	10.79	11.81	1.04	10.10	13.51	17.10	1.43	14.75	19.44	0.97	6.72	6.72	6.72
0.80	6	10.17	0.65	9.10	11.24	11.70	1.00	10.07	13.34	17.64	1.45	15.26	20.02	0.72	7.44	7.44	7.44
0.90	5	10.35	0.71	9.18	11.52	11.55	1.03	9.85	13.24	17.94	1.61	15.29	20.59	0.38	7.82	7.82	7.82
1.00	5	10.41	0.79	9.11	11.70	11.47	1.02	9.79	13.14	18.17	1.64	15.48	20.86	0.25	8.07	8.07	8.07
0.0	5	10.41	0.79	9.11	11.70	11.47	1.02	9.79	13.14	18.17	1.64	15.48	20.86	0.0	0.0	0.0	0.0
0.10	5	9.87	0.43	9.16	10.57	11.76	1.07	10.00	13.52	17.31	1.56	14.75	19.87	1.05	1.05	1.05	1.05
0.20	5	9.22	0.41	8.55	9.89	11.99	1.12	10.16	13.83	16.42	1.58	13.83	19.02	1.12	2.18	2.18	2.18
0.30	5	8.32	0.42	7.63	9.02	12.08	1.16	10.18	13.99	15.54	1.57	12.97	18.11	1.26	3.44	3.44	3.44
0.40	5	7.43	0.42	6.73	8.12	12.18	1.23	10.16	14.20	14.81	1.54	12.28	17.34	1.16	4.60	4.60	4.60
0.50	6	6.49	0.36	5.90	7.08	12.33	1.12	10.50	14.16	13.97	1.49	11.53	16.41	1.26	5.86	5.86	5.86
0.60	6	6.07	0.54	5.18	6.95	12.32	1.06	10.58	14.06	13.52	1.50	11.05	15.98	0.62	6.49	6.49	6.49
0.70	6	5.83	0.78	4.54	7.11	12.36	1.08	10.58	14.13	13.10	1.53	10.60	15.60	0.48	6.97	6.97	6.97
0.80	6	5.75	0.73	4.56	6.94	12.30	0.99	10.68	13.92	12.78	1.59	10.16	15.39	0.34	7.31	7.31	7.31
0.90	6	5.73	0.72	4.56	6.91	12.15	0.84	10.78	13.52	12.57	1.61	9.93	15.20	0.26	7.57	7.57	7.57
1.00	6	5.69	0.82	4.35	7.03	11.94	0.67	10.85	13.04	12.35	1.63	9.68	15.03	0.30	7.86	7.86	7.86

203

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DISTANCE	MOVED	CUM
0.0	6	15.64	0.86	14.23	17.05	10.48	0.49	9.67	11.30	12.38	0.73	11.18	13.58	0.0	0.0	0.0	0.0
0.10	6	15.50	0.70	14.36	16.65	10.30	0.72	9.12	11.48	13.54	1.26	11.48	15.60	1.18	1.18	1.18	1.18
0.20	6	15.41	0.67	14.31	16.51	10.10	0.95	8.54	11.67	14.93	1.63	12.25	17.60	1.40	2.58	2.58	2.58
0.30	6	15.95	0.56	15.03	16.87	9.99	0.58	8.40	11.59	16.53	1.24	14.59	18.66	1.79	4.37	4.37	4.37
0.40	6	16.66	0.67	15.56	17.75	10.03	1.04	8.33	11.73	18.08	1.14	16.21	19.95	1.62	5.99	5.99	5.99
0.50	6	17.39	0.72	16.21	18.57	10.20	1.10	8.40	12.03	19.25	1.03	17.57	20.93	1.39	7.38	7.38	7.38
0.60	6	18.26	0.84	16.89	19.64	10.45	1.15	8.56	12.34	20.06	1.15	18.17	21.95	1.21	8.59	8.59	8.59
0.70	6	19.03	0.84	17.65	20.42	10.69	1.16	8.78	12.59	20.54	1.09	18.75	22.32	0.94	9.53	9.53	9.53
0.80	6	19.66	0.79	18.36	20.96	10.79	1.00	9.15	12.43	20.79	1.12	18.95	22.62	0.69	10.22	10.22	10.22
0.90	6	19.92	0.85	18.53	21.32	10.91	0.84	9.53	12.28	20.80	1.14	18.94	22.67	0.29	10.50	10.50	10.50
1.00	6	20.10	1.03	18.42	21.79	11.06	0.83	9.69	12.43	20.78	1.17	18.86	22.70	0.24	10.74	10.74	10.74
0.0	6	20.10	1.03	18.42	21.79	11.06	0.83	9.69	12.43	20.78	1.17	18.86	22.70	0.0	0.0	0.0	0.0
0.10	6	19.51	0.57	18.58	20.44	10.97	0.95	9.41	12.54	20.19	1.37	17.94	22.44	0.84	0.84	0.84	0.84
0.20	6	18.69	0.57	17.77	19.62	10.75	1.10	8.95	12.55	19.62	1.69	16.84	22.40	1.02	1.86	1.86	1.86
0.30	6	17.59	0.81	16.26	18.91	10.43	0.92	8.92	11.94	18.94	2.05	15.57	22.31	1.34	3.20	3.20	3.20
0.40	6	16.53	0.84	15.16	17.90	10.37	0.70	9.22	11.51	17.93	2.02	14.61	21.24	1.46	4.67	4.67	4.67
0.50	6	15.58	0.88	14.14	17.02	10.50	0.64	9.46	11.55	16.64	1.85	13.61	19.68	1.61	6.27	6.27	6.27
0.60	6	15.33	0.94	13.79	16.87	10.52	0.60	9.54	11.53	15.51	1.48	13.08	17.94	1.16	7.43	7.43	7.43
0.70	6	15.22	0.95	13.66	16.78	10.66	0.67	9.56	11.77	14.43	1.15	12.55	16.32	1.09	8.52	8.52	8.52
0.80	6	15.24	0.90	13.77	16.70	10.69	0.65	9.63	11.75	13.58	1.07	11.82	15.33	0.86	9.38	9.38	9.38
0.90	6	15.42	0.83	14.06	16.78	10.61	0.57	9.68	11.54	12.97	0.85	11.57	14.36	0.64	10.02	10.02	10.02
1.00	6	15.64	0.86	14.23	17.05	10.48	0.49	9.67	11.30	12.38	0.73	11.18	13.58	0.64	10.65	10.65	10.65

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO PANEL CONTROLLER AT +24.7, +10.0, +23.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +15.0, -13.0, +4.8.

MOTION NUMBER - 22240
BACK ANGLE - 13

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.49	0.11	0.40 TO 0.60 SECS.
LEFT REV	0.51	0.13	0.30 TO 0.70 SECS.

(11)

[illegible]

(2)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----				DISTANCE INCR	MOVES CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	5 PCT	95 PCT				
0.0	7	-1.05	1.52	-3.55	-0.43	-0.90	-0.95	-2.43	0.52	0.81	2.94	21.94	0.81	21.94	0.0	0.0			
0.10	7	-1.20	1.39	-3.49	1.08	-0.95	0.71	-2.11	0.22	23.34	0.90	21.90	24.85	0.19	0.0				
F 0.20	7	-1.31	1.32	-3.47	0.78	-0.92	0.59	-1.89	0.05	23.45	1.02	21.78	25.13	0.13	0.32				
O 0.30	7	-1.32	1.29	-3.43	0.85	-0.92	0.63	-1.95	0.11	23.46	1.02	21.85	25.06	0.02	0.34				
R 0.40	7	-1.37	1.26	-3.43	0.69	-0.97	0.71	-2.14	0.20	23.46	0.97	21.87	25.06	0.07	0.41				
W 0.50	7	-1.43	1.24	-3.47	0.61	-1.01	0.81	-2.34	0.31	23.47	0.98	21.86	25.07	0.07	0.48				
A 0.60	7	-1.47	1.26	-3.54	0.59	-0.98	0.80	-2.30	0.34	23.40	0.91	21.91	24.89	0.08	0.57				
K 0.70	7	-1.50	1.28	-3.60	0.67	-0.93	0.81	-2.25	0.39	23.35	0.84	21.96	24.73	0.08	0.65				
D 0.80	7	-1.47	1.30	-3.61	0.60	-0.86	0.86	-2.28	0.53	23.37	0.80	22.06	24.68	0.07	0.71				
O 0.90	7	-1.36	1.32	-3.52	0.81	-0.97	0.92	-2.48	0.54	23.41	0.81	22.08	24.74	0.15	0.87				
1.00	7	-1.21	1.36	-3.44	1.01	-1.11	0.99	-2.74	0.52	23.45	0.85	22.06	24.85	0.20	1.07				
0.0	7	-1.21	1.36	-3.44	1.01	-1.11	0.99	-2.74	0.52	23.45	0.85	22.06	24.85	0.0	0.0				
0.10	7	-1.28	1.35	-3.50	0.93	-1.02	0.84	-2.40	0.35	23.47	0.83	22.12	24.83	0.11	0.11				
0.20	7	-1.28	1.41	-3.59	1.03	-0.99	0.71	-2.16	0.18	23.38	0.74	22.17	24.58	0.10	0.22				
R 0.30	7	-1.18	1.46	-3.58	1.22	-1.07	0.71	-2.24	0.09	23.18	0.75	21.95	24.42	0.23	0.45				
E 0.40	7	-1.16	1.47	-3.56	1.25	-1.17	0.78	-2.44	0.10	23.13	0.76	21.88	24.38	0.11	0.56				
T 0.50	7	-1.13	1.49	-3.57	1.31	-1.18	0.88	-2.63	0.26	23.14	0.73	21.94	24.34	0.03	0.60				
O 0.60	7	-1.19	1.41	-3.50	1.12	-1.10	0.85	-2.48	0.29	23.15	0.77	21.89	24.41	0.11	0.60				
R 0.70	7	-1.19	1.34	-3.39	1.00	-1.08	0.82	-2.43	0.26	23.18	0.83	21.82	24.54	0.03	0.74				
N 0.80	7	-1.13	1.33	-3.31	1.24	-1.13	0.82	-2.48	0.22	23.25	0.86	21.84	24.67	0.11	0.85				
0.90	7	-1.10	1.42	-3.42	1.23	-1.06	0.85	-2.46	0.34	23.27	0.84	21.89	24.65	0.08	0.92				
1.00	7	-1.05	1.52	-3.55	1.45	-1.05	0.90	-2.43	0.52	23.26	0.81	21.94	24.59	0.12	1.05				

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE SIZE,N	-----X-----			-----Y-----			-----Z-----			-----CO-ORDINATE-----			-----CO-ORDINATE-----			DISTANCE	MOVED	
T		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	2.71	0.85	1.32	4.10	-0.73	0.99	-2.36	0.89	22.36	1.05	20.65	24.08	22.36	1.05	20.65	24.08	0.0	0.0
0.10	7	2.79	0.83	1.43	4.15	-0.60	0.96	-2.17	0.97	22.30	1.08	20.53	24.07	22.30	1.08	20.53	24.07	0.17	0.17
0.20	7	2.81	1.03	1.12	4.49	-0.50	0.98	-2.11	1.11	22.25	1.09	20.46	23.90	22.25	1.09	20.46	23.90	0.11	0.28
0.30	7	2.73	1.08	0.96	4.51	-0.56	1.00	-2.20	1.09	22.23	1.02	20.55	23.90	22.23	1.02	20.55	23.90	0.09	0.38
0.40	7	2.77	1.12	0.94	4.60	-0.66	1.06	-2.40	1.07	22.24	1.00	20.60	23.89	22.24	1.00	20.60	23.89	0.11	0.49
0.50	7	2.83	1.14	0.95	4.70	-0.76	1.12	-2.60	1.07	22.28	1.00	20.64	23.92	22.28	1.00	20.64	23.92	0.12	0.61
0.60	7	2.80	1.11	0.98	4.62	-0.67	0.95	-2.22	0.89	22.27	1.00	20.63	23.91	22.27	1.00	20.63	23.91	0.10	0.71
0.70	7	2.75	1.08	0.98	4.53	-0.55	0.83	-1.90	0.81	22.27	0.99	20.65	23.89	22.27	0.99	20.65	23.89	0.13	0.84
0.80	7	2.75	1.03	1.06	4.44	-0.46	0.78	-1.75	0.82	22.30	0.94	20.77	23.84	22.30	0.94	20.77	23.84	0.09	0.93
0.90	7	2.83	0.99	1.20	4.46	-0.45	0.89	-1.91	1.01	22.31	0.94	20.76	23.85	22.31	0.94	20.76	23.85	0.08	1.02
1.00	7	2.92	0.99	1.30	4.54	-0.42	1.04	-2.12	1.28	22.29	0.99	20.66	23.91	22.29	0.99	20.66	23.91	0.09	1.11
0.0	7	2.92	0.99	1.30	4.54	-0.42	1.04	-2.12	1.28	22.29	0.99	20.66	23.91	22.29	0.99	20.66	23.91	0.0	0.0
0.10	7	2.99	0.99	1.37	4.62	-0.60	0.55	-2.16	0.95	22.36	0.90	20.89	23.84	22.36	0.90	20.89	23.84	0.21	0.21
0.20	7	2.96	0.87	1.52	4.39	-0.81	0.83	-2.17	0.56	22.45	0.88	21.00	23.89	22.45	0.88	21.00	23.89	0.22	0.44
0.30	7	2.81	0.74	1.60	4.01	-0.81	0.55	-2.36	0.75	22.43	0.96	20.85	24.02	22.43	0.96	20.85	24.02	0.15	0.59
0.40	7	2.70	0.74	1.48	3.91	-0.68	1.05	-2.41	1.04	22.35	0.97	20.76	23.94	22.35	0.97	20.76	23.94	0.18	0.77
0.50	7	2.67	0.81	1.33	4.00	-0.71	1.10	-2.51	1.09	22.33	0.96	20.76	23.91	22.33	0.96	20.76	23.91	0.04	0.81
0.60	7	2.65	0.85	1.26	4.04	-0.69	1.05	-2.40	1.03	22.31	0.96	20.74	23.88	22.31	0.96	20.74	23.88	0.04	0.85
0.70	7	2.62	0.88	1.18	4.06	-0.67	0.96	-2.24	0.89	22.28	0.96	20.70	23.86	22.28	0.96	20.70	23.86	0.05	0.90
0.80	7	2.61	0.88	1.17	4.06	-0.76	0.55	-2.32	0.80	22.32	1.04	20.63	24.02	22.32	1.04	20.63	24.02	0.10	0.99
0.90	7	2.64	0.87	1.22	4.06	-0.76	0.98	-2.37	0.85	22.35	1.06	20.62	24.08	22.35	1.06	20.62	24.08	0.04	1.03
1.00	7	2.71	0.85	1.32	4.10	-0.73	0.99	-2.36	0.89	22.36	1.05	20.65	24.08	22.36	1.05	20.65	24.08	0.07	1.11

LANDMARK - LT ACROMION (5)

TIME	SAMPLE	SIZE,N	-----X - CO-ORDINATE-----			-----Y - CO-ORDINATE-----			-----Z - CO-ORDINATE-----			DISTANCE			MOVED	
T			MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	T	7	-0.41	0.75	-1.64	0.82	7.30	0.91	5.80	8.79	22.41	1.11	20.59	24.24	0.0	0.0
0.10	T	7	-0.60	0.69	-1.72	0.53	7.15	0.79	5.85	8.45	22.52	1.11	20.70	24.34	0.26	0.26
0.20	T	7	-0.79	0.69	-1.91	0.34	7.03	0.77	5.77	8.29	22.52	1.10	20.81	24.43	0.24	0.50
0.30	T	7	-0.88	0.68	-2.00	0.24	7.02	0.82	5.67	8.36	22.70	1.06	20.96	24.43	0.12	0.63
0.40	T	7	-0.82	0.66	-1.90	0.26	7.06	0.84	5.69	8.44	22.78	1.03	21.10	24.47	0.12	0.74
0.50	T	7	-0.73	0.59	-1.69	0.23	7.08	0.82	5.75	8.42	22.83	1.00	21.19	24.47	0.10	0.84
0.60	T	7	-0.70	0.56	-1.62	0.23	7.08	0.79	5.79	8.37	22.83	1.05	21.09	24.55	0.04	0.88
0.70	T	7	-0.69	0.57	-1.62	0.24	7.08	0.77	5.83	8.34	22.83	1.08	21.06	24.60	0.02	0.90
0.80	T	7	-0.64	0.53	-1.51	0.24	7.05	0.74	5.84	8.27	22.90	1.03	21.21	24.58	0.09	0.99
0.90	T	7	-0.46	0.59	-1.42	0.50	6.99	0.74	5.77	8.21	22.92	1.04	21.22	24.63	0.19	1.18
1.00	T	7	-0.27	0.68	-1.39	0.85	6.93	0.77	5.67	8.19	22.93	1.08	21.15	24.70	0.20	1.38
0.0	T	7	-0.27	0.68	-1.39	0.85	6.93	0.77	5.67	8.19	22.93	1.08	21.15	24.70	0.0	0.0
0.10	T	7	-0.29	0.68	-1.40	0.83	6.95	0.71	5.80	8.11	22.84	1.09	21.06	24.62	0.09	0.09
0.20	T	7	-0.27	0.73	-1.47	0.93	6.95	0.65	5.88	8.02	22.77	1.10	20.96	24.58	0.08	0.16
0.30	T	7	-0.32	0.80	-1.63	0.86	6.95	0.65	5.88	8.02	22.57	1.06	20.92	24.41	0.11	0.27
0.40	T	7	-0.45	0.80	-1.77	0.86	7.00	0.71	5.84	8.17	22.55	1.01	20.90	24.20	0.18	0.46
0.50	T	7	-0.46	0.86	-1.88	0.96	7.10	0.80	5.78	8.42	22.50	1.00	20.85	24.14	0.11	0.57
0.60	T	7	-0.49	0.80	-1.80	0.82	7.13	0.89	5.68	8.59	22.49	1.05	20.78	24.21	0.05	0.62
0.70	T	7	-0.49	0.72	-1.67	0.68	7.11	0.87	5.68	8.55	22.51	1.05	20.79	24.24	0.03	0.64
0.80	T	7	-0.56	0.57	-1.49	0.37	7.11	0.85	5.71	8.51	22.50	1.00	20.86	24.14	0.07	0.72
0.90	T	7	-0.53	0.59	-1.50	0.43	7.19	0.88	5.76	8.63	22.45	1.04	20.76	24.15	0.09	0.81
1.00	T	7	-0.41	0.75	-1.64	0.82	7.30	0.91	5.80	8.79	22.41	1.11	20.59	24.24	0.16	0.99

LANDMARK - LT GRIP CENTER (17)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	4	18.23	0.69	17.11	19.36	10.02	0.45	9.29	10.75	12.54	0.36	12.05	13.24	0.0	0.0	0.0	
0.10	4	18.26	0.59	17.30	19.22	9.79	0.60	8.80	10.78	14.78	0.63	13.75	15.81	2.15	2.15	0.0	
F 0.20	5	18.45	0.51	17.60	19.29	9.65	0.66	8.56	10.74	16.47	1.40	14.18	18.77	1.71	3.86	3.86	
R 0.30	6	18.82	0.45	18.09	19.56	9.62	0.51	8.77	10.46	18.53	1.43	16.19	20.87	2.09	5.95	5.95	
D 0.40	7	19.27	0.26	18.84	19.71	9.63	0.28	9.17	10.08	20.35	1.21	18.37	22.34	1.88	7.83	7.83	
W 0.50	7	19.81	0.91	18.32	21.30	9.62	0.45	8.89	10.36	22.08	1.13	20.23	23.94	1.81	9.64	9.64	
A 0.60	7	20.57	0.81	19.23	21.90	9.80	0.40	9.15	10.45	22.56	0.85	21.16	23.95	0.91	10.55	10.55	
R 0.70	7	21.30	0.67	20.20	22.41	10.00	0.31	9.49	10.51	22.96	0.76	21.70	24.21	0.86	11.41	11.41	
D 0.80	7	22.01	0.45	21.28	22.74	10.20	0.16	9.94	10.47	23.06	0.69	21.94	24.19	0.74	12.15	12.15	
0.90	7	22.61	0.60	21.63	23.59	10.45	0.22	10.09	10.80	22.97	0.59	21.90	23.83	0.68	12.83	12.83	
1.00	7	23.15	0.90	21.67	24.84	10.72	0.31	10.20	11.23	22.58	0.51	21.74	23.42	0.67	13.50	13.50	
0.0	7	23.15	0.90	21.67	24.84	10.72	0.31	10.20	11.23	22.58	0.51	21.74	23.42	0.0	0.0	0.0	
0.10	7	21.94	0.77	20.68	23.20	10.20	0.43	9.49	10.90	22.06	1.09	20.27	23.84	1.42	1.42	1.42	
0.20	7	20.82	0.83	19.47	22.17	9.92	0.64	8.78	10.86	21.25	1.54	18.73	23.77	1.43	2.85	2.85	
R 0.30	7	19.95	0.90	18.48	21.43	9.75	0.58	8.81	10.70	19.52	1.66	16.90	22.34	1.85	4.70	4.70	
E 0.40	7	19.13	1.24	17.11	21.16	9.62	0.63	8.58	10.66	17.78	2.01	14.48	21.08	2.02	6.71	6.71	
T 0.50	7	19.06	0.91	17.56	20.56	9.53	0.72	8.35	10.71	16.73	1.49	14.30	19.17	1.06	7.77	7.77	
U 0.60	6	19.08	1.01	17.42	20.73	9.46	0.70	8.32	10.60	15.31	1.26	13.24	17.38	1.42	9.20	9.20	
R 0.70	6	18.90	0.87	17.47	20.33	9.52	0.67	8.43	10.61	14.39	0.96	12.82	15.57	0.94	10.13	10.13	
N 0.80	6	18.71	0.67	17.61	19.81	9.64	0.71	8.47	10.80	13.72	0.74	12.51	14.93	0.71	10.84	10.84	
0.90	4	18.37	0.71	17.21	19.53	9.95	0.53	9.08	10.81	13.08	0.55	12.18	13.98	0.78	11.63	11.63	
1.00	4	18.23	0.69	17.11	19.36	10.02	0.45	9.29	10.75	12.54	0.36	12.05	13.24	0.47	12.09	12.09	

LANDMARK - LT TROCHANTER (19)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	4.74	0.37	4.13	5.35	6.66	0.97	5.07	8.25	3.86	0.32	3.33	4.39	0.0	0.0	0.0	
0.10	7	4.64	0.40	3.99	5.29	6.65	0.91	5.17	8.14	3.86	0.32	3.33	4.40	0.10	0.10	0.10	
F 0.20	7	4.56	0.53	3.70	5.43	6.66	0.89	5.20	8.12	3.87	0.33	3.33	4.41	0.08	0.18	0.18	
D 0.30	7	4.54	0.72	3.36	5.72	6.64	0.91	5.15	8.12	3.88	0.32	3.35	4.40	0.03	0.21	0.21	
R 0.40	7	4.53	0.93	3.00	6.06	6.58	0.55	5.03	8.13	3.89	0.33	3.35	4.42	0.07	0.27	0.27	
W 0.50	7	4.52	1.16	2.62	6.42	6.52	1.00	4.88	8.16	3.91	0.35	3.33	4.48	0.06	0.34	0.34	
A 0.60	7	4.55	0.96	2.99	6.12	6.59	0.98	4.98	8.20	3.88	0.33	3.33	4.42	0.08	0.42	0.42	
R 0.70	7	4.58	0.76	3.33	5.82	6.64	0.99	5.02	8.27	3.85	0.31	3.35	4.36	0.07	0.48	0.48	
D 0.80	7	4.58	0.60	3.59	5.56	6.67	0.90	5.20	8.14	3.84	0.27	3.39	4.29	0.03	0.51	0.51	
0.90	7	4.58	0.47	3.80	5.36	6.73	0.75	5.50	7.97	3.82	0.25	3.41	4.24	0.06	0.53	0.53	
1.00	7	4.63	0.38	4.00	5.25	6.78	0.66	5.70	7.86	3.78	0.28	3.33	4.23	0.08	0.65	0.65	
0.0	7	4.63	0.38	4.00	5.25	6.78	0.66	5.70	7.86	3.78	0.28	3.33	4.23	0.0	0.0	0.0	
0.10	7	4.73	0.41	4.05	5.41	6.67	0.78	5.40	7.95	3.81	0.27	3.37	4.25	0.15	0.15	0.15	
0.20	7	4.80	0.48	4.02	5.58	6.59	0.88	5.16	8.03	3.85	0.29	3.38	4.32	0.11	0.25	0.25	
R 0.30	7	4.75	0.61	3.76	5.75	6.57	0.92	5.05	8.08	3.87	0.31	3.36	4.39	0.06	0.32	0.32	
E 0.40	7	4.68	0.56	3.77	5.59	6.59	0.85	5.19	7.99	3.85	0.29	3.36	4.32	0.08	0.40	0.40	
T 0.50	7	4.67	0.46	3.91	5.42	6.63	0.77	5.38	7.89	3.85	0.28	3.38	4.32	0.05	0.45	0.45	
U 0.60	7	4.63	0.46	3.87	5.38	6.77	0.62	5.76	7.79	3.85	0.27	3.41	4.30	0.14	0.59	0.59	
R 0.70	7	4.57	0.45	3.84	5.30	6.87	0.57	5.93	7.81	3.87	0.28	3.42	4.32	0.12	0.71	0.71	
0.80	7	4.57	0.45	3.84	5.30	6.87	0.57	5.93	7.81	3.87	0.28	3.42	4.32	0.15	0.86	0.86	
N 0.90	7	4.48	0.49	3.68	5.28	6.75	0.70	5.59	7.90	3.87	0.28	3.42	4.33	0.12	0.98	0.98	
0.90	7	4.58	0.42	3.89	5.26	6.67	0.82	5.33	8.01	3.86	0.30	3.38	4.35	0.12	1.10	1.10	
1.00	7	4.74	0.37	4.13	5.35	6.66	0.67	5.07	8.25	3.86	0.32	3.33	4.39	0.17	1.27	1.27	

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	-----X----- 5 PCT	-----X----- 95 PCT	-----Y----- MEAN	-----Y----- SE	-----Y----- 5 PCT	-----Y----- 95 PCT	-----Z----- MEAN	-----Z----- SE	-----Z----- 5 PCT	-----Z----- 95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	20.38	0.62	19.37	21.40	5.92	0.54	4.38	7.47	11.54	1.28	9.45	13.64	0.0	0.0
0.10	6	20.37	0.69	19.23	21.51	5.90	0.95	4.34	7.47	11.55	1.30	9.41	13.68	0.03	0.03
F 0.20	7	20.35	0.72	19.16	21.54	5.72	0.99	4.09	7.35	11.53	1.20	9.56	13.50	0.19	0.21
O 0.30	7	20.29	0.73	19.09	21.48	5.68	0.98	4.07	7.28	11.54	1.19	9.59	13.48	0.07	0.29
R 0.40	7	20.26	0.70	19.12	21.45	5.65	0.91	4.07	7.14	11.55	1.19	9.60	13.49	0.03	0.32
W 0.50	7	20.28	0.71	19.11	21.44	5.65	0.84	4.27	7.03	11.56	1.20	9.60	13.53	0.02	0.34
A 0.60	7	20.19	0.77	18.92	21.46	5.61	0.88	4.16	7.05	11.57	1.23	9.56	13.59	0.09	0.44
R 0.70	7	20.12	0.83	18.76	21.49	5.58	0.92	4.07	7.10	11.57	1.25	9.53	13.62	0.07	0.51
D 0.80	7	20.13	0.80	18.82	21.45	5.61	0.94	4.06	7.16	11.56	1.22	9.55	13.56	0.04	0.55
O 0.90	7	20.19	0.71	19.03	21.35	5.62	0.98	4.02	7.22	11.55	1.21	9.56	13.53	0.06	0.61
1.00	7	20.26	0.64	19.21	21.30	5.59	1.02	3.93	7.26	11.54	1.22	9.54	13.53	0.07	0.68
0.0	7	20.26	0.64	19.21	21.30	5.59	1.02	3.93	7.26	11.54	1.22	9.54	13.53	0.0	0.0
0.10	7	20.26	0.69	19.14	21.39	5.57	0.97	3.97	7.17	11.55	1.20	9.59	13.51	0.03	0.03
0.20	7	20.32	0.73	19.12	21.52	5.57	0.53	4.05	7.09	11.56	1.19	9.61	13.51	0.05	0.09
R 0.30	7	20.38	0.80	19.06	21.70	5.63	0.91	4.14	7.12	11.50	1.20	9.54	13.47	0.10	0.19
E 0.40	7	20.36	0.72	19.17	21.54	5.69	0.91	4.21	7.17	11.45	1.20	9.48	13.42	0.08	0.27
T 0.50	7	20.36	0.56	19.44	21.28	5.70	0.87	4.27	7.13	11.45	1.21	9.47	13.43	0.01	0.28
U 0.60	7	20.28	0.70	19.13	21.42	5.64	0.54	4.10	7.18	11.49	1.20	9.53	13.45	0.11	0.39
R 0.70	7	20.39	0.79	18.79	21.40	5.49	1.04	3.79	7.20	11.50	1.19	9.56	13.45	0.23	0.63
N 0.80	6	20.02	1.10	18.23	21.82	5.60	1.25	3.54	7.65	11.59	1.27	9.50	13.68	0.15	0.78
O 0.90	6	20.25	0.73	19.05	21.46	5.81	1.03	4.13	7.43	11.54	1.29	9.43	13.65	0.32	1.10
1.00	6	20.38	0.62	19.37	21.40	5.92	0.94	4.38	7.47	11.54	1.28	9.45	13.64	0.18	1.27

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	-----X----- 5 PCT	-----X----- 95 PCT	-----Y----- MEAN	-----Y----- SE	-----Y----- 5 PCT	-----Y----- 95 PCT	-----Z----- MEAN	-----Z----- SE	-----Z----- 5 PCT	-----Z----- 95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	0.97	0.83	-0.39	2.34	7.19	1.16	5.29	9.09	20.39	1.35	18.17	22.62	0.0	0.0
0.10	6	0.70	0.58	-0.25	1.65	7.23	0.96	5.64	8.81	20.46	1.28	18.36	22.57	0.29	0.29
F 0.20	7	0.60	0.45	-0.14	1.33	7.38	0.80	6.06	8.70	20.55	1.14	18.68	22.42	0.20	0.49
O 0.30	7	0.58	0.39	-0.06	1.21	7.47	0.86	6.07	8.88	20.57	1.13	18.71	22.42	0.10	0.59
R 0.40	7	0.67	0.44	-0.05	1.39	7.45	0.93	5.92	8.98	20.69	1.06	18.94	22.43	0.15	0.74
W 0.50	7	0.76	0.53	-0.11	1.63	7.40	1.00	5.75	9.05	20.84	0.95	19.28	22.41	0.19	0.93
A 0.60	7	1.00	0.47	0.24	1.77	7.45	0.99	5.82	9.07	20.93	0.95	19.36	22.49	0.26	1.19
R 0.70	7	1.20	0.48	0.41	2.00	7.51	1.05	5.80	9.23	21.02	0.93	19.49	22.55	0.23	1.42
D 0.80	7	1.32	0.50	0.50	2.13	7.55	1.09	5.77	9.33	21.14	0.88	19.69	22.59	0.17	1.59
O 0.90	6	1.54	0.49	0.73	2.34	7.43	1.19	5.47	9.38	21.43	0.77	20.17	22.70	0.39	1.98
1.00	6	1.74	0.46	0.98	2.50	7.36	1.25	5.31	9.42	21.51	0.81	20.18	22.84	0.22	2.20
0.0	6	1.74	0.46	0.98	2.50	7.36	1.25	5.31	9.42	21.51	0.81	20.18	22.84	0.0	0.0
0.10	6	1.56	0.34	1.01	2.12	7.12	1.13	5.26	8.97	21.29	0.92	19.78	22.80	0.37	0.37
0.20	7	1.26	0.33	0.72	1.80	7.05	0.97	5.46	8.64	20.39	1.10	19.09	22.69	0.51	0.88
R 0.30	7	1.12	0.61	0.13	2.12	7.14	0.90	5.68	8.62	20.75	1.05	19.03	22.47	0.22	1.10
E 0.40	7	1.00	0.54	0.12	1.88	7.34	0.99	5.71	8.97	20.59	0.96	19.01	22.17	0.28	1.37
U 0.50	7	0.75	0.48	-0.04	1.55	7.40	1.06	5.66	9.14	20.52	0.97	18.93	22.12	0.26	1.64
T 0.60	7	0.69	0.66	-0.40	1.77	7.39	1.14	5.53	9.26	20.53	1.05	18.80	22.26	0.07	1.70
R 0.70	7	0.70	0.69	-0.43	1.83	7.30	1.08	5.54	9.07	20.50	1.09	18.72	22.29	0.09	1.79
N 0.80	7	0.77	0.55	-0.14	1.67	7.20	0.94	5.65	8.74	20.52	1.10	18.71	22.33	0.13	1.92
O 0.90	6	0.88	0.65	-0.18	1.95	7.14	1.06	5.40	8.87	20.43	1.27	18.35	22.51	0.16	2.08
1.00	6	0.97	0.83	-0.39	2.34	7.19	1.16	5.29	9.09	20.39	1.35	18.17	22.62	0.11	2.16

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE, N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	5	5.86	0.79	4.57	7.15	12.12	0.76	10.88	13.36	12.79	1.60	10.17	15.42	0.0	0.0	0.0
0.10	5	5.90	0.48	5.11	6.69	12.19	0.67	11.09	13.28	13.33	1.38	11.06	15.60	0.54	0.54	0.54
F 0.20	6	6.17	0.44	5.45	6.88	12.34	0.56	11.41	13.27	13.75	1.11	11.93	15.57	0.52	1.06	1.06
R 0.30	6	6.64	0.47	5.87	7.41	12.40	0.41	11.73	13.06	14.38	1.02	12.70	16.06	0.79	1.85	1.85
T 0.40	6	7.31	0.58	6.37	8.26	12.38	0.29	11.90	12.86	15.15	0.98	13.54	16.76	1.02	2.88	2.88
W 0.50	6	8.01	0.74	6.80	9.22	12.37	0.38	11.74	13.03	15.95	1.01	14.29	17.61	1.06	3.94	3.94
A 0.60	6	8.54	0.72	7.47	9.61	12.28	0.60	11.29	13.27	16.52	0.91	15.14	18.11	0.93	4.87	4.87
R 0.70	6	8.25	0.69	8.12	10.37	12.15	0.79	10.86	13.44	17.27	0.78	16.00	18.55	0.90	5.76	5.76
D 0.80	6	9.75	0.61	8.75	10.74	11.93	0.87	10.50	13.37	17.79	0.67	16.69	18.88	0.75	6.51	6.51
0.90	6	10.10	0.40	9.44	10.75	11.77	1.01	10.12	13.43	18.13	0.66	17.06	19.21	0.52	7.03	7.03
1.00	6	10.38	0.21	10.05	10.72	11.65	1.18	9.71	13.58	18.45	0.69	17.32	19.58	0.45	7.48	7.48
0.0	6	10.38	0.21	10.05	10.72	11.65	1.18	9.71	13.58	18.45	0.69	17.32	19.58	0.0	0.0	0.0
0.10	6	9.57	0.33	9.04	10.10	11.98	1.17	10.05	13.93	17.22	0.82	15.87	18.57	1.51	1.51	1.51
0.20	6	8.80	0.53	7.93	9.68	12.37	1.07	10.11	14.62	16.05	1.11	14.24	17.87	1.45	2.96	2.96
R 0.30	6	7.91	0.59	6.94	8.88	12.14	1.07	10.38	13.91	14.98	1.32	12.81	17.14	1.42	4.38	4.38
E 0.40	5	7.09	0.54	6.20	7.99	12.28	1.16	10.39	14.18	14.22	1.45	11.84	16.60	1.12	5.50	5.50
U 0.50	5	6.58	0.60	5.59	7.57	12.30	1.16	10.40	14.20	13.72	1.70	10.94	16.51	0.71	6.21	6.21
U 0.60	5	6.20	0.62	5.18	7.21	12.32	1.20	10.35	14.29	13.45	1.67	10.72	16.19	0.47	6.68	6.68
R 0.70	5	6.02	0.59	5.06	6.98	12.33	1.17	10.41	14.24	13.24	1.62	10.59	15.90	0.27	6.96	6.96
N 0.80	5	5.96	0.65	4.89	7.03	12.27	1.15	10.39	14.16	13.09	1.63	10.41	15.77	0.17	7.13	7.13
0.90	5	5.90	0.68	4.78	7.02	12.17	0.93	10.65	13.69	12.95	1.61	10.30	15.59	0.19	7.32	7.32
1.00	5	5.86	0.79	4.57	7.15	12.12	0.76	10.88	13.36	12.79	1.60	10.17	15.42	0.16	7.48	7.48

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE, N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	4	15.34	0.14	15.10	15.58	10.86	0.81	9.54	12.19	11.98	0.65	10.91	13.05	0.0	0.0	0.0
0.10	4	15.12	0.28	14.66	15.58	10.86	0.64	9.80	11.91	13.55	1.03	11.95	15.34	1.68	1.68	1.68
F 0.20	5	15.20	0.33	14.65	15.75	10.80	0.49	9.99	11.51	15.22	1.35	13.01	17.43	1.58	3.26	3.26
R 0.30	6	15.77	0.45	15.03	16.51	10.57	0.42	9.89	11.25	16.97	1.35	14.76	19.18	1.86	5.11	5.11
U 0.40	6	16.54	0.65	15.48	17.61	10.55	0.35	9.97	11.13	18.27	1.29	16.15	20.39	1.51	6.63	6.63
W 0.50	7	17.46	0.91	15.97	18.95	10.51	0.55	9.62	11.41	19.57	1.14	17.70	21.45	1.59	8.22	8.22
A 0.60	7	18.14	0.90	16.67	19.61	10.62	0.48	9.83	11.41	20.17	0.95	18.62	21.73	0.92	9.14	9.14
R 0.70	7	18.76	0.86	17.34	20.18	10.77	0.45	10.04	11.50	20.59	0.89	19.24	22.14	0.82	9.95	9.95
D 0.80	7	19.25	0.64	18.20	20.31	10.99	0.52	10.14	11.83	20.90	0.87	19.48	22.32	0.58	10.53	10.53
0.90	7	19.75	0.44	19.03	20.47	11.11	0.58	10.17	12.06	20.89	0.84	19.51	22.27	0.51	11.04	11.04
1.00	7	20.24	0.35	19.66	20.81	11.20	0.62	10.19	12.22	20.84	0.82	19.49	22.18	0.50	11.54	11.54
0.0	7	20.24	0.35	19.66	20.81	11.20	0.62	10.19	12.22	20.84	0.82	19.49	22.18	0.0	0.0	0.0
0.10	7	19.20	0.46	18.44	19.96	10.97	0.54	10.08	11.86	20.58	1.26	18.02	22.15	1.30	1.30	1.30
0.20	7	18.18	0.72	17.00	19.37	10.78	0.59	9.82	11.75	19.25	1.72	16.43	22.07	1.33	2.63	2.63
R 0.30	6	17.23	0.93	15.71	18.76	10.54	0.49	9.74	11.34	18.10	2.03	14.78	21.43	1.51	4.14	4.14
E 0.40	4	16.02	1.12	14.19	17.86	10.62	0.42	9.92	11.32	17.22	2.45	13.21	21.24	1.50	5.64	5.64
T 0.50	4	15.47	0.70	14.32	16.63	10.66	0.82	9.31	12.01	15.77	2.41	11.81	19.74	1.55	7.19	7.19
U 0.60	4	15.31	0.49	14.50	16.12	10.74	1.03	9.04	12.44	14.82	2.28	10.99	18.45	1.07	8.26	8.26
R 0.70	4	15.27	0.33	14.72	15.82	10.76	1.11	8.94	12.58	13.83	1.97	10.61	17.06	0.89	9.15	9.15
N 0.80	4	15.24	0.28	14.78	15.70	10.75	0.68	9.13	12.36	13.09	1.64	10.39	15.78	0.75	9.89	9.89
0.90	4	15.28	0.17	15.00	15.56	10.79	0.86	9.38	12.21	12.52	1.14	10.65	14.40	0.57	10.46	10.46
1.00	4	15.34	0.14	15.10	15.58	10.86	0.81	9.54	12.19	11.98	0.65	10.91	13.05	0.55	11.01	11.01

MOVEMENT: RIGHT HAND MOVES FROM STICK CONTROLLER AT +20.0, 0.0, +12.4 TO HATCH RELEASE CONTROLLER AT +13.0, -13.0, +23.0 AND RETURNS. THIS MOVEMENT IS PRECEDED BY LEFT HAND MOVING FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO STICK CONTROLLER AND IS FOLLOWED BY LEFT HAND RETURNING BACK TO STICK CONTROLLER.

MOTION NUMBER - 11150
 BACK ANGLE - 13

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.84	0.15	0.60 TO 1.00 SECS.
RIGHT REV	0.74	0.15	0.60 TO 1.00 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE/N	(-----X - CO-ORDINATE-----) MEAN	(-----X - CO-ORDINATE-----) SE	(-----X - CO-ORDINATE-----) 5 PCT	(-----Y - CO-ORDINATE-----) MEAN	(-----Y - CO-ORDINATE-----) SE	(-----Y - CO-ORDINATE-----) 5 PCT	(-----Z - CO-ORDINATE-----) MEAN	(-----Z - CO-ORDINATE-----) SE	(-----Z - CO-ORDINATE-----) 5 PCT	DISTANCE INCR	MOVED CUH
0.0	7	6.85	1.91	3.72	9.98	0.24	-1.53	29.48	1.09	27.68	31.27	0.0
0.10	7	6.51	1.50	4.05	8.97	-2.15	-4.18	29.57	1.33	27.39	31.74	0.0
0.20	7	6.51	1.63	3.85	9.18	-2.49	-4.42	29.57	1.21	27.58	31.74	1.95
0.30	7	6.56	1.57	3.98	9.13	-2.36	-4.19	29.54	1.17	27.72	31.55	2.49
0.40	7	6.45	1.64	3.76	9.14	-2.37	-4.01	29.53	1.06	27.90	31.37	2.44
0.50	7	6.36	1.89	3.26	9.35	-2.32	-3.66	29.50	0.99	27.98	31.23	2.55
0.60	7	6.34	1.83	3.33	9.35	-2.32	-3.58	29.59	0.94	28.05	31.23	2.65
0.70	7	6.22	1.81	3.26	9.18	-2.08	-3.48	29.70	0.99	28.08	31.14	2.68
0.80	7	6.19	1.72	3.36	9.02	-2.00	-3.59	29.70	1.06	28.02	31.32	2.97
0.90	7	6.25	1.74	3.40	9.10	-1.88	-3.65	29.77	1.06	28.03	31.49	3.07
1.00	7	6.34	1.74	3.49	9.18	-1.91	-3.52	29.55	1.07	27.89	31.50	3.21
0.0	7	6.34	1.74	3.49	9.18	-1.91	-3.52	29.55	1.07	27.89	31.40	0.0
0.10	7	6.72	1.72	3.90	9.54	-0.67	-2.27	29.57	1.10	27.78	31.37	1.30
0.20	7	6.86	1.75	3.99	9.72	-0.21	-1.79	29.53	1.15	27.64	31.42	1.77
0.30	7	6.70	1.81	3.73	9.66	-0.13	-1.08	29.52	1.17	27.60	31.43	1.95
0.40	7	6.69	1.86	3.64	9.74	-0.20	-1.93	29.49	1.19	27.54	31.43	2.03
0.50	7	6.73	1.77	3.82	9.64	-0.20	-1.80	29.49	1.23	27.48	31.50	2.07
0.60	7	6.71	1.72	3.89	9.52	-0.08	-1.47	29.61	1.17	27.70	31.53	2.25
0.70	7	6.72	1.82	3.74	9.71	-0.16	-1.31	29.62	1.18	27.69	31.56	2.33
0.80	7	6.83	1.81	3.86	9.80	-0.12	-1.09	29.53	1.11	27.72	31.35	2.48
0.90	7	6.83	1.84	3.81	9.85	-0.10	-1.15	29.48	1.08	27.72	31.25	2.54
1.00	7	6.85	1.91	3.72	9.98	-0.24	-1.53	29.48	1.09	27.68	31.27	2.68

LANDMARK - CERVICALE

(2)

TIME T	SAMPLE SIZE/N	(-----X - CO-ORDINATE-----) MEAN	(-----X - CO-ORDINATE-----) SE	(-----X - CO-ORDINATE-----) 5 PCT	(-----Y - CO-ORDINATE-----) MEAN	(-----Y - CO-ORDINATE-----) SE	(-----Y - CO-ORDINATE-----) 5 PCT	(-----Z - CO-ORDINATE-----) MEAN	(-----Z - CO-ORDINATE-----) SE	(-----Z - CO-ORDINATE-----) 5 PCT	DISTANCE INCR	MOVED CUH
0.0	7	-1.07	1.26	-3.14	1.00	0.40	-1.17	23.56	1.15	21.78	25.54	0.0
0.10	7	-0.70	0.96	-2.28	0.88	0.55	-1.14	23.74	1.19	21.78	25.69	0.40
0.20	7	-0.75	0.95	-2.31	0.80	0.43	-0.99	23.78	1.11	21.97	25.60	0.54
0.30	7	-0.74	0.93	-2.27	0.79	0.59	-0.53	23.82	1.03	22.14	25.50	0.71
0.40	7	-0.90	0.80	-2.31	0.51	0.64	-0.61	23.78	1.12	21.95	25.62	0.87
0.50	7	-0.87	1.21	-2.84	1.11	0.56	-0.69	23.81	1.13	21.95	25.66	0.96
0.60	7	-0.96	1.14	-2.83	0.90	0.91	-0.53	23.74	1.01	22.09	25.40	1.32
0.70	7	-0.88	0.99	-2.51	0.74	1.25	-0.31	23.77	1.11	21.95	25.59	1.68
0.80	7	-0.94	0.83	-2.31	0.43	1.24	-0.44	23.83	1.15	21.94	25.72	1.76
0.90	7	-0.86	0.87	-2.28	0.56	1.21	-0.32	23.92	1.17	21.99	25.84	1.88
1.00	7	-0.87	0.95	-2.43	0.69	1.19	-0.38	23.84	1.14	21.97	25.71	1.96
0.0	7	-0.87	0.95	-2.43	0.69	1.19	-0.38	23.84	1.14	21.97	25.71	0.0
0.10	7	-0.90	1.06	-2.64	0.84	1.26	-0.09	23.89	0.96	22.32	25.47	0.09
0.20	7	-1.03	1.13	-2.88	0.82	1.05	-0.18	23.89	1.01	22.23	25.54	0.34
0.30	7	-1.12	1.04	-2.82	0.58	0.86	-0.87	23.94	1.06	22.16	25.65	0.55
0.40	7	-0.94	1.12	-2.78	0.89	0.87	-1.04	23.92	1.08	22.16	25.68	0.72
0.50	7	-0.98	1.12	-2.82	0.85	0.78	-1.02	23.87	1.08	22.09	25.64	0.84
0.60	7	-0.97	1.09	-2.75	0.81	0.63	-1.02	23.80	1.06	22.02	25.58	1.01
0.70	7	-0.82	1.14	-2.70	1.05	0.63	-0.98	23.80	1.06	22.05	25.54	1.15
0.80	7	-0.83	1.12	-2.66	1.00	0.53	-1.28	23.78	1.01	22.12	25.43	1.25
0.90	7	-1.03	1.14	-2.90	0.85	0.35	-1.56	23.70	1.09	21.92	25.48	1.53
1.00	7	-1.07	1.26	-3.14	1.00	0.40	-1.17	23.56	1.15	21.78	25.54	1.61

LANDMARK - SUPRATERNALE (3)

TIME	SAMPLE SIZE,N	-----X-----			-----Y-----			-----Z-----			-----			DISTANCE INCR	MOVEMENT
		MEAN	SE	95 PCT	MEAN	SE	95 PCT	MEAN	SE	95 PCT	95 PCT	95 PCT			
0.0	7	3.06	1.95	0.13	0.26	0.38	1.14	22.52	1.16	20.71	24.52	0.0	0.0	0.0	
0.10	7	3.33	1.82	0.35	6.32	0.35	1.15	22.52	1.18	20.72	24.60	0.27	0.27	0.27	
0.20	7	3.26	1.77	0.36	6.17	0.19	1.08	22.72	1.13	20.79	24.58	0.18	0.45	0.45	
0.30	7	3.15	1.77	0.25	6.05	0.09	1.32	22.64	1.13	20.79	24.50	0.16	0.62	0.62	
0.40	7	3.00	1.86	-0.05	6.04	0.34	1.19	22.58	1.12	20.85	24.52	0.17	0.79	0.79	
0.50	7	2.76	2.07	0.64	6.16	0.49	1.55	22.74	1.08	20.96	24.51	0.28	1.07	1.07	
0.60	7	2.78	1.96	-0.43	5.99	0.58	1.53	22.64	1.11	20.83	24.46	0.13	1.20	1.20	
0.70	7	2.77	1.89	-0.32	5.87	0.62	1.36	22.57	1.07	20.94	24.44	0.06	1.26	1.26	
0.80	7	2.69	1.83	-0.31	5.68	0.64	1.23	22.57	1.08	20.90	24.44	0.09	1.36	1.36	
0.90	7	2.62	1.92	-0.54	5.77	0.58	1.24	22.66	1.01	21.03	24.33	0.09	1.45	1.45	
1.00	7	2.63	2.03	-0.70	5.96	0.53	1.26	22.72	1.02	21.04	24.40	0.06	1.51	1.51	
0.0	7	2.63	2.03	-0.70	5.96	0.53	1.26	22.72	1.02	21.04	24.40	0.0	0.0	0.0	
0.10	7	2.66	1.99	-0.61	5.92	0.64	1.14	22.79	1.04	21.09	24.50	0.13	0.13	0.13	
0.20	7	2.73	1.95	-0.46	5.93	0.55	1.07	22.74	1.07	20.99	24.50	0.15	0.26	0.26	
0.30	7	2.72	1.90	-0.42	5.83	0.44	1.13	22.75	1.05	21.03	24.47	0.11	0.37	0.37	
0.40	7	2.44	2.57	-1.78	6.65	0.28	0.78	22.79	1.04	21.09	24.50	0.33	0.70	0.70	
0.50	7	1.95	3.74	-1.18	8.08	-0.29	1.47	22.79	1.08	21.06	24.60	1.45	1.45	1.45	
0.60	7	2.57	2.57	-1.64	6.78	0.05	0.70	22.83	1.08	21.06	24.60	0.75	1.45	1.45	
0.70	7	3.05	1.98	-0.21	6.30	0.48	1.08	22.79	1.10	20.98	24.59	0.71	2.16	2.16	
0.80	7	3.12	1.84	0.11	6.13	0.33	1.08	22.76	1.13	20.90	24.62	0.64	2.80	2.80	
0.90	7	3.05	1.81	0.08	6.02	0.32	1.09	22.74	1.11	20.91	24.57	0.17	2.97	2.97	
1.00	7	3.06	1.95	-0.13	6.26	0.38	1.14	22.70	1.13	20.85	24.55	0.08	3.06	3.06	
								22.62	1.16	20.71	24.52	0.10	3.15	3.15	

LANDMARK - RT ACRGMION (4)

TIME	SAMPLE	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE	MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT		
0.0	7	-0.91	0.91	-2.39	0.58	-7.15	-8.04	-6.26	23.08	0.98	21.48	24.69	0.0	0.0	
0.10	7	-0.77	0.85	-2.17	0.63	-7.07	-7.91	-6.23	23.06	0.98	21.60	24.52	0.16	0.16	
0.20	7	-0.73	0.84	-2.11	0.64	-7.20	-8.03	-6.35	22.92	0.94	21.38	24.46	0.20	0.35	
0.30	7	-0.71	0.86	-2.11	0.70	-7.53	-8.47	-6.76	22.76	0.98	21.55	24.37	0.37	0.72	
0.40	7	-0.47	1.07	-2.22	1.28	-7.50	-8.30	-6.83	22.54	1.03	20.94	24.34	0.27	0.99	
0.50	7	-0.19	1.12	-2.03	1.66	-7.61	-8.34	-6.88	22.58	1.11	20.75	24.41	0.29	1.28	
0.60	7	0.14	1.05	-1.58	1.87	-7.71	-8.43	-7.01	22.48	1.15	20.59	24.37	0.29	1.57	
0.70	7	0.60	1.07	-1.16	2.36	-7.78	-8.46	-7.07	22.35	1.14	20.48	24.33	0.36	1.93	
0.80	7	0.61	1.02	-1.06	2.28	-7.88	-8.49	-7.07	22.27	1.11	20.44	24.09	0.48	2.41	
0.90	7	0.57	1.05	-1.16	2.29	-7.81	-8.62	-7.00	22.15	1.12	20.29	23.97	0.14	2.55	
1.00	7	0.04	1.16	-1.26	2.54	-8.03	-8.79	-7.27	21.99	1.21	20.00	23.98	0.17	2.72	

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	CUM
0.0	7	19.37	0.54	18.49	20.25	0.0
0.10	7	19.43	0.28	18.98	19.88	0.0
0.20	7	19.45	0.35	18.87	20.03	0.20
0.30	7	19.42	0.55	18.51	20.32	0.35
0.40	7	19.29	0.62	18.27	20.30	0.40
0.50	7	19.53	0.68	18.40	20.65	0.58
0.60	7	19.42	0.49	18.62	20.23	0.89
0.70	7	19.37	0.54	18.48	20.25	1.20
0.80	7	19.33	0.63	18.30	20.36	1.35
0.90	7	19.31	0.69	18.18	20.45	1.41
1.00	7	19.25	0.70	18.09	20.40	1.46
						1.54
0.0	7	19.25	0.70	18.09	20.40	0.0
0.10	7	19.30	0.80	17.98	20.61	0.09
0.20	7	19.32	0.83	17.97	20.68	0.15
0.30	7	19.38	0.71	18.21	20.55	0.28
0.40	7	19.42	0.64	18.37	20.46	0.35
0.50	7	19.47	0.49	18.67	20.27	0.47
0.60	7	19.44	0.38	18.81	20.07	0.55
0.70	7	19.38	0.45	18.64	20.11	0.63
0.80	7	19.38	0.50	18.56	20.21	0.72
0.90	7	19.37	0.55	18.47	20.27	0.81
1.00	7	19.37	0.54	18.49	20.25	0.86

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	CUM
0.0	7	1.76	1.02	0.09	3.43	0.0
0.10	7	1.57	1.00	0.06	3.20	0.09
0.20	7	1.56	0.76	0.31	2.82	0.29
0.30	7	1.34	0.59	0.37	2.31	0.32
0.40	7	0.87	0.75	0.36	2.10	0.60
0.50	7	0.65	0.76	0.60	1.90	1.10
0.60	7	0.25	0.88	1.19	1.68	1.45
0.70	7	0.06	0.79	1.23	1.35	1.94
0.80	7	0.27	0.74	0.95	1.48	2.30
0.90	7	0.42	0.80	0.89	1.73	2.54
1.00	7	0.32	0.86	1.09	1.72	2.71
						2.81
0.0	7	0.32	0.86	1.09	1.72	0.0
0.10	7	0.27	0.83	1.09	1.63	0.12
0.20	7	0.40	0.85	1.00	1.79	0.31
0.30	7	0.57	0.89	0.90	2.03	0.53
0.40	7	1.10	0.71	0.07	2.27	0.61
0.50	7	1.36	0.60	0.27	2.45	1.14
0.60	7	1.50	0.70	0.35	2.64	1.44
0.70	7	1.61	0.80	0.29	2.93	1.72
0.80	7	1.83	0.84	0.46	3.21	1.93
0.90	7	1.77	0.84	0.39	3.15	2.14
1.00	7	1.76	1.02	0.09	3.43	2.27
						2.37

MMT NO. 1160/13

LANDMARK - RT ELBOW CENTER (24)

TIME T	SAMPLE SIZE,N	(-X - CO-ORDINATE-----)					(-Y - CO-ORDINATE-----)					(-Z - CO-ORDINATE-----)					DISTANCE			MOVED		
		MEAN	SE	5 PCT	95 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	INCR	INCR	INCR	CUM	CUM	CUM
0.0	7	6.50	1.11	4.67	8.32	-7.05	0.51	-7.90	-6.21	10.35	1.51	8.08	13.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	5.90	1.09	4.12	7.68	-8.18	1.31	-10.33	-6.03	10.49	1.47	8.09	12.90	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
0.20	7	5.43	1.15	3.55	7.32	-8.56	1.37	-10.81	-6.31	10.53	1.55	8.00	13.07	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
0.30	7	4.55	1.12	2.72	6.38	-8.89	1.57	-11.46	-6.32	10.55	1.59	7.95	13.15	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
0.40	7	3.37	0.97	1.78	4.96	-9.50	1.59	-12.11	-6.89	10.95	1.53	8.14	13.16	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
0.50	7	2.82	0.89	1.36	4.28	-10.07	1.75	-12.94	-7.20	10.93	1.34	8.74	13.13	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
0.60	7	1.86	0.60	1.88	3.84	-10.93	1.45	-13.31	-8.55	11.49	1.44	9.80	13.19	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
0.70	7	3.16	0.53	2.30	4.03	-11.59	1.39	-13.87	-9.31	12.15	0.74	10.95	13.36	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
0.80	7	3.49	0.42	2.80	4.17	-12.13	1.37	-14.38	-9.88	12.55	0.73	11.45	13.84	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
0.90	7	3.86	0.35	3.32	4.59	-12.07	1.25	-14.12	-10.02	12.91	0.87	11.49	14.33	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
1.00	6	3.98	0.40	3.32	4.63	-12.07	1.31	-14.23	-9.92	12.96	0.95	11.41	14.51	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
0.0	6	3.90	0.43	3.20	4.60	-11.43	1.23	-13.46	-9.41	12.44	0.81	11.10	13.77	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
0.10	6	3.62	0.49	3.02	4.61	-10.59	1.04	-12.30	-8.88	11.59	1.08	9.93	13.46	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
0.20	7	3.73	0.77	2.46	4.99	-10.01	1.06	-11.76	-8.27	11.30	1.24	8.73	13.37	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
0.30	7	4.12	0.91	2.63	5.62	-9.37	1.05	-11.09	-7.66	11.10	1.44	8.73	13.46	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
0.40	7	4.72	1.12	2.89	6.55	-8.92	1.00	-10.56	-7.29	10.94	1.61	8.26	13.55	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
0.50	7	5.42	1.13	3.63	7.22	-8.30	1.06	-10.05	-6.56	10.79	1.60	8.16	13.42	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
0.60	7	6.02	0.98	4.41	7.83	-7.86	0.54	-9.40	-6.31	10.73	1.61	8.09	13.37	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
0.70	7	6.34	0.91	4.84	7.83	-7.46	0.66	-8.54	-6.37	10.57	1.63	8.00	13.34	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
0.80	7	6.48	1.01	4.83	8.14	-7.21	0.49	-8.02	-6.40	10.36	1.64	7.88	13.27	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
0.90	7	6.50	1.11	4.67	8.32	-7.05	0.51	-7.90	-6.21	10.35	1.51	8.08	13.02	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16

LANDMARK - RT WRIST CENTER (26)

TIME T	SAMPLE SIZE,N	(-X - CO-ORDINATE-----)					(-Y - CO-ORDINATE-----)					(-Z - CO-ORDINATE-----)					DISTANCE			MOVED		
		MEAN	SE	5 PCT	95 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	INCR	INCR	INCR	CUM	CUM	CUM
0.0	6	15.56	0.76	14.31	16.80	-2.98	0.38	-3.61	-2.35	12.12	0.59	11.15	13.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	6	14.58	0.67	13.49	15.68	-4.00	0.53	-4.83	-3.13	12.44	1.23	10.20	14.23	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42
0.20	6	13.87	1.09	12.08	15.66	-4.60	0.74	-5.82	-3.39	12.90	1.59	10.13	15.67	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
0.30	7	12.56	1.25	10.51	14.61	-5.33	1.11	-7.14	-3.51	13.88	2.06	10.50	17.26	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79
0.40	7	10.86	1.02	8.98	12.33	-6.78	1.52	-9.27	-4.29	15.40	2.15	11.87	18.94	2.84	2.84	2.84	2.84	2.84	2.84	2.84	2.84	2.84
0.50	7	9.32	1.15	7.44	11.20	-8.31	1.67	-11.06	-5.57	17.21	1.60	14.59	19.84	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73
0.60	7	7.86	1.67	5.13	10.60	-11.15	2.07	-14.54	-7.76	19.37	1.15	17.17	20.96	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68
0.70	7	8.57	0.71	7.41	9.73	-12.34	1.03	-14.04	-10.65	19.37	0.57	18.43	20.31	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42
0.80	7	9.25	0.49	8.45	10.04	-13.45	0.94	-14.99	-11.91	19.45	0.42	18.75	20.14	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
0.90	7	9.76	0.49	8.95	10.57	-13.66	0.83	-15.02	-12.30	19.38	0.29	19.12	20.05	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
1.00	7	9.94	0.52	9.09	10.79	-13.55	0.80	-14.87	-12.24	19.82	0.37	19.01	20.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
0.0	7	9.94	0.52	9.09	10.79	-13.55	0.80	-14.87	-12.24	19.82	0.37	19.01	20.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	9.37	0.53	8.42	10.31	-12.34	0.72	-13.52	-11.16	19.43	0.27	18.99	19.88	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
0.20	7	9.27	0.64	8.22	10.31	-10.72	1.11	-12.54	-8.90	18.79	0.71	17.62	19.95	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74
0.30	7	9.92	0.59	8.95	10.89	-0.69	1.86	-11.74	-5.63	17.80	1.56	15.57	20.03	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36
0.40	7	11.37	0.49	10.56	12.17	-6.47	1.29	-10.71	-2.23	16.32	1.49	12.80	17.69	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03
0.50	7	12.57	1.12	10.74	14.40	-5.99	1.29	-8.10	-3.88	15.24	1.27	11.25	15.41	10.17	10.17	10.17	10.17	10.17	10.17	10.17	10.17	10.17
0.60	7	14.16	0.87	12.73	15.59	-4.48	1.32	-6.65	-2.32	13.33	1.27	11.05	14.77	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91
0.70	7	14.63	1.09	12.85	16.41	-4.25	0.78	-5.53	-2.96	12.94	1.13	11.05	14.77	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
0.80	7	15.16	0.83	13.80	16.51	-3.70	0.59	-4.68	-2.73	12.44	0.88	10.97	13.85	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
0.90	6	15.39	0.79	14.10	16.68	-3.27	0.47	-4.04	-2.51	12.20	0.80	10.88	13.51	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
1.00	6	15.56	0.76	14.31	16.80	-2.98	0.38	-3.61	-2.35	12.12	0.59	11.15	13.10	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +15.0, -13.0, +4.8 TO HATCH RELEASE CONTROLLER AT +13.0, -13.0, +23.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +20.0, +10.0, +12.4.

MOTION NUMBER - 12160
 BACK ANGLE - 13

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
RGHT FWD	0.64	0.10	0.50 TO 0.80 SECS.
RGHT REV	0.73	0.20	0.40 TO 1.00 SECS.

LANDMARK - NASION (1)

TIME	SAMPLE	-----X-----	CO-ORDINATE-----	-----Y-----	CO-ORDINATE-----	-----Z-----	CO-ORDINATE-----	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	INCR
0.0	7	6.98	1.34	4.79	9.18	-2.58	1.37	4.82	0.0
0.10	7	6.57	1.48	4.15	8.99	-2.37	0.95	-3.93	0.0
F 0.20	7	6.20	1.58	3.61	8.79	-2.09	0.80	-3.40	0.75
O 0.30	7	5.95	1.56	3.39	8.51	-2.02	0.77	-3.29	0.56
R 0.40	7	5.89	1.46	3.50	8.29	-2.12	0.83	-3.49	1.32
W 0.50	7	6.01	1.42	3.68	8.34	-2.24	0.93	-3.77	1.58
A 0.60	7	6.01	1.54	3.48	8.54	-2.29	0.97	-3.88	1.11
R 0.70	7	5.92	1.53	3.41	8.43	-2.26	0.90	-3.90	1.87
D 0.80	7	5.81	1.52	3.31	8.30	-2.20	1.01	-3.86	1.92
O 0.90	7	5.83	1.62	3.17	8.47	-2.22	1.09	-4.00	2.02
1.00	7	5.89	1.72	3.06	8.72	-2.26	1.16	-4.16	2.17
0.0	7	5.89	1.72	3.06	8.72	-2.26	1.16	-4.16	2.28
0.10	7	6.13	1.63	3.46	8.80	-2.41	1.11	-4.23	0.0
0.20	7	6.25	1.55	3.70	8.79	-2.40	1.14	-4.26	0.39
R 0.30	7	6.29	1.47	3.87	8.70	-2.42	1.21	-4.40	0.85
E 0.40	7	6.45	1.48	4.02	8.88	-2.42	1.22	-4.42	0.18
T 0.50	7	6.46	1.38	4.20	8.72	-2.49	1.22	-4.49	0.17
U 0.60	7	6.58	1.36	4.34	8.81	-2.53	1.24	-4.56	1.00
R 0.70	7	6.83	1.37	4.58	9.09	-2.49	1.18	-4.43	0.08
N 0.80	7	6.89	1.37	4.64	9.14	-2.52	1.12	-4.36	1.08
O 0.90	7	6.89	1.31	4.74	9.05	-2.57	1.16	-4.47	1.21
1.00	7	6.98	1.34	4.79	9.18	-2.58	1.37	-4.82	1.47
0.0	7	6.98	1.34	4.79	9.18	-2.58	1.37	-4.82	1.54
0.10	7	6.13	1.63	3.46	8.80	-2.41	1.11	-4.23	1.63
0.20	7	6.25	1.55	3.70	8.79	-2.40	1.14	-4.26	0.08
R 0.30	7	6.29	1.47	3.87	8.70	-2.42	1.21	-4.40	0.39
E 0.40	7	6.45	1.48	4.02	8.88	-2.42	1.22	-4.42	0.85
T 0.50	7	6.46	1.38	4.20	8.72	-2.49	1.22	-4.49	0.18
U 0.60	7	6.58	1.36	4.34	8.81	-2.53	1.24	-4.56	0.17
R 0.70	7	6.83	1.37	4.58	9.09	-2.49	1.18	-4.43	1.00
N 0.80	7	6.89	1.37	4.64	9.14	-2.52	1.12	-4.36	0.08
O 0.90	7	6.89	1.31	4.74	9.05	-2.57	1.16	-4.47	1.21
1.00	7	6.98	1.34	4.79	9.18	-2.58	1.37	-4.82	1.47

LANDMARK - CERVICALE (2)

TIME	SAMPLE	-----X-----	CO-ORDINATE-----	-----Y-----	CO-ORDINATE-----	-----Z-----	CO-ORDINATE-----	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	INCR
0.0	7	-0.45	1.36	-2.68	1.78	0.53	0.47	-0.25	0.0
0.10	7	-0.51	1.38	-2.77	1.75	0.69	0.72	-0.49	0.0
F 0.20	7	-0.59	1.31	-2.73	1.55	0.93	0.84	-0.45	0.18
O 0.30	7	-0.68	1.07	-2.44	1.08	1.05	0.96	-0.52	0.43
R 0.40	7	-0.85	0.93	-2.37	0.67	0.97	1.00	-0.67	0.25
W 0.50	7	-0.94	0.98	-2.54	0.67	1.02	0.81	-0.31	0.19
A 0.60	7	-0.67	1.20	-2.65	1.30	1.13	0.71	-0.04	0.82
R 0.70	7	-0.63	1.24	-2.67	1.41	1.22	0.78	-0.07	0.91
D 0.80	7	-0.63	1.20	-2.60	1.34	1.39	1.03	-0.30	1.20
O 0.90	7	-0.66	1.11	-2.49	1.16	1.23	0.90	-0.24	1.30
1.00	7	-0.70	1.03	-2.38	0.99	0.98	0.77	-0.27	1.49
0.0	7	-0.70	1.03	-2.38	0.99	0.98	0.77	-0.27	1.66
0.10	7	-0.78	1.07	-2.53	0.98	0.98	0.77	-0.27	1.91
0.20	7	-0.77	1.03	-2.45	0.92	1.07	0.69	-0.07	0.0
R 0.30	7	-0.82	1.04	-2.52	0.89	1.02	0.77	-0.25	0.09
E 0.40	7	-0.81	1.18	-2.81	1.07	0.90	0.72	-0.29	0.09
T 0.50	7	-0.78	1.10	-2.59	1.03	0.79	0.54	-0.10	0.28
O 0.60	7	-0.64	1.27	-2.61	1.44	0.76	0.67	-0.33	0.19
R 0.70	7	-0.43	1.33	-2.71	1.75	0.78	0.86	-0.63	0.45
U 0.80	7	-0.33	1.34	-2.49	1.89	0.82	0.81	-0.52	0.63
N 0.90	7	-0.32	1.33	-2.50	1.85	0.64	0.69	-0.50	0.75
1.00	7	-0.45	1.36	-2.68	1.78	0.53	0.47	-0.25	0.90
0.0	7	-0.45	1.36	-2.68	1.78	0.53	0.47	-0.25	1.11
0.10	7	-0.78	1.07	-2.53	0.98	0.98	0.77	-0.27	1.26
0.20	7	-0.77	1.03	-2.45	0.92	1.07	0.69	-0.07	1.44
R 0.30	7	-0.82	1.04	-2.52	0.89	1.02	0.77	-0.25	1.61
E 0.40	7	-0.81	1.18	-2.81	1.07	0.90	0.72	-0.29	0.0
T 0.50	7	-0.78	1.10	-2.59	1.03	0.79	0.54	-0.10	0.09
O 0.60	7	-0.64	1.27	-2.61	1.44	0.76	0.67	-0.33	0.28
R 0.70	7	-0.43	1.33	-2.71	1.75	0.78	0.86	-0.63	0.19
U 0.80	7	-0.33	1.34	-2.49	1.89	0.82	0.81	-0.52	0.45
N 0.90	7	-0.32	1.33	-2.50	1.85	0.64	0.69	-0.50	0.63
1.00	7	-0.45	1.36	-2.68	1.78	0.53	0.47	-0.25	0.75

LANDMARK - SUPRASTERNALE (3)														
TIME T	SAMPLE SIZE,N	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			95 PCT			DISTANCE INCR
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	
0.0	7	2.57	1.51	0.11	0.53	1.02	-1.15	22.79	1.28	20.69	24.89	0.0	0.0	0.0
0.10	7	2.48	1.47	0.08	0.71	1.22	-1.29	22.76	1.18	20.82	24.69	0.21	0.21	0.21
F 0.20	7	2.35	1.47	-0.07	0.83	1.23	-1.18	22.77	1.07	21.01	24.52	0.18	0.18	0.39
O 0.30	7	2.20	1.50	-0.26	0.70	1.05	-1.02	22.73	1.05	21.06	24.51	0.19	0.19	0.58
R 0.40	7	2.14	1.40	-0.16	0.78	1.07	-0.98	22.85	1.06	21.12	24.58	0.12	0.12	0.70
W 0.50	7	2.23	1.41	-0.09	0.95	1.18	-0.98	22.99	1.09	21.19	24.78	0.24	0.24	0.94
A 0.60	7	2.22	1.66	-0.49	1.02	1.35	-1.19	22.98	1.12	21.14	24.83	0.07	0.07	1.01
R 0.70	7	2.08	1.63	-0.59	1.08	1.34	-1.12	22.98	1.10	21.18	24.78	0.15	0.15	1.16
D 0.80	7	1.98	1.53	-0.52	1.01	1.26	-1.06	22.88	1.03	21.19	24.57	0.16	0.16	1.32
O 0.90	7	2.14	1.43	-0.21	0.87	1.22	-1.13	22.88	1.05	21.18	24.61	0.20	0.20	1.52
1.00	7	2.30	1.54	-0.23	0.75	1.30	-1.38	22.98	1.09	21.20	24.76	0.22	0.22	1.74
0.0	7	2.30	1.54	-0.23	0.75	1.30	-1.38	22.98	1.09	21.20	24.76	0.0	0.0	0.0
0.10	7	2.24	1.54	-0.28	0.86	1.09	-0.93	23.04	1.01	21.39	24.69	0.14	0.14	0.14
0.20	7	2.25	1.40	-0.05	0.90	1.06	-0.83	22.92	0.97	21.32	24.52	0.12	0.12	0.26
R 0.30	7	2.15	1.37	-0.09	0.91	1.22	-1.08	22.76	1.00	21.12	24.41	0.19	0.19	0.45
E 0.40	7	2.21	1.58	-0.38	0.87	1.26	-1.19	22.85	1.02	21.18	24.52	0.12	0.12	0.57
U 0.50	7	2.10	1.50	-0.36	0.86	1.17	-1.06	22.83	1.04	21.12	24.53	0.11	0.11	0.69
T 0.60	7	2.35	1.34	0.15	0.83	1.23	-1.20	22.79	1.11	20.98	24.60	0.25	0.25	0.94
R 0.70	7	2.74	1.38	0.48	0.72	1.17	-1.19	22.81	1.11	20.99	24.63	0.41	0.41	1.35
N 0.80	7	2.82	1.42	0.49	0.64	0.99	-0.99	22.81	1.17	20.89	24.74	0.12	0.12	1.47
O 0.90	7	2.67	1.37	0.42	0.47	1.07	-1.27	22.70	1.26	20.63	24.77	0.25	0.25	1.72
1.00	7	2.57	1.51	0.11	0.53	1.02	-1.15	22.79	1.28	20.69	24.89	0.14	0.14	1.86

LANDMARK - RT ACROMION (4)														
TIME T	SAMPLE SIZE,N	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			95 PCT			DISTANCE INCR
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	
0.0	7	0.69	1.24	-1.34	-7.97	0.55	-8.87	21.62	1.02	19.95	23.28	0.0	0.0	0.0
0.10	7	0.27	1.16	-1.63	-7.74	0.57	-8.67	21.91	0.93	20.38	23.44	0.56	0.56	0.56
F 0.20	7	-0.18	1.07	-1.93	-7.56	0.53	-8.43	21.93	0.92	20.42	23.45	0.48	1.05	1.05
O 0.30	7	-0.53	0.97	-2.12	-7.58	0.45	-8.31	21.51	1.91	18.38	24.64	0.55	2.03	2.03
R 0.40	7	-0.74	0.88	-2.18	-7.54	0.43	-8.25	21.88	1.56	19.32	24.44	0.43	0.78	0.78
W 0.50	7	-0.76	0.99	-2.38	-7.41	0.52	-8.26	22.65	0.89	21.18	24.11	0.19	2.99	2.99
A 0.60	7	-0.73	1.29	-2.84	-7.30	0.60	-8.28	22.79	0.78	21.52	24.06	0.22	3.21	3.21
R 0.70	7	-0.84	1.28	-2.94	-7.16	0.61	-8.16	22.94	0.61	21.94	23.93	0.10	3.31	3.31
D 0.80	7	-0.79	0.97	-2.39	-7.15	0.54	-8.03	22.85	0.77	21.59	24.12	0.10	3.41	3.41
O 0.90	7	-0.70	0.93	-2.24	-7.16	0.59	-8.14	22.90	0.79	21.60	24.20	0.10	3.52	3.52
1.00	7	-0.65	0.96	-2.22	-7.22	0.57	-8.15	22.97	0.82	21.62	24.32	0.11	3.52	3.52
0.0	7	-0.65	0.96	-2.22	-7.22	0.57	-8.15	22.97	0.82	21.62	24.32	0.0	0.0	0.0
0.10	7	-0.64	0.87	-2.07	-7.21	0.60	-8.19	22.84	0.73	21.64	24.04	0.13	0.13	0.13
O 0.20	7	-0.66	0.85	-2.06	-7.23	0.64	-8.30	22.52	0.66	21.53	23.70	0.23	0.23	0.36
R 0.30	7	-0.75	0.90	-2.22	-7.35	0.57	-8.29	22.41	0.67	21.32	23.51	0.24	0.24	0.60
E 0.40	7	-0.52	1.07	-2.28	-7.46	0.53	-8.33	22.34	0.72	21.16	23.51	0.27	0.27	0.87
U 0.50	7	-0.32	1.05	-2.04	-7.68	0.51	-8.51	22.12	0.72	20.93	23.30	0.37	1.24	1.24
T 0.60	7	-0.32	1.18	-1.97	-7.65	0.55	-8.56	21.25	1.71	18.45	24.06	0.91	2.15	2.15
W 0.70	7	-0.36	1.30	-1.83	-7.75	0.60	-8.73	21.44	1.03	19.75	23.13	0.40	2.55	2.55
R 0.80	7	0.36	1.24	-1.67	-7.75	0.48	-8.55	21.83	0.86	20.41	23.24	0.39	2.94	2.94
N 0.90	7	0.55	1.23	-1.47	-7.88	0.55	-8.79	21.67	1.00	20.03	23.30	0.28	3.22	3.22
1.00	7	0.69	1.24	-1.34	-7.97	0.55	-8.87	21.62	1.02	19.95	23.28	0.17	3.39	3.39

LANDMARK - RT GRIP CENTER (16)

TIME T	SAMPLE SIZE,N	(------X - CO-ORDINATE-----)				(------Y - CO-ORDINATE-----)				(------Z - CO-ORDINATE-----)				DISTANCE				MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	INCR	INCR	
0.0	7	13.78	0.88	12.34	15.22	-14.15	0.65	-15.22	-13.09	4.21	0.41	3.54	4.87	0.0	0.0	0.0	0.0	0.0
0.10	7	12.92	0.65	11.85	13.99	-14.84	0.55	-16.41	-13.28	6.33	1.75	3.66	9.41	2.58	2.58	2.58	2.58	2.58
F 0.20	7	12.37	1.13	10.51	14.23	-15.47	1.56	-18.03	-12.92	8.81	1.75	5.94	11.68	2.42	5.00	2.42	5.00	5.00
O 0.30	7	11.31	1.53	8.81	13.81	-16.67	2.40	-20.60	-12.74	13.33	3.74	7.21	19.46	4.80	9.80	4.80	9.80	9.80
R 0.40	7	11.05	1.31	8.91	13.19	-16.79	1.96	-20.01	-13.57	15.57	2.54	11.90	19.24	2.26	12.05	2.26	12.05	12.05
W 0.50	7	10.87	1.60	8.24	13.49	-16.63	1.36	-18.85	-14.40	18.58	1.82	15.69	21.67	3.12	15.17	3.12	15.17	15.17
A 0.60	7	11.39	1.35	9.17	13.61	-15.95	1.21	-17.94	-13.96	20.45	1.01	18.79	22.10	1.96	17.13	1.96	17.13	17.13
R 0.70	7	11.83	0.92	10.32	13.35	-15.24	0.91	-16.74	-13.75	21.48	0.72	20.30	22.66	1.33	18.46	1.33	18.46	18.46
D 0.80	7	12.25	0.55	11.35	13.16	-14.75	0.64	-15.80	-13.69	22.35	0.36	21.46	22.64	0.87	19.33	0.87	19.33	19.33
0.90	7	12.50	0.48	11.71	13.29	-14.58	0.53	-15.45	-13.71	22.18	0.40	21.52	22.85	0.32	19.65	0.32	19.65	19.65
1.00	7	12.50	0.58	11.55	13.45	-14.50	0.61	-15.50	-13.51	22.19	0.48	21.40	22.99	0.08	19.73	0.08	19.73	19.73
0.0	7	12.50	0.58	11.55	13.45	-14.50	0.61	-15.50	-13.51	22.19	0.48	21.40	22.99	0.0	0.0	0.0	0.0	0.0
0.10	7	12.08	0.86	10.66	13.49	-14.88	0.61	-15.88	-13.88	21.32	0.45	20.59	22.06	1.04	1.04	1.04	1.04	1.04
0.20	7	11.72	1.35	9.52	13.93	-15.66	0.83	-17.02	-14.30	19.59	1.11	17.77	21.42	1.93	2.97	1.93	2.97	2.97
R 0.30	7	11.41	1.73	8.58	14.24	-16.40	1.01	-18.05	-14.74	16.94	2.13	13.45	20.43	2.77	5.74	2.77	5.74	5.74
E 0.40	7	11.44	1.64	8.74	14.14	-16.67	1.06	-18.42	-14.93	13.50	2.96	8.65	18.35	3.45	9.19	3.45	9.19	9.19
T 0.50	7	11.62	1.48	9.20	14.04	-16.41	1.31	-18.55	-14.26	10.10	3.15	4.94	15.27	3.41	12.60	3.41	12.60	12.60
U 0.60	7	12.14	1.35	9.93	14.35	-15.73	1.53	-18.25	-13.21	7.72	2.49	3.64	11.79	2.54	15.14	2.54	15.14	15.14
R 0.70	7	12.75	1.48	10.33	15.18	-14.99	1.45	-17.37	-12.62	6.00	1.61	3.36	8.65	1.96	17.10	1.96	17.10	17.10
N 0.80	7	13.22	1.36	10.99	15.45	-14.66	1.03	-16.36	-12.97	5.05	1.02	3.37	6.72	1.11	18.21	1.11	18.21	18.21
0.90	7	13.59	1.14	11.73	15.46	-14.42	0.65	-15.48	-13.36	4.49	0.65	3.42	5.55	0.71	18.93	0.71	18.93	18.93
1.00	7	13.78	0.88	12.34	15.22	-14.15	0.65	-15.22	-13.09	4.21	0.41	3.54	4.87	0.43	19.36	0.43	19.36	19.36

LANDMARK - RT TROCHANTER (18)

TIME T	SAMPLE SIZE,N	(------X - CO-ORDINATE-----)				(------Y - CO-ORDINATE-----)				(------Z - CO-ORDINATE-----)				DISTANCE				MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	INCR	INCR	
0.0	7	4.48	1.23	2.47	6.50	-7.73	1.00	-9.38	-6.08	3.89	0.42	3.20	4.59	0.0	0.0	0.0	0.0	0.0
0.10	7	4.12	0.84	2.74	5.50	-7.68	1.03	-9.37	-6.00	3.87	0.52	3.01	4.73	0.37	0.37	0.37	0.37	0.37
F 0.20	7	4.04	0.86	2.64	5.45	-7.64	1.14	-9.51	-5.77	3.84	0.63	2.80	4.88	0.09	0.09	0.09	0.09	0.09
O 0.30	7	4.26	1.10	2.41	6.01	-7.70	1.18	-9.65	-5.76	3.88	0.62	2.87	4.89	0.18	0.64	0.18	0.64	0.64
D 0.40	7	4.39	1.07	2.63	6.15	-7.79	0.99	-9.43	-5.95	4.14	1.02	2.46	5.81	0.27	0.91	0.27	0.91	0.91
W 0.50	7	4.43	1.11	2.61	6.25	-7.72	0.99	-9.34	-6.16	4.50	1.76	1.62	7.38	0.39	1.30	0.39	1.30	1.30
A 0.60	7	4.35	1.15	2.46	6.23	-7.66	0.95	-9.22	-6.10	4.20	0.91	2.71	5.69	0.31	1.61	0.31	1.61	1.61
R 0.70	7	4.36	1.25	2.31	6.40	-7.66	0.93	-9.19	-6.14	3.96	0.49	3.15	4.77	0.26	1.87	0.26	1.87	1.87
D 0.80	7	4.42	1.43	2.06	6.77	-7.76	1.00	-9.39	-6.12	3.94	0.49	3.13	4.75	0.07	1.94	0.07	1.94	1.94
0.90	7	4.37	1.57	1.80	6.95	-7.83	1.11	-9.65	-6.02	4.03	0.53	3.15	4.90	0.12	2.06	0.12	2.06	2.06
1.00	7	4.37	1.57	1.80	6.95	-7.83	1.11	-9.65	-6.02	4.03	0.53	3.15	4.90	0.12	2.18	0.12	2.18	2.18
0.0	7	4.37	1.57	1.80	6.95	-7.83	1.11	-9.65	-6.02	4.03	0.53	3.15	4.90	0.0	0.0	0.0	0.0	0.0
0.10	7	4.23	1.41	1.91	6.55	-7.82	1.18	-9.75	-5.89	3.99	0.54	3.10	4.88	0.15	0.15	0.15	0.15	0.15
0.20	7	4.19	1.22	2.19	6.19	-7.67	1.06	-9.41	-5.93	3.90	0.53	3.03	4.77	0.18	0.32	0.18	0.32	0.32
R 0.30	7	4.12	1.15	2.24	6.00	-7.59	0.95	-9.16	-6.02	3.86	0.52	3.02	4.71	0.11	0.43	0.11	0.43	0.43
E 0.40	7	4.07	1.22	2.15	6.16	-7.64	0.95	-9.20	-6.08	3.87	0.53	3.01	4.73	0.06	0.49	0.06	0.49	0.49
T 0.50	7	4.15	1.44	1.72	6.43	-7.69	0.79	-8.99	-6.39	3.88	0.48	3.10	4.66	0.10	0.59	0.10	0.59	0.59
O 0.60	7	4.13	1.44	1.76	6.49	-7.80	0.89	-9.26	-6.34	3.87	0.49	3.07	4.66	0.12	0.71	0.12	0.71	0.71
U 0.70	7	4.35	1.21	2.37	6.33	-7.84	1.06	-9.58	-6.09	2.82	2.53	-1.33	6.98	1.07	1.78	1.07	1.78	1.78
N 0.80	7	4.47	1.21	2.49	6.46	-7.72	1.11	-9.54	-5.90	2.89	2.58	-1.34	7.12	0.18	1.96	0.18	1.96	1.96
0.90	7	4.35	1.33	2.17	6.53	-7.76	0.94	-9.29	-6.22	3.88	0.50	3.07	4.70	1.00	2.96	1.00	2.96	2.96
1.00	7	4.48	1.23	2.47	6.50	-7.73	1.00	-9.38	-6.08	3.89	0.42	3.20	4.59	0.14	3.10	0.14	3.10	3.10

IVMT NO. 12160/13

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T																	INCR	CUM
0.0		7	19.62	0.67	18.53	20.72	-6.32	1.65	-9.02	-3.62	11.73	0.63	10.70	12.76	0.0	0.0	0.0	0.0
0.10		7	19.59	0.50	18.76	20.41	-6.38	1.73	-9.22	-3.45	11.70	0.61	10.69	12.70	0.08	0.08	0.08	0.08
0.20		7	19.62	0.48	18.83	20.41	-6.39	1.79	-9.32	-3.45	11.66	0.58	10.71	12.61	0.05	0.12	0.12	0.12
0.30		7	19.43	0.83	18.07	20.79	-6.47	1.73	-9.31	-3.64	11.56	0.57	10.62	12.50	0.23	0.36	0.36	0.36
0.40		7	19.59	0.74	18.38	20.81	-6.51	1.67	-9.25	-3.76	11.51	0.60	10.62	12.60	0.17	0.53	0.53	0.53
0.50		7	19.61	0.49	18.81	20.41	-6.36	1.76	-9.23	-3.48	11.75	0.67	10.64	12.85	0.20	0.73	0.73	0.73
0.60		7	19.71	0.67	18.62	20.80	-6.43	1.66	-9.15	-3.70	11.75	0.62	10.73	12.77	0.12	0.85	0.85	0.85
0.70		7	19.72	0.67	18.62	20.81	-6.44	1.63	-9.11	-3.77	11.72	0.68	10.60	12.84	0.04	0.89	0.89	0.89
0.80		7	19.64	0.54	18.75	20.53	-6.42	1.69	-9.18	-3.65	11.64	0.70	10.49	12.79	0.11	1.00	1.00	1.00
0.90		7	19.60	0.57	18.66	20.54	-6.42	1.68	-9.17	-3.67	11.69	0.60	10.71	12.68	0.07	1.07	1.07	1.07
1.00		7	19.56	0.80	18.25	20.87	-6.41	1.66	-9.12	-3.69	11.77	0.54	10.88	12.66	0.09	1.16	1.16	1.16
0.0		7	19.56	0.80	18.25	20.87	-6.41	1.66	-9.12	-3.69	11.77	0.54	10.88	12.66	0.0	0.0	0.0	0.0
0.10		7	19.67	0.59	18.70	20.64	-6.43	1.72	-9.25	-3.61	11.74	0.65	10.68	12.81	0.11	0.11	0.11	0.11
0.20		7	19.62	0.55	18.71	20.53	-6.43	1.69	-9.20	-3.67	11.70	0.74	10.49	12.92	0.06	0.17	0.17	0.17
0.30		7	19.55	0.54	18.66	20.43	-6.41	1.62	-9.06	-3.75	11.63	0.74	10.42	12.83	0.11	0.28	0.28	0.28
0.40		7	19.58	0.55	18.69	20.48	-6.33	1.59	-8.94	-3.72	11.52	0.72	10.43	12.81	0.09	0.37	0.37	0.37
0.50		7	19.55	0.57	18.61	20.49	-6.29	1.55	-8.83	-3.75	11.64	0.74	10.42	12.86	0.06	0.42	0.42	0.42
0.60		7	19.61	0.55	18.70	20.52	-6.29	1.51	-8.76	-3.81	11.65	0.69	10.51	12.79	0.06	0.48	0.48	0.48
0.70		7	19.73	0.60	18.75	20.72	-6.25	1.54	-8.78	-3.73	11.66	0.60	10.67	12.65	0.13	0.61	0.61	0.61
0.80		7	19.69	0.69	18.55	20.83	-6.28	1.46	-8.68	-3.86	11.67	0.59	10.71	12.63	0.05	0.67	0.67	0.67
0.90		7	19.60	0.69	18.47	20.73	-6.35	1.46	-8.75	-3.86	11.66	0.59	10.69	12.63	0.11	0.78	0.78	0.78
1.00		7	19.62	0.67	18.53	20.72	-6.32	1.65	-9.02	-3.62	11.73	0.63	10.70	12.76	0.08	0.86	0.86	0.86

223

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T																	INCR	CUM
0.0		7	1.44	0.96	-0.13	3.00	-7.63	0.63	-8.66	-6.60	19.61	0.86	18.19	21.02	0.0	0.0	0.0	0.0
0.10		7	1.09	0.81	-0.24	2.42	-7.59	0.57	-8.53	-6.65	19.90	0.69	18.77	21.04	0.46	0.46	0.46	0.46
0.20		7	0.69	0.71	-0.47	1.85	-7.57	0.51	-8.41	-6.74	20.02	0.70	18.88	21.17	0.42	0.88	0.88	0.88
0.30		7	0.36	0.63	-0.67	1.39	-7.70	0.50	-8.52	-6.88	20.10	0.78	18.82	21.38	0.36	1.24	1.24	1.24
0.40		7	0.21	0.65	-0.85	1.28	-7.83	0.51	-8.67	-6.99	20.34	0.82	19.00	21.68	0.31	1.55	1.55	1.55
0.50		7	0.23	0.62	-0.96	1.41	-7.81	0.49	-8.62	-7.00	20.61	0.75	19.38	21.83	0.27	1.82	1.82	1.82
0.60		7	0.40	1.02	-1.28	2.08	-7.72	0.44	-8.44	-7.00	20.87	0.58	19.92	21.81	0.32	2.14	2.14	2.14
0.70		7	0.48	1.04	-1.22	2.18	-7.67	0.43	-8.37	-6.97	21.02	0.45	20.28	21.77	0.18	2.32	2.32	2.32
0.80		7	0.53	1.01	-1.12	2.18	-7.71	0.55	-8.61	-6.82	21.07	0.45	20.34	21.81	0.08	2.41	2.41	2.41
0.90		7	0.55	1.03	-1.14	2.24	-7.76	0.59	-8.73	-6.79	21.15	0.46	20.40	21.90	0.09	2.50	2.50	2.50
1.00		7	0.50	1.04	-1.21	2.21	-7.78	0.65	-8.85	-6.71	21.21	0.44	20.49	21.94	0.08	2.58	2.58	2.58
0.0		7	0.50	1.04	-1.21	2.21	-7.78	0.65	-8.85	-6.71	21.21	0.44	20.49	21.94	0.0	0.0	0.0	0.0
0.10		7	0.33	0.94	-1.22	1.88	-7.75	0.55	-8.65	-6.84	21.06	0.42	20.38	21.74	0.24	0.24	0.24	0.24
0.20		7	0.25	0.95	-1.32	1.81	-7.69	0.52	-8.55	-6.84	20.76	0.44	20.04	21.49	0.31	0.55	0.55	0.55
0.30		7	0.21	0.83	-1.16	1.57	-7.73	0.45	-8.47	-6.99	20.48	0.49	19.68	21.28	0.28	0.83	0.83	0.83
0.40		7	0.33	0.90	-1.13	1.80	-7.62	0.46	-8.38	-6.87	20.48	0.47	19.62	21.17	0.19	1.02	1.02	1.02
0.50		7	0.39	0.83	-0.96	1.75	-7.66	0.41	-8.33	-6.99	20.24	0.51	19.40	21.08	0.17	1.20	1.20	1.20
0.60		7	0.57	0.91	-0.91	2.06	-7.69	0.42	-8.37	-7.01	20.04	0.64	18.99	21.10	0.26	1.46	1.46	1.46
0.70		7	0.95	1.06	-0.78	2.69	-7.67	0.41	-8.35	-7.00	19.97	0.66	18.88	21.06	0.39	1.85	1.85	1.85
0.80		7	1.28	0.98	-0.32	2.89	-7.66	0.44	-8.38	-6.94	19.80	0.78	18.53	21.07	0.37	2.22	2.22	2.22
0.90		7	1.42	0.94	-0.12	2.96	-7.74	0.49	-8.54	-6.95	19.68	0.85	18.29	21.07	0.20	2.42	2.42	2.42
1.00		7	1.44	0.96	-0.13	3.00	-7.63	0.63	-8.66	-6.60	19.61	0.86	18.19	21.02	0.14	2.56	2.56	2.56

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO HATCH RELEASE CONTROLLER AT +13.0, -13.0, +23.0 AND RETURNS. RIGHT HAND REMAINS AT STICK CONTROLLER AT +20.0, 0.0, +12.4.

NOTE:

IN THE CASE OF MOVEMENT NUMBERS 21260 AND 22260 AT 13° BACK ANGLE, TWO SETS OF TABLES EACH FOR POINTS 17 AND 27 ARE PROVIDED. THIS IS BECAUSE THESE TWO POINTS WERE OBSTRUCTED IN VIEW FROM THE CAMERA AT LOCATIONS NEARER TO HATCH RELEASE CONTROL AND THEREFORE A SECOND SERIES OF PICTURES VIEWED FROM RIGHT HAND SIDE WAS TAKEN. THE DATA FROM THE SECOND SERIES FORM THE SET OF DATA MARKED WITH AN ASTERICK FOR THE POINTS 17 AND 27. THE USER IS ADVISED TO CONSULT BOTH THE SET OF TABLES FOR THESE POINTS ONLY.

MOTION NUMBER - 21260
 BACK ANGLE - 13

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.67	0.15	0.40 TO 0.90 SECS.
LEFT REV	0.69	0.15	0.50 TO 0.90 SECS.

LANDMARK - NASION (1)

TIME	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED CUM		
0	7	6.07	1.29	3.95	8.19	0.67	1.09	-1.12	2.45	29.07	1.02	27.39	30.74	0.0	0.0		
0.10	7	5.38	1.15	3.49	7.27	-1.95	1.02	-3.62	-0.27	30.10	1.08	28.33	31.87	2.89	2.89		
0.20	7	4.97	1.15	3.09	6.86	-3.27	0.63	-4.30	-0.25	30.46	1.13	28.60	32.32	1.44	4.33		
0.30	7	4.84	1.10	3.03	6.64	-3.59	0.63	-4.61	-0.25	30.37	1.16	28.48	32.27	0.36	4.69		
0.40	7	4.80	0.91	3.31	6.28	-3.69	0.93	-5.22	-2.16	30.35	1.18	28.41	32.29	0.11	4.79		
0.50	7	4.63	0.96	3.05	6.21	-3.96	1.04	-5.67	-2.25	30.42	1.23	28.41	32.43	0.33	5.12		
0.60	7	4.44	1.04	2.72	6.15	-4.16	1.09	-5.95	-2.37	30.38	1.23	28.36	32.40	0.28	5.40		
0.70	7	4.33	0.96	2.75	5.92	-4.21	1.22	-6.22	-2.20	30.35	1.17	28.43	32.27	0.12	5.52		
0.80	7	4.25	1.13	2.39	6.11	-4.50	0.54	-6.04	-2.95	30.36	1.25	28.32	32.40	0.30	5.82		
0.90	7	4.25	1.21	2.27	6.23	-4.73	1.00	-6.36	-3.09	30.39	1.30	28.27	32.52	0.23	6.05		
1.00	7	4.40	1.12	2.56	6.24	-4.78	1.28	-6.88	-2.68	30.36	1.30	28.23	32.50	0.16	6.21		
2.0	7	4.40	1.12	2.56	6.24	-4.78	1.28	-6.88	-2.68	30.36	1.30	28.23	32.50	0.0	0.0		
3.0	7	5.48	1.35	3.26	7.70	-1.88	0.42	-2.56	-1.19	29.25	1.30	27.48	31.74	3.19	3.19		
4.0	7	5.99	1.28	3.90	8.08	-0.52	0.71	-1.69	0.04	29.25	1.18	27.31	31.19	1.49	4.68		
5.0	7	5.99	1.14	4.12	7.87	-0.36	0.80	-1.67	0.95	29.07	1.13	27.29	30.99	0.20	4.88		
6.0	7	5.89	1.29	3.77	8.01	-0.20	0.98	-1.80	1.40	29.07	1.06	27.33	30.81	0.20	5.08		
7.0	7	5.92	1.23	3.91	7.94	-0.16	1.07	-1.91	1.60	29.10	1.04	27.39	30.81	0.06	5.14		
8.0	7	6.01	1.21	4.03	8.00	-0.13	1.21	-2.11	1.85	29.13	1.04	27.42	30.85	0.10	5.24		
9.0	7	6.07	1.34	3.88	8.26	-0.03	1.25	-2.08	2.03	29.14	1.07	27.38	30.90	0.11	5.36		
10.0	7	6.04	1.32	3.87	8.21	0.21	1.31	-1.93	2.35	29.13	1.05	27.41	30.86	0.24	5.59		
11.0	7	6.04	1.32	3.87	8.22	0.43	1.32	-1.74	2.59	29.12	1.04	27.41	30.82	0.22	5.81		
12.0	7	6.07	1.29	3.95	8.19	0.67	1.09	-1.12	2.45	29.07	1.02	27.39	30.74	0.25	6.06		

LANDMARK - CERVICALE (2)

TIME	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED		
0.0	7	-1.04	0.63	-2.07	-0.01	-1.35	0.70	-2.50	-0.19	23.32	23.32	1.00	21.68	24.95	0.0	0.0	
0.10	7	-0.88	0.65	-1.95	0.18	-1.12	0.66	-2.21	-0.04	23.39	23.39	1.13	21.54	25.24	0.28	0.0	
0.20	7	-0.96	0.70	-2.10	0.18	-1.08	0.75	-2.31	0.15	23.27	23.27	1.19	21.33	25.22	0.15	0.28	
0.30	7	-1.05	0.85	-2.45	0.34	-1.07	0.74	-2.29	0.16	23.17	23.17	1.20	21.20	25.14	0.14	0.43	
0.40	7	-0.88	0.88	-2.32	0.56	-1.11	0.89	-2.56	0.35	23.31	23.31	1.15	21.42	25.20	0.22	0.79	
0.50	7	-0.82	0.99	-2.44	0.80	-1.22	0.91	-2.72	0.27	23.39	23.39	1.11	21.56	25.21	0.15	0.95	
0.60	7	-0.85	1.03	-2.54	0.84	-1.33	0.78	-2.62	-0.04	23.49	23.49	1.07	21.74	25.24	0.15	1.10	
0.70	7	-0.79	1.05	-2.52	0.93	-1.52	0.84	-2.90	-0.15	23.50	23.50	1.02	21.93	25.28	0.23	1.33	
0.80	7	-0.65	1.10	-2.45	1.15	-1.77	1.05	-3.49	-0.06	23.52	23.52	1.05	21.90	25.33	0.29	1.62	
0.90	7	-0.61	1.08	-2.39	1.17	-1.84	0.99	-3.47	-0.22	23.68	23.68	1.08	21.91	25.45	0.10	1.72	
1.00	7	-0.73	0.95	-2.29	0.83	-1.97	0.96	-3.54	-0.39	23.78	23.78	1.09	21.99	25.56	0.19	1.91	
0.0	7	-0.73	0.95	-2.29	0.83	-1.97	0.96	-3.54	-0.39	23.78	23.78	1.09	21.99	25.56	0.0	0.0	
0.10	7	-0.85	0.90	-2.32	0.62	-1.88	0.74	-3.08	-0.67	23.74	23.74	1.16	21.84	25.64	0.16	0.16	
0.20	7	-0.87	0.86	-2.29	0.55	-1.96	0.64	-3.33	-0.59	23.62	23.62	1.15	21.74	25.50	0.14	0.30	
0.30	7	-0.92	0.75	-2.14	0.30	-2.04	0.78	-3.32	-0.75	23.47	23.47	1.11	21.65	25.29	0.18	0.48	
0.40	7	-1.07	0.70	-2.21	0.07	-1.96	0.61	-2.96	-0.95	23.37	23.37	1.07	21.62	25.12	0.20	0.68	
0.50	7	-1.11	0.58	-2.06	-0.16	-1.73	0.59	-2.70	-0.76	23.41	23.41	1.06	21.67	25.16	0.23	0.91	
0.60	7	-1.03	0.64	-2.07	0.02	-1.47	0.53	-2.34	-0.60	23.51	23.51	1.08	21.75	25.28	0.29	1.20	
0.70	7	-0.94	0.73	-2.14	0.27	-1.49	0.46	-2.44	-0.73	23.41	23.41	1.12	21.58	25.25	0.14	1.34	
0.80	7	-1.09	0.75	-2.32	0.13	-1.38	0.50	-2.24	-0.56	23.37	23.37	1.12	21.53	25.21	0.19	1.53	
0.90	7	-1.16	0.68	-2.27	-0.05	-1.33	0.55	-2.21	-0.43	23.37	23.37	1.05	21.65	25.10	0.09	1.62	
1.00	7	-1.04	0.63	-2.07	-0.01	-1.35	0.70	-2.50	-0.19	23.32	23.32	1.00	21.68	24.95	0.13	1.75	

LANDMARK - LT GRIP CENTER (17)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	INCR	MOVED
0.0	5	18.27	0.31	17.76	18.78	10.18	0.59	9.21	11.15	12.86	0.38	12.24	13.48	0.0	0.0	0.0	0.0
0.10	5	17.57	0.29	17.09	18.05	7.59	4.05	3.28	11.14	15.91	1.35	13.70	18.12	4.06	4.06	0.0	0.0
F 0.20	6	17.41	1.41	15.09	19.72	4.78	3.16	-0.61	10.16	18.53	2.36	14.65	22.40	3.85	7.91	0.0	0.0
O 0.30	3	15.87	0.94	14.33	17.41	-0.15	6.13	-10.20	9.90	23.40	3.55	17.57	29.22	7.10	7.10	0.0	0.0
R 0.40	3	15.46	1.68	12.70	18.22	-0.90	0.68	-2.01	0.22	22.18	0.77	20.91	23.45	1.48	16.48	0.0	0.0
W 0.50	1	16.32	0.0	16.32	16.32	-4.63	0.0	-4.63	-4.63	22.51	0.0	22.51	22.51	3.84	20.33	0.0	0.0
A 0.60	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.33	0.0	0.0
R 0.70	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.33	0.0	0.0
D 0.80	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.33	0.0	0.0
O 0.90	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.33	0.0	0.0
1.00	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.33	0.0	0.0
0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.20	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R 0.30	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E 0.40	3	16.63	1.79	13.70	19.57	-0.03	1.49	-2.48	2.42	21.63	2.76	17.10	26.16	0.0	0.0	0.0	0.0
T 0.50	7	16.86	1.84	13.84	19.87	2.51	1.01	0.86	4.16	20.13	1.71	17.34	22.93	2.95	2.95	0.0	0.0
U 0.60	7	17.70	1.65	15.00	20.41	6.34	1.99	3.07	9.61	17.54	1.25	15.49	19.59	4.71	7.66	0.0	0.0
R 0.70	7	18.32	1.74	15.46	21.18	10.08	3.82	3.82	16.34	14.56	2.01	11.36	17.96	4.76	12.42	0.0	0.0
N 0.80	6	17.97	1.10	16.18	19.77	9.23	0.74	8.01	10.45	14.93	0.73	13.73	16.12	0.96	13.38	0.0	0.0
O 0.90	5	17.95	0.42	17.25	18.65	10.01	0.53	8.48	11.55	13.68	0.58	12.73	14.62	1.48	14.85	0.0	0.0
1.00	5	18.27	0.31	17.76	18.78	10.18	0.59	9.21	11.15	12.86	0.38	12.24	13.48	0.89	15.75	0.0	0.0

LANDMARK - LT TROCHANTER (19)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	INCR	MOVED
0.0	7	4.15	0.87	2.71	5.58	6.89	0.70	5.74	8.04	3.94	0.34	3.39	4.49	0.0	0.0	0.0	0.0
0.10	7	4.14	0.78	2.85	5.42	6.83	0.62	5.82	7.85	3.94	0.30	3.45	4.44	0.06	0.06	0.0	0.0
F 0.20	7	4.17	0.72	2.98	5.36	6.88	0.59	5.91	7.85	3.94	0.31	3.43	4.44	0.06	0.06	0.0	0.0
O 0.30	7	4.30	0.77	3.04	5.55	6.89	0.64	5.85	7.94	3.90	0.34	3.34	4.47	0.13	0.25	0.0	0.0
R 0.40	7	4.37	0.81	3.05	5.69	6.86	0.75	5.64	8.09	3.91	0.28	3.45	4.47	0.08	0.33	0.0	0.0
W 0.50	7	4.37	0.91	2.88	5.86	6.82	0.88	5.38	8.26	3.98	0.30	3.49	4.47	0.09	0.42	0.0	0.0
A 0.60	7	4.33	0.93	2.81	5.85	6.85	0.81	5.52	8.18	4.01	0.31	3.51	4.52	0.06	0.48	0.0	0.0
R 0.70	7	4.35	0.92	2.84	5.86	6.81	0.73	5.62	8.01	4.01	0.25	3.59	4.53	0.04	0.52	0.0	0.0
D 0.80	7	4.33	0.82	2.99	5.67	6.81	0.78	5.54	8.08	4.02	0.32	3.50	4.54	0.03	0.54	0.0	0.0
O 0.90	7	4.27	0.71	3.11	5.43	6.71	0.80	5.40	8.03	4.05	0.32	3.50	4.54	0.12	0.66	0.0	0.0
1.00	7	4.24	0.64	3.19	5.29	6.64	0.82	5.30	7.99	4.05	0.33	3.56	4.65	0.09	0.75	0.0	0.0
0.0	7	4.24	0.64	3.19	5.29	6.64	0.82	5.30	7.99	4.05	0.33	3.56	4.65	0.0	0.0	0.0	0.0
0.10	7	4.20	0.69	3.07	5.32	6.78	0.79	5.48	8.08	3.98	0.36	3.39	4.56	0.19	0.19	0.0	0.0
0.20	7	4.26	0.71	3.09	5.42	6.81	0.73	5.61	8.01	3.92	0.34	3.36	4.48	0.09	0.28	0.0	0.0
R 0.30	7	4.27	0.72	3.09	5.45	6.74	0.70	5.60	7.89	3.94	0.29	3.46	4.41	0.07	0.35	0.0	0.0
E 0.40	7	4.19	0.74	2.97	5.41	6.73	0.63	5.70	7.76	3.97	0.30	3.48	4.45	0.09	0.44	0.0	0.0
T 0.50	7	4.18	0.72	2.99	5.37	6.70	0.68	5.59	7.81	3.94	0.29	3.46	4.42	0.04	0.48	0.0	0.0
U 0.60	7	4.20	0.71	3.03	5.37	6.70	0.73	5.48	7.87	3.92	0.30	3.43	4.42	0.04	0.51	0.0	0.0
R 0.70	7	4.20	0.79	2.91	5.49	6.70	0.70	5.54	7.85	3.96	0.28	3.49	4.42	0.04	0.55	0.0	0.0
N 0.80	7	4.19	0.90	2.72	5.66	6.82	0.74	5.60	8.03	3.94	0.29	3.47	4.41	0.12	0.68	0.0	0.0
O 0.90	7	4.19	0.90	2.72	5.67	6.90	0.74	5.70	8.11	3.93	0.31	3.42	4.44	0.09	0.76	0.0	0.0
1.00	7	4.15	0.87	2.71	5.58	6.89	0.70	5.74	8.04	3.94	0.34	3.39	4.49	0.05	0.81	0.0	0.0

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE				MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	INCR	INCR	CUM	CUM	CUM	CUM
0.0	4	20.41	0.55	19.51	21.31	5.70	0.36	5.10	6.29	11.23	1.51	8.76	13.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	4	20.52	0.44	19.80	21.25	5.78	0.75	4.55	7.01	11.31	1.49	8.87	13.75	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
F 0.20	5	20.52	0.83	19.16	21.89	6.19	1.13	4.33	8.05	11.59	1.46	9.20	13.99	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
O 0.30	5	20.43	0.72	19.25	21.60	6.23	0.91	4.74	7.72	11.55	1.55	9.01	14.08	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
R 0.40	5	20.58	0.61	19.58	21.58	6.28	0.74	5.06	7.50	11.58	1.48	9.15	14.01	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
W 0.50	5	20.49	0.57	19.55	21.43	6.19	0.70	5.04	7.34	11.51	1.32	9.34	13.68	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
A 0.60	6	20.43	0.58	19.49	21.37	6.15	0.71	4.99	7.32	11.54	1.35	9.32	13.75	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
R 0.70	6	20.38	0.73	19.18	21.57	6.06	0.61	5.05	7.07	11.52	1.32	9.35	13.68	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
D 0.80	6	20.28	0.51	19.44	21.11	5.99	0.67	4.89	7.10	11.90	1.44	9.54	14.26	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
0.90	6	20.15	0.48	19.36	20.95	5.94	0.77	4.68	7.21	12.00	1.52	9.52	14.49	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
1.00	6	20.20	0.42	19.51	20.89	5.89	0.78	4.62	7.17	11.62	1.36	9.39	13.86	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
0.0	6	20.20	0.42	19.51	20.89	5.89	0.78	4.62	7.17	11.62	1.36	9.39	13.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	6	20.17	0.48	19.39	20.95	5.93	0.77	4.67	7.19	11.56	1.33	9.39	13.74	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
0.20	6	20.17	0.56	19.25	21.10	5.80	0.82	4.45	7.15	11.56	1.29	9.45	13.68	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
R 0.30	6	20.19	0.68	19.07	21.30	5.80	0.92	4.30	7.31	11.55	1.24	9.52	13.58	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
E 0.40	6	20.20	0.51	19.37	21.04	5.91	0.83	4.55	7.28	11.54	1.23	9.52	13.56	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
T 0.50	6	20.16	0.51	19.32	21.00	5.81	0.90	4.33	7.28	11.55	1.24	9.51	13.59	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
U 0.60	6	20.13	0.54	19.24	21.02	5.68	0.95	4.13	7.24	11.55	1.25	9.50	13.61	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
R 0.70	6	20.10	0.30	19.60	20.59	5.88	0.79	4.59	7.17	11.53	1.23	9.51	13.54	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
N 0.80	6	19.98	0.20	19.64	20.31	5.67	0.53	4.81	6.54	11.28	1.30	9.14	13.42	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
0.90	4	20.19	0.44	19.47	20.91	5.59	0.44	4.88	6.31	11.28	1.41	8.97	13.58	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
1.00	4	20.41	0.55	19.51	21.31	5.70	0.36	5.10	6.29	11.23	1.51	8.76	13.70	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE				MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	INCR	INCR	CUM	CUM	CUM	CUM
0.0	7	0.81	0.83	-0.55	2.16	7.41	0.58	6.47	8.36	21.33	0.69	19.90	22.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	0.78	0.83	-0.66	2.23	7.06	0.42	6.05	8.08	20.84	0.50	20.02	21.66	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
F 0.20	7	0.84	0.98	-0.77	2.44	6.85	0.71	5.89	8.01	20.80	0.51	19.97	21.64	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
O 0.30	7	1.15	1.04	-0.56	2.85	6.79	0.65	5.72	7.86	20.96	0.54	20.06	21.85	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
R 0.40	7	1.70	0.95	0.14	3.26	6.69	0.75	5.46	7.91	21.23	0.46	20.47	21.99	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
W 0.50	7	2.24	1.00	0.60	3.88	6.53	0.89	5.07	7.99	21.51	0.49	20.71	22.31	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
A 0.60	7	2.61	1.10	0.81	4.42	6.24	0.99	4.61	7.37	21.81	0.58	20.87	22.76	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
R 0.70	7	3.06	0.88	1.61	4.51	5.98	1.18	4.05	7.52	22.16	0.58	21.21	23.12	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
D 0.80	7	3.20	1.04	1.50	4.91	5.81	0.84	4.43	7.18	22.28	0.56	21.36	23.20	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
0.90	7	3.17	1.13	1.32	5.01	5.57	0.84	4.20	6.95	22.47	0.64	21.42	23.53	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
1.00	7	3.23	1.20	1.26	5.20	5.44	0.98	3.83	7.05	22.69	0.76	21.44	23.94	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
0.0	7	3.23	1.20	1.26	5.20	5.44	0.98	3.83	7.05	22.69	0.76	21.44	23.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	2.41	1.08	0.64	4.18	5.85	0.67	4.91	6.79	22.41	0.67	21.32	23.51	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
0.20	7	2.02	1.27	-0.07	4.11	5.96	0.50	4.98	6.95	22.22	0.68	21.11	23.33	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
R 0.30	7	1.82	1.20	-0.14	3.78	6.14	0.67	5.03	7.24	22.04	0.75	20.82	23.27	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
E 0.40	7	1.45	1.01	-0.21	3.11	6.37	0.58	5.42	7.32	21.85	0.77	20.58	23.12	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
T 0.50	7	1.08	0.64	0.02	2.13	6.65	0.53	5.78	7.52	21.67	0.75	20.44	22.91	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
U 0.60	7	1.04	0.80	-0.28	2.36	6.86	0.55	5.96	7.76	21.59	0.75	20.36	22.81	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
R 0.70	7	0.73	1.01	-0.95	2.36	6.97	0.59	6.01	7.93	21.43	0.81	20.11	22.75	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
N 0.80	7	0.70	0.90	-0.99	1.96	6.95	0.67	5.86	8.05	21.33	0.84	19.93	22.68	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
0.90	7	0.46	0.71	-0.71	1.62	7.06	0.76	5.80	8.31	21.23	0.82	19.88	22.58	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
1.00	7	0.81	0.83	-0.55	2.16	7.41	0.58	6.47	8.36	21.33	0.69	19.90	22.16	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54

LANDMARK - LT ELBOW CENTER (251)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		CUM	
0.0	6	5.35	0.69	4.21	6.49	12.27	0.69	11.14	13.39	13.25	1.51	10.78	15.73	0.0	0.0	0.0	
0.10	6	6.02	0.71	4.86	7.18	10.86	0.69	9.72	11.99	12.59	2.21	8.86	16.12	1.74	1.74	1.74	
F 0.20	7	6.88	0.86	5.47	8.29	9.81	1.04	8.10	11.52	12.70	1.99	9.43	15.96	1.37	3.11	3.11	
O 0.30	7	8.05	1.55	5.51	10.59	8.12	0.54	7.24	9.00	13.74	1.76	10.85	16.64	2.31	5.42	5.42	
R 0.40	7	9.76	2.17	6.20	13.32	6.17	1.22	4.17	8.16	14.34	2.14	11.44	18.44	2.86	8.27	8.27	
W 0.50	7	10.39	1.14	8.52	12.26	4.70	0.16	4.43	4.97	15.63	1.44	13.24	18.02	1.74	10.01	10.01	
A 0.60	7	11.09	1.10	9.10	12.72	2.81	0.87	2.04	3.59	16.58	1.30	14.44	18.72	2.18	12.19	12.19	
R 0.70	7	11.09	1.08	9.31	12.86	1.40	0.70	0.25	2.55	17.53	1.12	15.52	19.19	1.62	13.81	13.81	
D 0.80	7	11.13	1.14	9.25	13.01	0.60	0.50	-0.22	1.41	17.63	1.21	15.65	19.61	0.85	14.66	14.66	
0.90	6	11.18	1.33	9.00	13.36	0.07	0.51	-0.59	0.74	17.78	1.43	15.44	20.12	0.55	15.21	15.21	
1.00	6	11.13	1.26	9.06	13.20	-0.22	0.41	-0.59	0.46	17.85	1.40	15.56	20.14	0.31	15.51	15.51	
0.0	6	11.13	1.26	9.06	13.20	-0.22	0.41	-0.90	0.46	17.85	1.40	15.56	20.14	0.0	0.0	0.0	
0.10	6	11.05	1.47	8.64	13.47	1.81	1.00	0.17	3.44	17.55	1.38	15.38	19.91	2.04	2.04	2.04	
0.20	7	10.62	1.67	7.89	13.35	4.00	1.37	1.42	6.58	16.97	1.70	14.19	19.75	2.34	4.37	4.37	
R 0.30	7	9.72	2.12	6.25	13.20	6.16	1.49	3.71	8.60	16.13	2.26	12.42	19.83	2.49	6.86	6.86	
E 0.40	6	8.06	2.20	4.45	11.67	8.55	1.62	5.90	11.21	14.60	2.26	10.88	18.31	3.29	10.15	10.15	
U 0.50	6	7.47	1.05	5.75	9.19	9.33	0.96	7.77	10.90	14.45	1.59	11.85	17.06	0.99	11.14	11.14	
U 0.60	6	6.50	0.91	5.00	8.00	10.63	1.10	8.83	12.43	14.30	1.73	11.17	16.84	1.68	12.82	12.82	
R 0.70	6	5.67	1.07	3.92	7.42	11.42	1.11	9.60	13.24	13.78	1.62	11.11	16.44	1.17	13.99	13.99	
N 0.80	6	5.26	0.97	3.68	6.85	11.95	1.00	10.31	13.59	13.61	1.47	11.20	16.02	0.69	14.68	14.68	
0.90	6	5.24	0.87	3.81	6.67	12.24	0.84	10.86	13.61	13.43	1.46	11.04	15.83	0.33	15.01	15.01	
1.00	6	5.35	0.69	4.21	6.49	12.27	0.69	11.14	13.39	13.25	1.51	10.78	15.73	0.22	15.23	15.23	

LANDMARK - LT WRIST CENTER (271)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		CUM	
0.0	4	15.00	0.36	14.40	15.60	10.90	0.86	9.49	12.31	12.78	0.44	12.07	13.49	0.0	0.0	0.0	
0.10	4	14.48	0.50	13.66	15.30	9.52	1.47	7.11	11.94	14.51	1.35	12.29	16.74	2.27	2.27	2.27	
F 0.20	4	14.13	0.83	12.78	15.49	7.14	4.81	4.81	9.47	16.61	1.46	14.21	19.00	3.19	5.47	5.47	
O 0.30	4	14.57	1.98	11.33	17.81	4.60	0.51	3.76	5.43	18.76	0.76	17.52	20.01	3.36	8.83	8.83	
R 0.40	3	13.32	1.17	11.40	15.25	0.96	0.54	0.08	1.85	19.35	0.59	18.99	20.92	4.02	12.85	12.85	
W 0.50	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
A 0.60	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
R 0.70	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
D 0.80	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.90	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1.00	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.20	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
R 0.30	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
E 0.40	2	14.08	0.18	13.78	14.38	1.37	0.65	0.30	2.43	20.75	1.80	17.79	23.71	0.0	0.0	0.0	
T 0.50	5	13.86	0.89	12.40	15.31	3.70	0.83	2.33	5.07	18.26	1.64	15.57	20.95	3.41	3.41	3.41	
U 0.60	4	14.25	0.85	12.86	15.65	6.60	1.30	4.46	8.74	17.10	1.10	15.29	18.91	3.15	6.57	6.57	
R 0.70	4	14.30	0.59	13.33	15.27	9.57	2.73	5.09	14.05	15.13	1.13	13.27	16.99	3.56	10.13	10.13	
N 0.80	4	14.22	0.56	13.30	15.15	10.28	1.31	8.12	12.43	14.60	0.77	13.34	15.86	0.89	11.02	11.02	
0.90	4	14.46	0.43	13.75	15.17	10.84	1.18	8.89	12.78	13.64	0.55	12.07	14.53	1.14	12.15	12.15	
1.00	4	15.00	0.36	14.40	15.60	10.90	0.86	9.49	12.31	12.78	0.44	12.07	13.49	1.02	13.17	13.17	

MVMT NO. 21260/13

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO HATCH RELEASE CONTROLLER AT +13.0, -13.0, +23.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +15.0, -13.0, +4.8.

NOTE:

IN THE CASE OF MOVEMENT NUMBERS 21260 AND 22260 AT 13° BACK ANGLE, TWO SETS OF TABLES EACH FOR POINTS 17 AND 27 ARE PROVIDED. THIS IS BECAUSE THESE TWO POINTS WERE OBSTRUCTED IN VIEW FROM THE CAMERA AT LOCATIONS NEARER TO HATCH RELEASE CONTROL AND THEREFORE A SECOND SERIES OF PICTURES VIEWED FROM RIGHT HAND SIDE WAS TAKEN. THE DATA FROM THE SECOND SERIES FORM THE SET OF DATA MARKED WITH AN ASTERICK FOR THE POINTS 17 AND 27. THE USER IS ADVISED TO CONSULT BOTH THE SETS OF TABLES FOR THESE POINTS ONLY.

MOTION NUMBER - 22260
 BACK ANGLE - 13

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.66	0.08	0.60 TO 0.80 SECS.
LEFT REV	0.66	0.10	0.50 TO 0.80 SECS.

LANDMARK - NASION

(1)

TIME	SAMPLE	(-----X-----)	CO-ORDINATE	(-----Y-----)	CO-ORDINATE	(-----Z-----)	CO-ORDINATE	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	MEAN	SE	MEAN	SE	INCR	CUM
0.0	7	6.21	0.93	0.70	0.57	29.17	0.92	27.66	0.0
0.10	7	5.73	1.34	-1.43	0.88	29.86	0.99	28.24	2.29
0.20	7	5.34	1.24	-2.80	1.03	30.24	1.17	28.32	2.29
0.30	7	4.98	1.07	-3.30	1.31	30.28	1.18	28.35	3.76
0.40	7	4.83	1.13	-3.48	1.62	30.33	1.20	28.36	4.57
0.50	7	4.89	1.32	-3.54	1.69	30.39	1.20	28.42	4.67
0.60	7	4.84	1.39	-3.59	1.46	30.46	1.20	28.49	4.76
0.70	7	4.84	1.25	-3.61	1.44	30.52	1.22	28.52	4.83
0.80	7	4.75	1.16	-3.73	1.58	30.57	1.19	28.62	4.98
0.90	7	4.70	1.11	-3.88	1.59	30.56	1.21	28.58	5.14
1.00	7	4.75	0.77	-3.94	1.55	30.49	1.25	28.43	5.25
0.0	7	4.75	0.77	-3.94	1.55	30.49	1.25	28.43	0.0
0.10	7	5.32	0.96	-1.87	1.46	29.99	1.24	27.95	2.21
0.20	7	5.78	1.21	-0.38	1.85	29.43	1.12	27.60	3.86
0.30	7	5.97	1.33	-0.05	1.54	29.11	1.06	27.37	4.36
0.40	7	5.93	1.28	0.02	1.50	29.13	1.02	27.45	4.44
0.50	7	5.98	1.21	-0.04	1.43	29.16	1.00	27.52	4.52
0.60	7	6.08	1.07	0.00	1.35	29.18	1.02	27.51	4.63
0.70	7	6.09	0.92	0.15	1.37	29.21	1.01	27.55	4.77
0.80	7	6.10	0.92	0.41	1.29	29.22	1.00	27.58	5.03
0.90	7	6.14	0.91	0.56	1.12	29.21	0.97	27.62	5.19
1.00	7	6.21	0.93	0.70	0.97	29.17	0.92	27.66	5.35

LANDMARK - CERVICALE

(2)

TIME	SAMPLE	(-----X-----)	CO-ORDINATE	(-----Y-----)	CO-ORDINATE	(-----Z-----)	CO-ORDINATE	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	MEAN	SE	MEAN	SE	INCR	CUM
0.0	7	-1.34	0.95	-0.93	0.56	23.56	1.05	21.83	0.0
0.10	7	-1.10	1.26	-1.33	0.84	23.47	0.88	22.03	0.47
0.20	7	-1.05	1.41	-1.59	1.12	23.38	0.96	21.81	0.76
0.30	7	-1.18	1.35	-1.65	1.23	23.32	0.99	21.70	0.91
0.40	7	-1.13	1.28	-1.64	1.20	23.33	0.99	21.71	0.96
0.50	7	-1.09	1.30	-1.55	1.08	23.36	0.95	21.80	1.06
0.60	7	-0.85	1.40	-1.70	1.10	23.34	0.91	21.84	1.34
0.70	7	-0.69	1.38	-1.94	1.15	23.33	0.93	21.79	1.63
0.80	7	-0.73	1.49	-2.04	1.21	23.39	0.89	21.93	1.75
0.90	7	-0.62	1.56	-2.13	1.26	23.46	0.89	22.00	1.91
1.00	7	-0.57	1.52	-2.22	1.34	23.56	0.88	22.12	2.06
0.0	7	-0.57	1.52	-2.22	1.34	23.56	0.88	22.12	0.0
0.10	7	-0.71	1.44	-2.07	1.24	23.49	0.94	21.95	0.22
0.20	7	-0.78	1.48	-2.00	1.27	23.43	1.01	21.78	0.33
0.30	7	-0.69	1.55	-2.12	1.14	23.39	1.05	21.66	0.49
0.40	7	-0.85	1.45	-2.22	1.08	23.32	1.00	21.68	0.68
0.50	7	-0.87	1.42	-2.07	0.94	23.37	0.95	21.80	1.02
0.60	7	-1.16	1.01	-1.59	0.81	23.49	1.03	21.81	1.28
0.70	7	-1.26	0.96	-1.33	0.45	23.62	0.97	22.03	1.60
0.80	7	-1.31	0.95	-1.32	0.49	23.66	0.98	22.05	1.82
0.90	7	-1.31	0.92	-1.01	0.51	23.61	1.03	21.92	1.94
1.00	7	-1.34	0.95	-0.93	0.56	23.56	1.05	21.83	2.04

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE	(------X - CO-ORDINATE-----)				(------Y - CC-ORDINATE-----)				(------Z - CO-ORDINATE-----)				DISTANCE				MOVED	
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	CUM	CUM		
0.0	7	2.76	0.95	1.20	4.32	-0.43	0.98	-2.04	1.19	22.48	0.82	21.13	23.83	0.0	0.0	0.0	0.0		
0.10	7	2.71	0.45	1.97	3.44	-0.76	0.96	-2.33	0.82	22.48	0.85	21.08	23.87	0.33	0.33	0.33	0.33		
F 0.20	7	2.61	0.49	1.80	3.42	-1.06	1.19	-3.01	0.89	22.49	0.84	21.11	23.87	0.32	0.32	0.65	0.65		
R 0.30	7	2.50	0.40	1.83	3.16	-1.31	1.30	-3.45	0.83	22.52	0.86	21.12	23.93	0.27	0.27	0.93	0.93		
O 0.40	7	2.54	0.41	1.87	3.22	-1.33	1.33	-3.50	0.85	22.53	0.87	21.10	23.95	0.05	0.05	0.98	0.98		
W 0.50	7	2.62	0.46	1.88	3.37	-1.26	1.29	-3.38	0.86	22.55	0.74	21.34	23.76	0.11	0.11	1.08	1.08		
A 0.60	7	2.60	0.38	1.98	3.21	-1.42	1.31	-3.58	0.73	22.63	0.81	21.31	23.95	0.18	0.18	1.27	1.27		
R 0.70	7	2.60	0.34	2.04	3.16	-1.59	1.23	-3.60	0.43	22.72	0.86	21.31	24.14	0.19	0.19	1.46	1.46		
D 0.80	7	2.74	0.48	1.95	3.53	-1.63	1.10	-3.44	0.18	22.79	0.89	21.33	24.26	0.16	0.16	1.62	1.62		
O 0.90	7	2.76	0.52	1.91	3.61	-1.81	1.19	-3.75	0.14	22.87	0.90	21.39	24.34	0.20	0.20	1.81	1.81		
1.00	7	2.62	0.48	1.83	3.41	-2.15	1.36	-4.38	0.08	22.94	0.84	21.56	24.32	0.38	0.38	2.19	2.19		
0.0	7	2.62	0.48	1.83	3.41	-2.15	1.36	-4.38	0.08	22.94	0.84	21.56	24.32	0.0	0.0	0.0	0.0		
0.10	7	2.62	0.50	1.80	3.44	-1.81	1.29	-3.93	0.30	22.91	0.94	21.36	24.45	0.34	0.34	0.34	0.34		
0.20	7	2.62	0.49	1.82	3.42	-1.58	1.30	-3.71	0.56	22.84	1.03	21.16	24.52	0.25	0.25	0.58	0.58		
R 0.30	7	2.61	0.41	1.94	3.29	-1.53	1.25	-3.59	0.53	22.74	1.06	21.00	24.47	0.11	0.11	0.70	0.70		
E 0.40	7	2.45	0.45	1.72	3.19	-1.50	1.33	-3.68	0.68	22.60	0.91	21.11	24.09	0.21	0.21	0.91	0.91		
O 0.50	7	2.60	0.57	1.51	3.70	-1.25	1.05	-2.98	0.48	22.55	0.84	21.17	23.93	0.30	0.30	1.21	1.21		
U 0.60	7	2.85	0.84	1.46	4.23	-0.98	0.76	-2.23	0.27	22.56	0.82	21.21	23.91	0.36	0.36	1.57	1.57		
R 0.70	7	2.87	0.86	1.46	4.29	-0.71	0.54	-1.59	0.18	22.54	0.78	21.27	23.82	0.28	0.28	1.84	1.84		
N 0.80	7	2.77	0.94	1.23	4.32	-0.60	0.58	-1.55	0.35	22.59	0.81	21.26	23.92	0.15	0.15	2.00	2.00		
O 0.90	7	2.74	0.95	1.18	4.30	-0.53	0.73	-1.73	0.67	22.57	0.82	21.22	23.92	0.08	0.08	2.08	2.08		
1.00	7	2.76	0.95	1.20	4.32	-0.43	0.98	-2.04	1.19	22.48	0.82	21.13	23.83	0.14	0.14	2.21	2.21		

238

LANDMARK - LT ACRGION (5)

TIME	SAMPLE	(------X - CO-ORDINATE-----)				(------Y - CO-ORDINATE-----)				(------Z - CO-ORDINATE-----)				DISTANCE				MOVED	
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	CUM	CUM		
0.0	5	-0.81	0.95	-2.37	0.75	6.71	0.64	5.65	7.77	22.36	1.27	20.28	24.44	0.0	0.0	0.0	0.0		
0.10	5	-0.90	0.65	-1.96	0.16	6.64	0.32	6.12	7.16	22.51	0.93	20.99	24.03	0.19	0.19	0.19	0.19		
F 0.20	6	-0.61	0.89	-2.06	0.84	6.77	0.67	5.67	7.87	22.32	1.09	20.53	24.10	0.37	0.37	0.56	0.56		
O 0.30	6	-0.41	0.91	-1.90	1.08	6.73	0.78	5.46	8.01	21.95	1.15	18.42	25.47	0.42	0.42	0.98	0.98		
R 0.40	6	-0.02	0.94	-1.56	1.53	6.65	0.59	5.68	7.62	22.86	0.77	21.59	24.12	0.99	0.99	1.97	1.97		
W 0.50	6	0.35	1.06	-1.39	2.10	6.60	0.45	5.87	7.33	23.26	0.83	21.91	24.62	0.55	0.55	2.53	2.53		
A 0.60	6	0.68	0.96	-0.89	2.25	6.37	0.43	5.66	7.09	23.51	0.84	22.14	24.89	0.47	0.47	3.00	3.00		
R 0.70	6	1.04	0.93	-0.49	2.57	6.20	0.46	5.44	6.96	23.71	0.90	22.24	25.18	0.45	0.45	3.44	3.44		
D 0.80	6	1.35	0.95	-0.20	2.91	6.14	0.44	5.42	6.86	23.85	0.95	22.29	25.41	0.35	0.35	3.79	3.79		
O 0.90	6	1.44	0.88	0.00	2.88	6.06	0.46	5.31	6.81	24.00	0.93	22.47	25.53	0.20	0.20	3.99	3.99		
1.00	6	1.37	0.75	0.14	2.60	5.98	0.53	5.10	6.85	24.14	0.88	22.70	25.58	0.17	0.17	4.16	4.16		
0.0	6	1.37	0.75	0.14	2.60	5.98	0.53	5.10	6.85	24.14	0.88	22.70	25.58	0.0	0.0	0.0	0.0		
0.10	6	1.00	0.92	-0.50	2.51	6.00	0.34	5.44	6.56	24.00	0.91	22.50	25.49	0.40	0.40	0.40	0.40		
0.20	6	0.82	1.03	-1.07	2.31	6.04	0.43	5.34	6.74	23.80	0.99	22.18	25.42	0.43	0.43	0.83	0.83		
R 0.30	6	0.31	1.07	-1.45	2.07	6.10	0.62	5.09	7.11	23.60	1.03	21.91	25.28	0.37	0.37	1.21	1.21		
E 0.40	6	0.02	1.05	-1.70	1.74	6.33	0.72	5.16	7.51	23.42	0.99	21.80	25.04	0.41	0.41	1.62	1.62		
U 0.50	6	-0.14	0.94	-1.68	1.41	6.46	0.83	5.10	7.83	23.22	1.02	21.56	24.89	0.29	0.29	1.90	1.90		
U 0.60	6	-0.30	0.94	-1.84	1.24	6.46	0.80	5.15	7.76	23.11	1.06	21.37	24.85	0.20	0.20	2.10	2.10		
R 0.70	6	-0.46	1.07	-2.21	1.29	6.60	0.74	5.39	7.82	23.07	0.99	21.45	24.68	0.22	0.22	2.32	2.32		
N 0.80	6	-0.55	1.05	-2.28	1.18	6.79	0.80	5.48	8.10	23.01	0.95	21.45	24.57	0.21	0.21	2.53	2.53		
O 0.90	5	-0.77	1.04	-2.48	0.94	6.65	0.64	5.61	7.70	22.62	0.98	21.02	24.22	0.47	0.47	3.00	3.00		
1.00	5	-0.81	0.95	-2.37	0.75	6.71	0.64	5.65	7.77	22.36	1.27	20.28	24.44	0.27	0.27	3.27	3.27		

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	INCR	CUM
0.0	6	18.14	0.27	17.70	18.58	10.09	0.44	9.37	10.82	12.85	0.42	12.15	13.54	0.0	0.0	0.0	0.0	0.0	0.0
0.10	6	18.08	0.79	16.79	19.37	7.65	2.17	4.09	11.20	15.44	1.32	13.27	17.60	3.56	3.56	3.56	3.56	3.56	3.56
F 0.20	5	17.24	0.42	16.55	17.94	4.12	3.81	-2.12	10.37	18.31	2.61	14.02	22.60	4.62	4.62	4.62	4.62	4.62	4.62
O 0.30	5	16.30	0.47	15.53	17.07	-0.19	4.64	-7.79	7.41	21.22	3.73	15.10	27.33	5.28	5.28	5.28	5.28	5.28	5.28
R 0.40	3	15.37	0.86	13.95	16.78	-2.30	1.83	-5.30	0.70	20.97	2.85	16.30	25.63	2.33	2.33	2.33	2.33	2.33	2.33
W 0.50	3	15.69	1.01	14.03	17.35	-2.54	2.45	-6.55	1.47	20.53	2.42	16.56	24.49	0.60	0.60	0.60	0.60	0.60	0.60
A 0.60	1	14.89	0.0	14.89	14.89	-6.84	0.0	-6.84	-6.84	22.72	0.0	22.72	22.72	4.89	4.89	4.89	4.89	4.89	4.89
R 0.70	1	14.56	0.0	14.56	14.56	-8.32	0.0	-8.32	-8.32	22.93	0.0	22.93	22.93	1.53	1.53	1.53	1.53	1.53	1.53
D 0.80	1	14.23	0.0	14.23	14.23	-9.23	0.0	-9.23	-9.23	23.02	0.0	23.02	23.02	0.97	0.97	0.97	0.97	0.97	0.97
O 0.90	1	14.09	0.0	14.09	14.09	-9.72	0.0	-9.72	-9.72	23.08	0.0	23.08	23.08	0.52	0.52	0.52	0.52	0.52	0.52
1.00	1	14.19	0.0	14.19	14.19	-9.78	0.0	-9.78	-9.78	23.14	0.0	23.14	23.14	0.13	0.13	0.13	0.13	0.13	0.13
0.0	1	14.19	0.0	14.19	14.19	-9.78	0.0	-9.78	-9.78	23.14	0.0	23.14	23.14	0.0	0.0	0.0	0.0	0.0	0.0
0.10	1	13.64	0.0	13.64	13.64	-8.13	0.0	-8.13	-8.13	23.19	0.0	23.19	23.19	1.74	1.74	1.74	1.74	1.74	1.74
0.20	1	12.99	0.0	12.99	12.99	-6.26	0.0	-6.26	-6.26	23.04	0.0	23.04	23.04	1.98	1.98	1.98	1.98	1.98	1.98
R 0.30	2	14.37	1.45	11.98	16.75	-2.41	1.35	-4.63	-0.19	22.49	0.22	22.14	22.85	4.13	4.13	4.13	4.13	4.13	4.13
E 0.40	4	16.03	1.18	14.09	17.97	1.07	1.03	-0.62	2.76	20.68	1.10	18.88	22.48	12.11	12.11	12.11	12.11	12.11	12.11
T 0.50	5	16.53	0.98	14.93	18.14	3.80	0.83	2.45	5.15	18.89	0.95	15.55	18.80	3.31	3.31	3.31	3.31	3.31	3.31
U 0.60	5	17.11	0.89	15.64	18.58	6.32	0.69	5.18	7.45	17.18	1.01	13.92	17.22	2.50	2.50	2.50	2.50	2.50	2.50
R 0.70	5	17.61	0.66	16.52	18.70	8.16	0.30	7.66	8.66	15.57	0.92	12.94	15.96	1.81	1.81	1.81	1.81	1.81	1.81
N 0.80	6	18.14	0.71	16.97	19.31	9.48	0.29	9.00	9.95	14.45	0.72	12.36	14.72	1.02	1.02	1.02	1.02	1.02	1.02
O 0.90	6	18.17	0.38	17.56	18.79	9.94	0.40	9.29	10.60	13.54	0.42	12.15	13.54	0.71	0.71	0.71	0.71	0.71	0.71
1.00	6	18.14	0.27	17.70	18.58	10.09	0.44	9.37	10.82	12.85	0.42	12.15	13.54	0.0	0.0	0.0	0.0	0.0	0.0

LANDMARK - LT TROCHANTER (19)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	CO-ORDINATE	INCR	CUM
0.0	7	4.31	0.76	3.06	5.57	6.84	0.61	5.85	7.84	3.91	0.38	3.28	4.54	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	4.37	0.67	3.27	5.48	6.77	0.76	5.53	8.01	3.93	0.36	3.36	4.54	0.10	0.10	0.10	0.10	0.10	0.10
F 0.20	7	4.42	0.62	3.42	5.43	6.69	0.81	5.36	8.01	3.93	0.37	3.32	4.54	0.10	0.10	0.10	0.10	0.10	0.10
O 0.30	7	4.45	0.56	3.53	5.37	6.67	0.60	5.68	7.65	3.88	0.33	3.33	4.52	0.06	0.06	0.06	0.06	0.06	0.06
R 0.40	7	4.42	0.61	3.43	5.42	6.71	0.61	5.71	7.71	3.92	0.37	3.31	4.52	0.07	0.07	0.07	0.07	0.07	0.07
W 0.50	7	4.37	0.77	3.10	5.64	6.73	0.73	5.52	7.93	3.97	0.41	3.31	4.54	0.08	0.08	0.08	0.08	0.08	0.08
A 0.60	7	4.30	0.60	3.31	5.28	6.56	0.89	5.10	8.01	4.01	0.37	3.41	4.62	0.19	0.19	0.19	0.19	0.19	0.19
R 0.70	7	4.29	0.53	3.43	5.15	6.46	0.91	4.97	7.95	4.00	0.35	3.42	4.58	0.10	0.10	0.10	0.10	0.10	0.10
D 0.80	7	4.41	0.66	3.33	5.49	6.65	0.73	5.45	7.85	3.96	0.31	3.45	4.47	0.23	0.23	0.23	0.23	0.23	0.23
O 0.90	7	4.49	0.70	3.34	5.64	6.68	0.68	5.56	7.80	3.97	0.32	3.45	4.49	0.09	0.09	0.09	0.09	0.09	0.09
1.00	7	4.47	0.67	3.37	5.57	6.58	0.73	5.38	7.78	3.96	0.37	3.35	4.56	0.10	0.10	0.10	0.10	0.10	0.10
0.0	7	4.47	0.67	3.37	5.57	6.58	0.73	5.38	7.78	3.96	0.37	3.35	4.56	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	4.53	0.66	3.45	5.62	6.57	0.76	5.32	7.82	3.97	0.35	3.38	4.55	0.06	0.06	0.06	0.06	0.06	0.06
0.20	7	4.53	0.70	3.38	5.69	6.61	0.81	5.28	7.93	3.98	0.36	3.40	4.57	0.04	0.04	0.04	0.04	0.04	0.04
R 0.30	7	4.44	0.71	3.26	5.61	6.71	0.82	5.36	8.06	3.98	0.35	3.41	4.56	0.14	0.14	0.14	0.14	0.14	0.14
E 0.40	7	4.39	0.71	3.23	5.55	6.74	0.81	5.41	8.08	3.97	0.34	3.42	4.53	0.06	0.06	0.06	0.06	0.06	0.06
T 0.50	7	4.41	0.65	3.34	5.47	6.78	0.80	5.48	8.09	3.97	0.34	3.42	4.52	0.04	0.04	0.04	0.04	0.04	0.04
U 0.60	7	4.34	0.68	3.22	5.46	6.76	0.79	5.45	8.06	3.96	0.36	3.37	4.55	0.07	0.07	0.07	0.07	0.07	0.07
R 0.70	7	4.36	0.76	3.12	5.60	6.74	0.85	5.35	8.14	3.97	0.35	3.39	4.55	0.03	0.03	0.03	0.03	0.03	0.03
N 0.80	7	4.40	0.76	3.15	5.65	6.75	0.86	5.33	8.16	3.97	0.37	3.37	4.60	0.04	0.04	0.04	0.04	0.04	0.04
O 0.90	7	4.36	0.71	3.19	5.63	6.79	0.71	5.62	7.96	3.94	0.35	3.37	4.52	0.07	0.07	0.07	0.07	0.07	0.07
1.00	7	4.31	0.76	3.06	5.57	6.84	0.61	5.85	7.84	3.91	0.38	3.28	4.54	0.08	0.08	0.08	0.08	0.08	0.08

LANDMARK - LT KNEE TOP (21)

TIME	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	MUVED
T		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	5	20.43	0.46	19.68	21.18	6.14	0.91	4.64	7.64	11.55	1.47	9.14	13.95	0.0	0.0
0.10	5	20.36	0.53	19.49	21.23	6.05	0.73	4.85	7.25	11.56	1.45	9.19	13.93	0.12	0.12
F 0.20	6	20.31	0.52	19.46	21.17	5.64	0.80	4.33	6.95	11.64	1.29	9.53	13.75	0.54	0.54
0 0.30	6	20.36	0.49	19.56	21.16	5.61	0.79	4.32	6.91	11.65	1.30	9.51	13.79	0.06	0.60
R 0.40	6	20.36	0.49	19.53	21.12	5.59	0.83	4.22	6.95	11.63	1.29	9.52	13.74	0.05	0.65
W 0.50	6	20.27	0.45	19.53	21.01	5.60	0.92	4.09	7.12	11.63	1.25	9.58	13.68	0.06	0.70
A 0.60	5	20.22	0.52	19.37	21.07	5.84	0.71	4.67	7.00	11.55	1.37	9.30	13.79	0.25	0.96
R 0.70	5	20.25	0.54	19.37	21.13	5.81	0.69	4.68	6.94	11.55	1.41	9.24	13.86	0.04	1.00
U 0.80	5	20.36	0.44	19.64	21.08	5.88	0.67	4.79	6.98	11.56	1.43	9.21	13.91	0.13	1.13
N 0.90	5	20.34	0.45	19.60	21.08	5.92	0.66	4.84	7.00	11.57	1.41	9.26	13.89	0.04	1.17
1.00	5	20.21	0.61	19.20	21.22	5.84	0.71	4.67	7.01	11.56	1.39	9.29	13.84	0.15	1.32
0.0	5	20.21	0.61	19.20	21.22	5.84	0.71	4.67	7.01	11.56	1.39	9.29	13.84	0.0	0.0
0.10	5	20.32	0.45	19.58	21.06	5.79	0.62	4.78	6.80	11.56	1.40	9.26	13.84	0.12	0.12
0.20	5	20.31	0.48	19.52	21.10	5.71	0.63	4.68	6.85	11.56	1.42	9.23	13.90	0.08	0.20
R 0.30	5	20.18	0.62	19.16	21.20	5.70	0.73	4.51	6.89	11.61	1.45	9.23	13.99	0.14	0.34
E 0.40	5	20.31	0.54	19.43	21.19	5.95	0.74	4.74	7.16	11.63	1.43	9.29	13.97	0.28	0.62
T 0.50	5	20.40	0.56	19.49	21.31	5.95	0.78	4.68	7.23	11.60	1.42	9.28	13.93	0.09	0.72
U 0.60	5	20.37	0.54	19.49	21.26	5.95	0.80	4.64	7.25	11.61	1.48	9.18	14.04	0.03	0.75
R 0.70	5	20.29	0.60	19.30	21.28	6.15	0.79	4.86	7.45	11.53	1.41	9.22	13.84	0.24	0.98
N 0.80	5	20.30	0.64	19.25	21.35	6.18	0.82	4.83	7.53	11.50	1.36	9.26	13.73	0.04	1.03
0.90	5	20.36	0.59	19.40	21.33	6.11	0.91	4.61	7.61	11.54	1.45	9.15	13.92	0.10	1.13
1.00	5	20.43	0.46	19.68	21.18	6.14	0.91	4.64	7.64	11.55	1.47	9.14	13.95	0.08	1.21

LANDMARK - LT SHOULDER CENTER (23)

TIME	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	MUVED
T		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	6	1.32	1.17	-0.59	3.24	7.21	1.29	5.09	9.33	21.05	0.58	20.09	22.00	0.0	0.0
0.10	6	0.91	0.60	-0.07	1.89	6.97	0.72	5.80	8.14	21.00	0.37	20.40	21.60	0.49	0.49
F 0.20	7	0.62	0.41	-0.06	1.29	6.84	0.57	5.92	7.77	20.85	0.58	19.90	21.80	0.35	0.84
R 0.30	7	0.85	0.50	0.02	1.68	6.62	0.48	5.84	7.41	21.03	0.58	20.07	21.99	0.37	1.20
W 0.40	7	1.52	0.82	0.17	2.87	6.74	0.58	5.79	7.69	21.21	0.55	20.31	22.11	0.70	1.91
R 0.50	7	1.98	0.94	0.44	3.51	6.68	0.56	5.76	7.60	21.40	0.50	20.58	22.21	0.50	2.41
A 0.60	7	2.31	0.75	1.08	3.55	6.17	0.54	5.28	7.07	21.55	0.59	20.68	22.63	0.65	3.06
R 0.70	7	2.68	0.88	1.24	4.12	5.84	0.49	5.05	6.64	21.84	0.78	20.56	23.13	0.53	3.59
D 0.80	7	2.88	0.75	1.65	4.11	5.75	0.43	5.03	6.46	21.94	0.81	20.61	23.27	0.24	3.83
0.90	7	2.93	0.78	1.65	4.21	5.64	0.47	4.86	6.41	22.11	0.78	20.83	23.39	0.21	4.04
1.00	7	2.97	0.97	1.38	4.57	5.43	0.67	4.32	6.53	22.23	0.78	20.94	23.51	0.24	4.29
0.0	7	2.97	0.97	1.38	4.57	5.43	0.67	4.32	6.53	22.23	0.78	20.94	23.51	0.0	0.0
0.10	7	2.54	1.20	0.57	4.51	5.71	0.48	4.92	6.49	22.08	0.68	20.96	23.20	0.54	0.54
0.20	7	2.12	1.28	0.02	4.22	5.84	0.59	4.88	6.81	21.87	0.72	20.69	23.05	0.48	1.02
R 0.30	7	1.88	1.04	0.18	3.59	5.99	0.73	4.79	7.19	21.65	0.74	20.44	22.86	0.36	1.38
E 0.40	7	1.45	0.77	0.18	2.72	6.36	0.64	5.31	7.40	21.50	0.75	20.28	22.73	0.59	1.97
T 0.50	7	1.17	0.78	-0.11	2.46	6.54	0.47	5.76	7.32	21.37	0.80	20.07	22.68	0.35	2.32
U 0.60	7	0.98	0.86	-0.43	2.40	6.76	0.41	6.09	7.43	21.30	0.80	19.98	22.62	0.30	2.62
R 0.70	7	0.75	0.92	-0.77	2.26	7.12	0.56	6.20	8.03	21.22	0.73	20.03	22.42	0.44	3.06
N 0.80	6	0.88	0.97	-0.72	2.48	7.32	0.57	6.38	8.26	21.29	0.69	20.16	22.42	0.25	3.31
0.90	6	1.14	0.96	-0.43	2.71	7.24	0.82	5.90	8.58	21.19	0.66	20.11	22.27	0.29	3.60
1.00	6	1.32	1.17	-0.59	3.24	7.21	1.29	5.09	9.33	21.05	0.58	20.09	22.00	0.24	3.84

MMVT NO. 22260/13

LANDMARK - LT ELBOW CENTER (25)

TIME	SAMPLE	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE	MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR				
0.0	7	5.36	0.55	4.47	6.26	12.40	0.59	11.42	13.37	12.99	1.02	10.33	15.65	0.0	0.0			
0.10	7	5.53	0.64	4.48	6.58	11.28	0.42	10.60	11.97	12.51	1.52	10.12	15.10	1.19	1.19			
F 0.20	7	6.18	0.77	4.92	7.44	10.02	0.63	8.99	11.05	12.72	1.52	10.22	15.21	1.42	2.61			
D 0.30	7	7.55	1.01	5.90	9.20	8.66	0.80	7.34	9.98	13.43	1.54	10.90	15.96	2.05	4.67			
R 0.40	7	9.02	1.25	6.96	11.07	6.83	1.55	4.29	9.37	14.46	1.73	11.63	17.29	2.56	7.23			
W 0.50	7	10.32	1.44	7.96	12.69	4.73	2.48	0.66	8.80	15.55	2.16	12.01	19.10	2.71	9.94			
A 0.60	7	10.63	0.96	9.06	12.19	3.28	1.26	1.22	5.34	16.24	1.70	13.46	19.02	1.63	11.57			
R 0.70	7	11.06	1.13	9.20	12.91	1.62	1.21	-0.36	3.61	17.00	1.57	14.44	19.57	1.87	13.44			
D 0.80	7	11.14	1.07	9.38	12.91	0.79	1.03	-0.90	2.47	17.48	1.33	15.30	19.65	0.97	14.41			
0.90	6	11.13	1.00	9.49	12.77	0.47	0.81	-0.85	1.79	17.88	1.24	15.84	19.91	0.51	14.92			
1.00	6	11.08	0.89	9.62	12.53	0.22	0.58	-0.73	1.18	17.93	1.22	15.94	19.93	0.26	15.18			
0.0	6	11.08	0.89	9.62	12.53	0.22	0.58	-0.73	1.18	17.93	1.22	15.94	19.93	0.0	0.0			
0.10	6	10.97	1.13	9.12	12.82	1.30	0.75	0.07	2.53	17.63	1.21	15.65	19.61	1.12	1.12			
0.20	6	10.66	1.27	8.59	12.74	3.24	1.19	1.29	5.18	16.86	1.64	14.17	19.54	2.11	3.23			
R 0.30	6	10.01	1.59	7.41	12.62	5.60	1.46	3.21	7.59	15.91	1.98	12.66	19.15	2.63	5.86			
E 0.40	6	8.93	1.90	5.81	12.05	7.66	1.46	5.26	10.06	15.21	1.97	11.98	18.43	2.43	8.29			
T 0.50	7	7.35	1.84	4.34	10.37	9.40	1.23	7.38	11.42	14.03	2.00	10.74	17.32	2.62	10.92			
U 0.60	7	6.19	1.42	3.86	8.52	10.84	1.58	8.25	13.43	13.61	1.70	10.83	16.39	1.90	12.81			
R 0.70	7	5.35	0.83	3.99	6.71	12.09	2.37	8.20	15.98	13.18	1.60	10.55	15.82	1.57	14.38			
N 0.80	7	5.49	0.90	4.01	6.97	11.97	0.74	10.76	13.19	13.33	1.66	10.61	16.06	0.23	14.61			
0.90	7	5.35	0.71	4.18	6.52	12.23	0.70	11.08	13.38	13.19	1.62	10.54	15.84	0.33	14.94			
1.00	7	5.36	0.55	4.47	6.26	12.40	0.59	11.42	13.37	12.99	1.62	10.33	15.65	0.26	15.20			

LANDMARK - LT WRIST CENTER (27)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				DISTANCE			
T	SIZE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	5	15.50	0.73	14.30	16.70	10.81	0.79	9.51	12.11	12.50	0.80	11.19	13.81	0.0	0.0		
0.10	4	15.06	0.45	14.33	15.79	8.75	1.47	6.33	11.16	14.50	1.46	12.21	16.98	2.98	2.98		
F 0.20	6	14.33	0.39	13.69	14.98	5.53	1.46	3.54	8.33	16.69	1.73	13.85	19.53	3.58	6.55		
D 0.30	6	14.03	0.24	13.64	14.43	2.86	1.54	0.34	5.39	18.59	2.15	15.16	22.21	3.68	10.23		
R 0.40	3	13.90	0.61	12.89	14.90	1.41	2.55	-2.78	5.59	18.20	1.42	15.88	20.52	1.54	11.77		
W 0.50	3	13.96	0.41	13.29	14.62	-0.43	2.63	-4.73	3.88	18.85	2.12	15.38	22.33	1.94	13.72		
A 0.60	1	13.96	0.0	13.96	13.96	-4.64	0.0	-4.64	-4.64	21.12	0.0	21.12	21.12	4.79	18.51		
R 0.70	1	13.44	0.0	13.44	13.44	-6.55	0.0	-6.55	-6.55	21.59	0.0	21.59	21.59	2.03	20.54		
D 0.80	1	13.34	0.0	13.34	13.34	-6.99	0.0	-6.99	-6.99	21.52	0.0	21.62	21.62	0.45	20.99		
0.90	1	13.46	0.0	13.46	13.46	-6.98	0.0	-6.98	-6.98	21.59	0.0	21.59	21.59	0.13	21.12		
1.00	1	13.80	0.0	13.80	13.80	-6.70	0.0	-6.70	-6.70	21.59	0.0	21.59	21.59	0.44	21.55		
0.0	1	13.80	0.0	13.80	13.80	-6.70	0.0	-6.70	-6.70	21.59	0.0	21.59	21.59	0.0	0.0		
0.10	1	13.26	0.0	13.26	13.26	-5.44	0.0	-5.44	-5.44	21.49	0.0	21.49	21.49	1.37	1.37		
0.20	1	12.68	0.0	12.68	12.68	-3.83	0.0	-3.83	-3.83	21.11	0.0	21.11	21.11	1.76	3.13		
R 0.30	2	12.89	0.31	12.39	13.39	-0.23	1.75	-3.10	2.65	20.02	0.19	19.71	20.32	3.77	6.90		
E 0.40	2	14.00	0.90	12.53	15.47	2.71	1.27	0.63	4.78	18.76	0.85	17.36	20.16	3.38	10.28		
T 0.50	4	14.03	0.98	12.42	15.64	4.88	1.12	3.05	6.72	16.94	1.73	14.10	19.77	2.84	13.12		
U 0.60	4	14.48	0.47	13.70	15.25	6.38	1.98	3.14	9.63	16.82	1.69	14.05	19.59	1.57	14.69		
R 0.70	4	14.79	0.43	14.08	15.50	9.30	1.01	7.64	10.95	16.79	1.24	12.76	16.82	3.56	18.25		
N 0.80	5	15.21	0.55	14.30	16.11	11.26	3.09	6.19	16.33	13.39	2.18	9.82	16.95	2.45	20.70		
0.90	5	15.27	0.53	14.41	16.13	10.54	0.81	9.21	11.87	13.32	1.10	11.52	15.12	0.72	21.42		
1.00	5	15.50	0.73	14.30	16.70	10.81	0.79	9.51	12.11	12.50	0.80	11.19	13.81	0.90	22.32		

LANDMARK - LT GRIP CENTER (17)

[illegible]

LANDMARK - LT WRIST CENTER (27)

[illegible]

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +20.0, +10.0, +12.4 TO STICK CONTROLLER AT +20.0, 0.0, +12.4 AND REMAINS AT STICK CONTROLLER FOR RIGHT HAND TO COMPLETE A MOVEMENT AND THEN RETURNS BACK TO THROTTLE CONTROLLER.

BACK ANGLE - 13

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.46	0.09	0.30 TO 0.70 SECS.
LEFT REV	0.43	0.15	0.10 TO 0.90 SECS.

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	5 PCT	95 PCT	MEAN	SE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	42	6.85	0.30	1.42	2.03	2.63	29.34	1.26	27.27	31.42	0.0	0.0	0.0	0.0	0.0
0.10	42	6.83	-0.08	1.32	-2.24	2.08	29.35	1.27	27.27	31.42	0.38	0.38	0.38	0.38	0.38
0.20	42	6.78	-0.42	1.39	-2.69	1.86	29.37	1.34	27.18	31.56	0.34	0.72	0.72	0.72	0.72
0.30	42	6.71	-0.52	1.42	-2.85	1.81	29.41	1.34	27.20	31.61	0.13	0.85	0.85	0.85	0.85
0.40	42	6.68	-0.54	1.48	-2.96	1.89	29.42	1.35	27.21	31.63	0.04	0.88	0.88	0.88	0.88
0.50	42	6.70	-0.50	1.54	-3.02	2.02	29.47	1.38	27.20	31.74	0.06	0.95	0.95	0.95	0.95
0.60	42	6.69	-0.45	1.53	-2.95	2.06	29.54	1.40	27.25	31.84	0.09	1.04	1.04	1.04	1.04
0.70	42	6.56	-0.37	1.51	-2.85	2.11	29.69	1.44	27.32	32.06	0.21	1.25	1.25	1.25	1.25
0.80	41	6.35	-0.25	1.54	-2.78	2.28	29.84	1.46	27.45	32.23	0.28	1.53	1.53	1.53	1.53
0.90	40	6.20	-0.11	1.65	-2.81	2.59	29.95	1.50	27.49	32.42	0.24	1.77	1.77	1.77	1.77
1.00	40	6.10	0.04	1.76	-2.84	2.93	30.06	1.54	27.53	32.58	0.21	1.98	1.98	1.98	1.98
0.0	40	6.10	0.04	1.76	-2.84	2.93	30.06	1.54	27.53	32.58	0.0	0.0	0.0	0.0	0.0
0.10	42	6.63	0.95	1.24	-1.08	2.99	29.47	1.23	27.41	31.46	0.12	1.33	1.33	1.33	1.33
0.20	42	6.68	0.84	1.22	-1.16	2.84	29.44	1.24	27.39	31.46	0.11	1.44	1.44	1.44	1.44
0.30	42	6.72	0.75	1.19	-1.21	2.71	29.42	1.26	27.35	31.47	0.12	1.55	1.55	1.55	1.55
0.40	42	6.77	0.64	1.19	-1.31	2.59	29.41	1.27	27.32	31.47	0.11	1.67	1.67	1.67	1.67
0.50	42	6.81	0.54	1.21	-1.45	2.52	29.40	1.28	27.29	31.50	0.09	1.75	1.75	1.75	1.75
0.60	42	6.82	0.45	1.28	-1.65	2.56	29.39	1.30	27.26	31.52	0.06	1.82	1.82	1.82	1.82
0.70	42	6.82	0.39	1.33	-1.80	2.58	29.39	1.29	27.26	31.49	0.06	1.88	1.88	1.88	1.88
0.80	42	6.84	0.33	1.35	-1.89	2.54	29.37	1.27	27.27	31.45	0.03	1.91	1.91	1.91	1.91
0.90	42	6.84	0.30	1.38	-1.96	2.57	29.36	1.26	27.27	31.45	0.02	1.93	1.93	1.93	1.93
1.00	42	6.85	0.30	1.42	-2.03	2.63	29.34	1.26	27.27	31.42	0.02	1.93	1.93	1.93	1.93

LANDMARK - CERVICALE (2)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	5 PCT	95 PCT	MEAN	SE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	42	-0.88	-0.66	0.96	-2.23	0.92	23.68	1.04	21.97	25.39	0.0	0.0	0.0	0.0	0.0
0.10	42	-0.81	-0.56	0.93	-2.09	0.96	23.50	1.03	21.91	25.30	0.14	0.14	0.14	0.14	0.14
0.20	42	-0.77	-0.46	1.19	-2.41	1.49	23.54	1.04	21.83	25.25	0.12	0.26	0.26	0.26	0.26
0.30	42	-0.82	-0.49	1.23	-2.51	1.52	23.54	1.04	21.83	25.25	0.06	0.32	0.32	0.32	0.32
0.40	42	-0.88	-0.52	1.23	-2.55	1.50	23.56	1.04	21.85	25.27	0.06	0.38	0.38	0.38	0.38
0.50	42	-0.87	-0.58	1.18	-2.51	1.35	23.58	1.08	21.81	25.35	0.07	0.45	0.45	0.45	0.45
0.60	42	-0.86	-0.60	1.15	-2.48	1.29	23.58	1.11	21.76	25.41	0.02	0.47	0.47	0.47	0.47
0.70	42	-0.86	-0.52	1.10	-2.32	1.28	23.58	1.09	21.78	25.37	0.08	0.55	0.55	0.55	0.55
0.80	42	-0.87	-0.43	1.08	-2.20	1.34	23.57	1.07	21.81	25.33	0.09	0.64	0.64	0.64	0.64
0.90	42	-0.86	-0.42	1.10	-2.23	1.39	23.57	1.10	21.76	25.37	0.01	0.65	0.65	0.65	0.65
1.00	42	-0.86	-0.41	1.16	-2.32	1.50	23.56	1.14	21.69	25.44	0.01	0.66	0.66	0.66	0.66
0.0	42	-0.86	-0.41	1.16	-2.32	1.50	23.56	1.14	21.69	25.44	0.0	0.0	0.0	0.0	0.0
0.10	42	-0.91	-0.41	1.08	-2.17	1.35	23.53	1.09	21.85	25.42	0.09	0.09	0.09	0.09	0.09
0.20	42	-0.92	-0.48	1.03	-2.17	1.22	23.64	1.09	21.85	25.43	0.07	0.16	0.16	0.16	0.16
0.30	42	-0.92	-0.55	1.02	-2.22	1.13	23.65	1.11	21.82	25.47	0.07	0.23	0.23	0.23	0.23
0.40	42	-0.92	-0.61	1.03	-2.29	1.08	23.65	1.12	21.82	25.48	0.06	0.29	0.29	0.29	0.29
0.50	42	-0.86	-0.60	1.06	-2.34	1.14	23.67	1.10	21.86	25.48	0.06	0.35	0.35	0.35	0.35
0.60	42	-0.81	-0.59	1.08	-2.36	1.18	23.68	1.09	21.89	25.48	0.05	0.40	0.40	0.40	0.40
0.70	42	-0.86	-0.67	0.98	-2.28	0.94	23.69	1.09	21.90	25.47	0.09	0.49	0.49	0.49	0.49
0.80	42	-0.87	-0.71	0.99	-2.34	0.92	23.67	1.07	21.93	25.42	0.04	0.53	0.53	0.53	0.53
0.90	42	-0.87	-0.70	0.98	-2.30	0.91	23.68	1.05	21.96	25.39	0.01	0.54	0.54	0.54	0.54
1.00	42	-0.88	-0.66	0.96	-2.23	0.92	23.68	1.04	21.97	25.39	0.04	0.58	0.58	0.58	0.58

31

TIME T	SAMPLE SIZE/N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE INCR	MOVES CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT		
0.0	42	3.41	1.29	1.28	5.53	-0.39	1.07	-2.15	1.37	22.38	0.92	20.87	23.89	0.0	0.0
0.10	42	3.33	1.32	1.16	5.49	-0.34	-2.08	-2.08	1.37	22.33	0.89	20.88	23.78	0.10	0.10
0.20	42	3.24	1.50	0.77	5.70	-0.27	2.28	2.28	1.74	22.30	0.93	20.77	23.84	0.12	0.22
0.30	42	3.20	1.59	0.59	5.81	-0.32	1.23	-2.34	1.70	22.37	0.97	20.78	23.95	0.09	0.31
0.40	42	3.21	1.62	0.55	5.87	-0.42	1.21	-2.40	1.56	22.42	1.06	20.69	24.15	0.11	0.42
0.50	42	3.19	1.63	0.51	5.87	-0.41	1.21	-2.39	1.57	22.41	1.00	20.76	24.05	0.02	0.45
0.60	42	3.21	1.62	0.54	5.87	-0.37	1.21	-2.36	1.62	22.42	0.98	20.81	24.02	0.04	0.49
0.70	42	3.28	1.58	0.69	5.87	-0.37	1.19	-2.32	1.57	22.68	1.31	19.55	25.82	0.28	0.77
0.80	42	3.32	1.51	0.84	5.80	-0.33	1.15	-2.22	1.55	22.93	1.39	17.37	28.49	0.25	1.02
0.90	42	3.33	1.47	0.92	5.74	-0.24	1.15	-2.13	1.65	22.70	1.96	19.48	25.91	0.25	1.27
1.00	42	3.35	1.46	0.96	5.74	-0.16	1.18	-2.10	1.78	22.57	0.95	20.90	24.03	0.24	1.51
0.0	42	3.35	1.46	0.96	5.74	-0.16	1.18	-2.10	1.78	22.47	0.95	20.90	24.03	0.0	0.0
0.10	42	3.36	1.27	1.27	5.45	-0.12	1.15	-2.00	1.76	22.35	0.94	20.81	23.90	0.12	0.12
0.20	42	3.38	1.30	1.24	5.52	-0.19	1.14	-2.05	1.68	22.34	0.93	20.81	23.87	0.07	0.19
0.30	42	3.39	1.34	1.20	5.59	-0.24	1.16	-2.14	1.66	22.34	0.94	20.80	23.87	0.06	0.25
0.40	42	3.38	1.34	1.19	5.57	-0.30	1.15	-2.19	1.59	22.34	0.94	20.79	23.88	0.06	0.31
0.50	42	3.36	1.34	1.16	5.55	-0.34	1.12	-2.19	1.50	22.36	0.96	20.79	23.93	0.06	0.36
0.60	42	3.36	1.35	1.14	5.58	-0.35	1.07	-2.12	1.41	22.38	0.95	20.82	23.94	0.02	0.38
0.70	42	3.37	1.33	1.18	5.55	-0.37	1.06	-2.11	1.37	22.38	0.92	20.87	23.89	0.02	0.40
0.80	42	3.38	1.31	1.23	5.53	-0.40	1.09	-2.18	1.39	22.37	0.89	20.91	23.83	0.03	0.43
0.90	42	3.40	1.29	1.27	5.52	-0.40	1.08	-2.17	1.36	22.37	0.90	20.90	23.85	0.02	0.45
1.00	42	3.41	1.29	1.28	5.53	-0.39	1.07	-2.15	1.37	22.38	0.92	20.87	23.89	0.02	0.47

5)

TIME	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT		
0.0	26	-0.31	1.17	-2.22	1.61	7.12	0.74	8.34	23.13	1.21	21.15	25.11	0.0	0.0	
0.10	26	-0.25	1.10	-2.05	1.56	7.14	0.67	8.25	22.95	1.21	20.96	24.94	0.19	0.19	
0.20	27	-0.17	1.08	-1.94	1.60	7.16	0.69	8.30	22.84	1.25	20.79	24.88	0.14	0.33	
0.30	31	-0.04	1.44	-2.41	2.32	7.08	0.80	5.76	22.92	1.18	20.98	24.86	0.17	0.50	
0.40	32	-0.01	1.37	-2.26	2.24	7.14	0.76	5.88	22.89	1.16	20.99	24.79	0.08	0.58	
0.50	32	0.12	1.36	-2.12	2.35	7.22	0.77	5.96	22.87	1.14	20.99	24.74	0.15	0.73	
0.60	32	0.32	1.32	-1.84	2.28	7.28	0.79	5.98	22.80	1.14	20.93	24.68	0.23	0.95	
0.70	32	0.51	1.19	-1.44	2.47	7.34	0.87	5.92	22.74	1.15	20.85	24.63	0.21	1.16	
0.80	32	0.62	1.06	-1.11	2.35	7.41	0.80	6.11	22.71	1.16	20.81	24.61	0.13	1.29	
0.90	32	0.69	1.04	-1.01	2.39	7.54	0.76	6.29	22.68	1.18	20.74	24.61	0.15	1.44	
1.00	32	0.71	1.02	-0.97	2.38	7.63	0.79	6.33	22.65	1.19	20.70	24.60	0.10	1.54	
0.0	32	0.71	1.02	-0.97	2.38	7.63	0.79	6.33	22.65	1.19	20.70	24.60	0.0	0.0	
0.10	28	-0.34	0.94	-1.88	1.19	7.38	0.92	5.87	22.39	1.30	20.75	25.03	1.11	1.11	
0.20	28	-0.40	0.95	-1.96	1.16	7.30	0.87	5.87	23.02	1.26	20.94	25.09	0.16	1.26	
0.30	27	-0.47	0.98	-2.10	1.12	7.28	0.86	5.87	23.02	1.24	20.99	25.06	0.09	1.36	
0.40	26	-0.49	0.99	-2.09	1.16	7.20	0.81	5.87	23.02	1.26	20.95	25.08	0.08	1.43	
0.50	26	-0.49	1.04	-2.20	1.22	7.14	0.78	5.86	23.06	1.28	20.96	25.16	0.08	1.52	
0.60	26	-0.46	1.05	-2.17	1.26	7.11	0.75	5.88	23.08	1.26	21.02	25.15	0.07	1.56	
0.70	26	-0.42	1.01	-2.08	1.23	7.06	0.73	5.87	23.11	1.24	21.07	25.15	0.07	1.64	
0.80	26	-0.39	1.00	-2.03	1.24	7.01	0.71	5.84	23.13	1.24	21.10	25.16	0.06	1.70	
0.90	26	-0.36	1.07	-2.11	1.39	7.06	0.71	5.90	23.14	1.23	21.13	25.15	0.06	1.75	
1.00	26	-0.31	1.17	-2.22	1.61	7.12	0.74	5.90	23.13	1.21	21.15	25.11	0.08	1.84	

BACK ANGLE = 13

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE	SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE				MOVED			
T			MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR				INCR			CUM
0.0		19	18.46	0.79	17.16	19.77	9.87	0.58	8.92	10.82	12.83	0.40	12.17	13.48	0.0				0.0			0.0
0.10		19	18.06	0.79	16.76	19.36	9.20	0.68	8.08	10.32	13.61	0.42	12.92	14.29	1.11				1.11			1.11
0.20	F	20	17.40	0.89	16.23	19.16	8.50	0.99	6.88	10.13	16.41	0.71	13.24	15.58	1.12				1.12			2.23
0.30	O	20	17.40	0.83	16.04	18.77	7.05	1.14	5.19	8.92	14.79	0.66	13.70	15.88	1.53				1.53			3.76
0.40	R	19	17.23	0.95	15.67	18.79	5.59	1.22	3.59	7.60	15.02	0.70	13.88	16.16	1.48				1.48			5.24
0.50	W	20	17.32	1.13	15.47	19.17	3.94	1.63	1.27	6.60	14.66	0.78	13.51	15.81	1.70				1.70			6.94
0.60	A	19	17.83	0.95	16.28	19.38	3.02	1.09	1.23	4.80	14.13	0.78	12.86	15.40	1.18				1.18			8.12
0.70	D	18	18.18	0.77	16.91	19.45	2.37	0.59	1.39	3.34	13.50	0.72	12.32	14.68	0.97				0.97			9.09
0.80	R	17	18.55	0.70	17.39	19.70	1.75	0.54	0.86	2.63	12.92	0.74	11.71	14.14	0.93				10.01			10.53
0.90	D	16	18.72	0.50	17.90	19.54	1.38	0.50	-0.09	2.85	12.60	0.77	11.34	13.87	0.51				10.53			11.04
1.00		16	18.81	0.37	18.20	19.42	1.60	0.44	0.88	2.32	12.58	0.59	11.60	13.55	0.24				10.77			11.77
0.0		16	18.81	0.37	18.20	19.42	1.60	0.44	0.88	2.32	12.58	0.59	11.60	13.55	0.0				0.0			0.0
0.10		15	16.90	1.04	15.19	18.61	3.71	1.48	1.29	6.13	13.79	1.43	11.45	16.14	3.10				3.10			3.10
0.20		15	16.66	1.11	14.83	18.49	4.43	1.90	1.31	7.55	14.35	1.86	11.30	17.40	0.94				0.94			4.04
0.30	R	15	16.90	1.51	14.42	19.38	5.75	3.02	0.80	10.70	14.98	2.22	11.33	18.63	1.48				1.48			5.52
0.40	E	19	16.70	1.20	14.73	18.67	6.63	2.08	3.22	10.04	15.04	1.31	12.89	17.20	0.90				0.90			6.42
0.50	U	19	16.97	1.24	14.93	19.01	7.55	1.81	4.59	10.51	15.01	1.15	13.12	16.90	0.96				0.96			7.39
0.60	U	18	17.27	1.26	15.21	19.33	8.56	1.63	5.88	11.23	14.70	1.16	12.79	16.60	1.09				1.09			8.48
0.70	R	19	17.68	1.20	15.72	19.65	9.25	1.40	6.95	11.54	14.20	0.93	12.68	15.72	0.95				0.95			9.42
0.80	N	19	18.00	1.12	16.17	19.83	9.53	0.96	7.95	11.11	13.77	0.75	12.53	15.01	0.60				0.60			10.03
0.90		19	18.26	0.94	16.72	19.79	9.75	0.68	8.64	10.87	13.29	0.49	12.49	14.09	0.59				0.59			10.62
1.00		19	18.46	0.79	17.16	19.77	9.87	0.58	8.92	10.82	12.83	0.40	12.17	13.48	0.52				0.52			11.14

LANDMARK - LT TROCHANTER (19)

TIME	SAMPLE	SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE				MOVED			
T			MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR				INCR			CUM
0.0		21	4.16	0.67	3.07	5.25	6.74	0.79	5.44	8.03	3.90	0.35	3.32	4.48	0.0				0.0			0.0
0.10		21	4.18	0.60	3.20	5.16	6.71	0.67	5.62	7.80	3.88	0.33	3.33	4.42	0.04				0.04			0.04
0.20	F	21	4.19	0.57	3.25	5.13	6.68	0.65	5.61	7.75	3.85	0.34	3.30	4.41	0.04				0.04			0.08
0.30	O	21	4.21	0.54	3.33	5.10	6.64	0.69	5.51	7.76	3.85	0.32	3.32	4.38	0.05				0.05			0.13
0.40	R	21	4.24	0.55	3.34	5.14	6.63	0.71	5.47	7.79	3.87	0.32	3.34	4.39	0.03				0.03			0.16
0.50	W	21	4.23	0.58	3.28	5.17	6.63	0.70	5.48	7.77	3.88	0.33	3.33	4.42	0.02				0.02			0.17
0.60	A	21	4.22	0.61	3.22	5.22	6.58	0.71	5.42	7.75	3.89	0.36	3.30	4.47	0.05				0.05			0.22
0.70	R	21	4.24	0.62	3.23	5.25	6.60	0.71	5.43	7.77	3.91	0.37	3.31	4.51	0.04				0.04			0.25
0.80	D	21	4.25	0.57	3.31	5.19	6.63	0.73	5.44	7.82	3.92	0.37	3.31	4.54	0.04				0.04			0.29
0.90		21	4.27	0.52	3.42	5.13	6.66	0.69	5.53	7.80	3.90	0.37	3.30	4.50	0.05				0.05			0.34
1.00		21	4.30	0.54	3.42	5.18	6.69	0.67	5.59	7.79	3.87	0.38	3.24	4.50	0.05				0.05			0.39
0.0		21	4.30	0.54	3.42	5.18	6.69	0.67	5.59	7.79	3.87	0.38	3.24	4.50	0.0				0.0			0.0
0.10		20	4.15	0.62	3.14	5.18	6.62	0.73	5.43	7.82	3.84	0.33	3.30	4.39	0.16				0.16			0.16
0.20		20	4.22	0.57	3.29	5.16	6.63	0.72	5.45	7.81	3.85	0.33	3.30	4.39	0.07				0.07			0.23
0.30	R	21	4.21	0.55	3.30	5.11	6.59	0.72	5.42	7.77	3.87	0.34	3.32	4.42	0.05				0.05			0.27
0.40	E	21	4.24	0.64	3.20	5.29	6.56	0.72	5.38	7.75	3.87	0.35	3.29	4.45	0.05				0.05			0.32
0.50	O	21	4.50	0.87	3.08	5.93	6.79	1.19	4.84	8.74	3.89	0.38	3.27	4.51	0.34				0.34			0.66
0.60	U	21	4.59	1.38	2.32	6.85	6.97	1.65	4.26	9.69	3.91	0.35	3.33	4.49	0.20				0.20			0.87
0.70	U	21	4.24	0.56	3.32	5.15	6.71	0.78	5.43	7.99	3.94	0.35	3.36	4.52	0.44				0.44			1.31
0.80	N	21	4.14	0.59	3.18	5.11	6.66	0.74	5.45	7.87	3.94	0.35	3.37	4.52	0.11				0.11			1.41
0.90		21	4.15	0.60	3.17	5.13	6.68	0.73	5.48	7.88	3.94	0.34	3.36	4.49	0.03				0.03			1.44
1.00		21	4.16	0.67	3.07	5.25	6.74	0.79	5.44	8.03	3.90	0.35	3.32	4.48	0.06				0.06			1.50

LANDMARK - LT KNEE TOP (21)

TIME	SAMPLE	SIZE,N	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	DISTANCE	MOVED
T			CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	INCR	CUM
0.0		25	19.99	0.74	18.78	21.20	5.44	0.85	4.06	6.83	11.35	1.22	9.35	1.23	9.35	13.36	0.0	0.0
0.10		25	19.98	0.80	18.67	21.30	5.51	0.86	4.11	6.92	11.34	1.23	9.32	1.23	9.32	13.35	0.07	0.07
0.20	F	25	19.96	0.90	18.49	21.43	5.63	0.98	4.03	7.24	11.37	1.24	9.34	1.24	9.34	13.41	0.13	0.20
0.30	D	26	19.94	0.94	18.40	21.47	5.67	0.94	4.13	7.22	11.37	1.24	9.32	1.24	9.32	13.62	0.11	0.31
0.40	R	27	19.91	1.02	18.14	21.48	5.54	0.94	4.06	7.03	11.50	1.32	9.34	1.32	9.34	13.67	0.18	0.49
0.50	W	27	19.73	1.25	17.68	21.79	5.47	1.09	3.69	7.26	11.51	1.32	9.35	1.32	9.35	13.67	0.10	0.59
0.60	A	26	19.79	0.96	18.22	21.36	5.60	0.87	4.17	7.04	11.42	1.27	9.33	1.27	9.33	13.50	0.17	0.77
0.70	R	26	19.88	0.86	18.47	21.30	5.69	0.86	4.27	7.11	11.42	1.28	9.33	1.28	9.33	13.52	0.13	0.89
0.80	D	26	19.91	0.83	18.54	21.28	5.70	0.87	4.27	7.14	11.42	1.27	9.33	1.27	9.33	13.52	0.03	0.92
0.90	R	26	19.92	0.78	18.63	21.20	5.72	0.86	4.32	7.13	11.43	1.27	9.35	1.27	9.35	13.50	0.02	0.94
1.00	W	26	19.93	0.78	18.65	21.21	5.75	0.86	4.33	7.16	11.43	1.26	9.36	1.26	9.36	13.49	0.02	0.97
0.0		26	19.93	0.78	18.65	21.21	5.75	0.86	4.33	7.16	11.43	1.26	9.36	1.26	9.36	13.49	0.0	0.0
0.10		25	19.77	0.80	18.46	21.08	5.56	0.91	4.06	7.06	11.39	1.20	9.41	1.20	9.41	13.36	0.25	0.25
0.20		25	19.82	0.79	18.52	21.12	5.58	0.93	4.06	7.10	11.41	1.20	9.43	1.20	9.43	13.38	0.06	0.30
0.30	R	25	19.86	0.76	18.60	21.11	5.59	0.90	4.12	7.07	11.39	1.19	9.45	1.19	9.45	13.33	0.05	0.35
0.40	E	25	19.91	0.74	18.69	21.13	5.60	0.88	4.15	7.04	11.36	1.16	9.45	1.16	9.45	13.27	0.06	0.41
0.50	T	25	19.97	0.74	18.76	21.18	5.60	0.89	4.15	7.06	11.36	1.17	9.44	1.17	9.44	13.27	0.06	0.46
0.60	U	25	19.98	0.74	18.77	21.19	5.60	0.90	4.13	7.06	11.38	1.18	9.45	1.18	9.45	13.31	0.03	0.49
0.70	R	24	19.98	0.75	18.76	21.20	5.52	0.82	4.18	6.86	11.32	1.16	9.42	1.16	9.42	13.21	0.10	0.59
0.80	N	25	20.00	0.72	18.81	21.18	5.49	0.81	4.15	6.82	11.34	1.15	9.45	1.15	9.45	13.23	0.04	0.63
0.90		25	20.01	0.72	18.84	21.19	5.48	0.82	4.12	6.83	11.35	1.18	9.41	1.18	9.41	13.29	0.02	0.65
1.00		25	19.99	0.74	18.78	21.20	5.44	0.85	4.06	6.83	11.35	1.22	9.35	1.22	9.35	13.36	0.04	0.69

LANDMARK - LT SHOULDER CENTER (23)

TIME	SAMPLE	SIZE,N	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	DISTANCE	MOVED
T			CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	CO-ORDINATE	SE	5 PCT	95 PCT	INCR	CUM
0.0		21	0.89	0.96	-0.68	2.46	7.33	0.76	6.08	8.57	20.48	0.99	18.85	0.82	19.06	21.74	0.0	0.0
0.10		21	0.78	0.86	-0.62	2.19	7.25	0.75	6.02	8.49	20.43	0.82	19.06	0.79	19.04	21.63	0.15	0.15
0.20	F	21	0.68	0.84	-0.70	2.05	7.18	0.80	5.87	8.50	20.33	0.79	19.11	0.75	19.11	21.58	0.14	0.29
0.30	D	21	0.68	0.85	-0.72	2.08	7.08	0.72	5.89	8.26	20.35	0.75	19.11	0.75	19.11	21.61	0.11	0.40
0.40	R	21	0.76	0.87	-0.67	2.19	6.97	0.70	5.82	8.13	20.36	0.76	19.10	0.77	19.08	21.62	0.13	0.53
0.50	W	21	0.94	0.89	-0.53	2.40	6.94	0.71	5.76	8.11	20.35	0.74	19.10	0.74	19.10	21.52	0.18	0.71
0.60	A	21	1.14	0.83	-0.22	2.50	6.96	0.68	5.84	8.08	20.31	0.75	19.02	0.75	19.02	21.49	0.21	0.92
0.70	T	21	1.41	0.75	0.18	2.65	6.98	0.65	5.91	8.05	20.26	0.78	18.94	0.78	18.94	21.49	0.28	1.20
0.80	D	21	1.55	0.74	0.34	2.77	7.02	0.63	5.98	8.06	20.21	0.78	18.85	0.78	18.85	21.41	0.15	1.35
0.90	R	21	1.73	0.79	0.41	2.99	7.11	0.64	6.07	8.16	20.13	0.78	18.85	0.78	18.85	21.41	0.19	1.55
1.00	W	21	1.77	0.86	0.36	3.17	7.21	0.66	6.13	8.29	20.06	0.79	18.76	0.79	18.76	21.37	0.13	1.68
0.0		21	1.77	0.86	0.36	3.17	7.21	0.66	6.13	8.29	20.06	0.79	18.76	0.79	18.76	21.37	0.0	0.0
0.10		21	1.73	0.74	-0.47	1.94	7.18	0.65	5.78	8.57	20.38	1.06	18.35	1.06	18.35	21.82	1.03	1.03
0.20		21	0.69	0.78	-0.58	1.97	7.15	0.86	5.74	8.56	20.21	1.03	18.53	1.03	18.53	21.90	0.14	1.17
0.30	R	21	0.62	0.81	-0.71	1.94	7.15	0.83	5.78	8.52	20.27	0.98	18.66	0.98	18.66	21.88	0.10	1.27
0.40	E	21	0.56	0.85	-0.83	1.94	7.15	0.83	5.79	8.51	20.33	1.00	18.69	1.00	18.69	21.98	0.09	1.36
0.50	T	21	0.54	0.89	-0.93	2.00	7.17	0.86	5.77	8.57	20.45	1.04	18.75	1.04	18.75	22.15	0.12	1.48
0.60	U	21	0.53	0.93	-1.00	2.06	7.21	0.89	5.76	8.66	20.50	1.03	18.81	1.03	18.81	22.19	0.07	1.54
0.70	R	21	0.58	0.85	-0.82	1.98	7.26	0.90	5.78	8.74	20.57	1.01	18.92	1.01	18.92	22.23	0.10	1.64
0.80	N	21	0.59	0.87	-0.74	2.13	7.30	0.87	5.88	8.73	20.55	1.03	18.87	1.03	18.87	22.24	0.12	1.76
0.90		21	0.79	0.90	-0.69	2.28	7.30	0.80	5.99	8.62	20.52	1.01	18.86	1.01	18.86	22.18	0.10	1.87
1.00	W	21	0.89	0.96	-0.68	2.46	7.33	0.76	6.08	8.57	20.48	0.99	18.85	0.99	18.85	22.10	0.11	1.98

BACK ANGLE = 13

LANDMARK - LT ELBOW CENTER (25)

TIME	SAMPLE	(-----X-----)	CO-ORDINATE	(-----Y-----)	CO-ORDINATE	(-----Z-----)	CO-ORDINATE	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	MEAN	SE	MEAN	SE	INCR	CUM
0.0	21	5.53	0.81	11.82	10.49	13.15	1.46	0.0	0.0
0.10	21	5.37	0.82	10.99	0.82	12.31	1.37	0.0	0.0
0.20	21	5.21	0.97	10.99	0.82	11.82	1.37	0.0	0.0
0.30	21	5.24	1.06	10.25	0.97	11.40	1.30	0.0	0.0
0.40	21	5.41	1.05	9.17	0.88	11.24	1.30	0.0	0.0
0.50	21	5.78	1.03	7.13	0.82	10.61	1.30	0.0	0.0
0.60	21	6.22	0.99	4.10	0.82	10.02	1.29	0.0	0.0
0.70	21	6.59	0.96	3.60	0.81	9.45	1.29	0.0	0.0
0.80	21	6.90	0.89	3.16	0.79	8.97	1.29	0.0	0.0
0.90	21	7.04	0.75	2.73	0.78	8.57	1.28	0.0	0.0
1.00	21	7.04	0.66	2.73	0.62	8.05	1.28	0.0	0.0
0.0	21	7.04	0.66	2.73	0.52	7.63	1.28	0.0	0.0
0.10	21	5.30	1.19	6.77	0.52	7.63	1.28	0.0	0.0
0.20	21	4.99	1.10	6.77	1.00	7.63	1.28	0.0	0.0
0.30	21	4.85	0.99	6.77	1.11	7.08	1.04	0.0	0.0
0.40	21	4.82	1.01	6.47	1.14	7.56	1.18	0.0	0.0
0.50	21	4.86	1.09	6.48	1.08	8.15	1.35	0.0	0.0
0.60	21	5.01	1.03	6.65	1.06	8.68	1.35	0.0	0.0
0.70	21	5.14	0.95	6.69	1.07	9.17	1.37	0.0	0.0
0.80	21	5.27	0.86	6.69	1.06	9.59	1.39	0.0	0.0
0.90	21	5.43	0.82	6.68	1.00	9.96	1.44	0.0	0.0
1.00	21	5.53	0.81	6.86	1.00	10.26	1.49	0.0	0.0
0.0	21	5.53	0.81	6.86	0.81	10.49	1.46	0.0	0.0
0.10	21	5.30	1.19	6.77	0.52	7.63	1.28	0.0	0.0
0.20	21	4.99	1.10	6.77	1.00	7.63	1.28	0.0	0.0
0.30	21	4.85	0.99	6.77	1.11	7.08	1.04	0.0	0.0
0.40	21	4.82	1.01	6.47	1.14	7.56	1.18	0.0	0.0
0.50	21	4.86	1.09	6.48	1.08	8.15	1.35	0.0	0.0
0.60	21	5.01	1.03	6.65	1.06	8.68	1.35	0.0	0.0
0.70	21	5.14	0.95	6.69	1.07	9.17	1.37	0.0	0.0
0.80	21	5.27	0.86	6.69	1.06	9.59	1.39	0.0	0.0
0.90	21	5.43	0.82	6.68	1.00	9.96	1.44	0.0	0.0
1.00	21	5.53	0.81	6.86	1.00	10.26	1.49	0.0	0.0

LANDMARK - LT WRIST CENTER (27)

TIME	SAMPLE	(-----X-----)	CO-ORDINATE	(-----Y-----)	CO-ORDINATE	(-----Z-----)	CO-ORDINATE	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	MEAN	SE	MEAN	SE	INCR	CUM
0.0	14	15.15	0.86	10.66	0.59	11.62	0.81	0.0	0.0
0.10	14	14.81	0.88	9.63	0.79	10.93	0.72	0.0	0.0
0.20	14	14.46	0.98	8.58	0.79	10.86	0.71	0.0	0.0
0.30	15	14.21	0.88	7.00	1.38	9.26	0.71	0.0	0.0
0.40	16	14.00	0.91	5.79	1.69	8.57	0.76	0.0	0.0
0.50	17	14.31	0.84	4.96	1.48	7.39	0.74	0.0	0.0
0.60	15	14.74	0.85	4.46	0.90	6.29	0.83	0.0	0.0
0.70	14	15.14	0.79	3.69	0.86	5.10	0.77	0.0	0.0
0.80	16	15.39	0.79	3.22	1.10	4.41	0.79	0.0	0.0
0.90	15	15.62	0.69	3.14	0.78	4.41	0.54	0.0	0.0
1.00	15	15.76	0.52	3.05	0.62	4.06	0.61	0.0	0.0
0.0	15	15.78	0.52	3.05	0.62	4.06	0.61	0.0	0.0
0.10	12	13.72	1.22	4.53	1.67	7.27	1.54	0.0	0.0
0.20	12	13.38	1.07	5.13	1.84	8.32	1.62	0.0	0.0
0.30	14	13.27	0.96	6.07	1.66	7.10	1.58	0.0	0.0
0.40	15	13.26	1.08	7.10	1.58	6.29	1.54	0.0	0.0
0.50	16	13.61	1.21	8.28	1.70	5.49	1.54	0.0	0.0
0.60	14	14.09	1.13	9.31	1.56	4.75	1.54	0.0	0.0
0.70	13	14.35	0.98	9.90	1.18	3.54	1.54	0.0	0.0
0.80	14	14.57	1.07	10.27	0.88	2.73	1.54	0.0	0.0
0.90	14	15.04	0.92	10.64	0.57	2.03	1.54	0.0	0.0
1.00	14	15.15	0.86	10.66	0.59	2.03	1.54	0.0	0.0
0.0	15	15.78	0.52	3.05	0.62	4.06	0.61	0.0	0.0
0.10	12	13.72	1.22	4.53	1.67	7.27	1.54	0.0	0.0
0.20	12	13.38	1.07	5.13	1.84	8.32	1.62	0.0	0.0
0.30	14	13.27	0.96	6.07	1.66	7.10	1.58	0.0	0.0
0.40	15	13.26	1.08	7.10	1.58	6.29	1.54	0.0	0.0
0.50	16	13.61	1.21	8.28	1.70	5.49	1.54	0.0	0.0
0.60	14	14.09	1.13	9.31	1.56	4.75	1.54	0.0	0.0
0.70	13	14.35	0.98	9.90	1.18	3.54	1.54	0.0	0.0
0.80	14	14.57	1.07	10.27	0.88	2.73	1.54	0.0	0.0
0.90	14	15.04	0.92	10.64	0.57	2.03	1.54	0.0	0.0
1.00	14	15.15	0.86	10.66	0.59	2.03	1.54	0.0	0.0

DATA FOR 30° BACK ANGLE CONFIGURATION

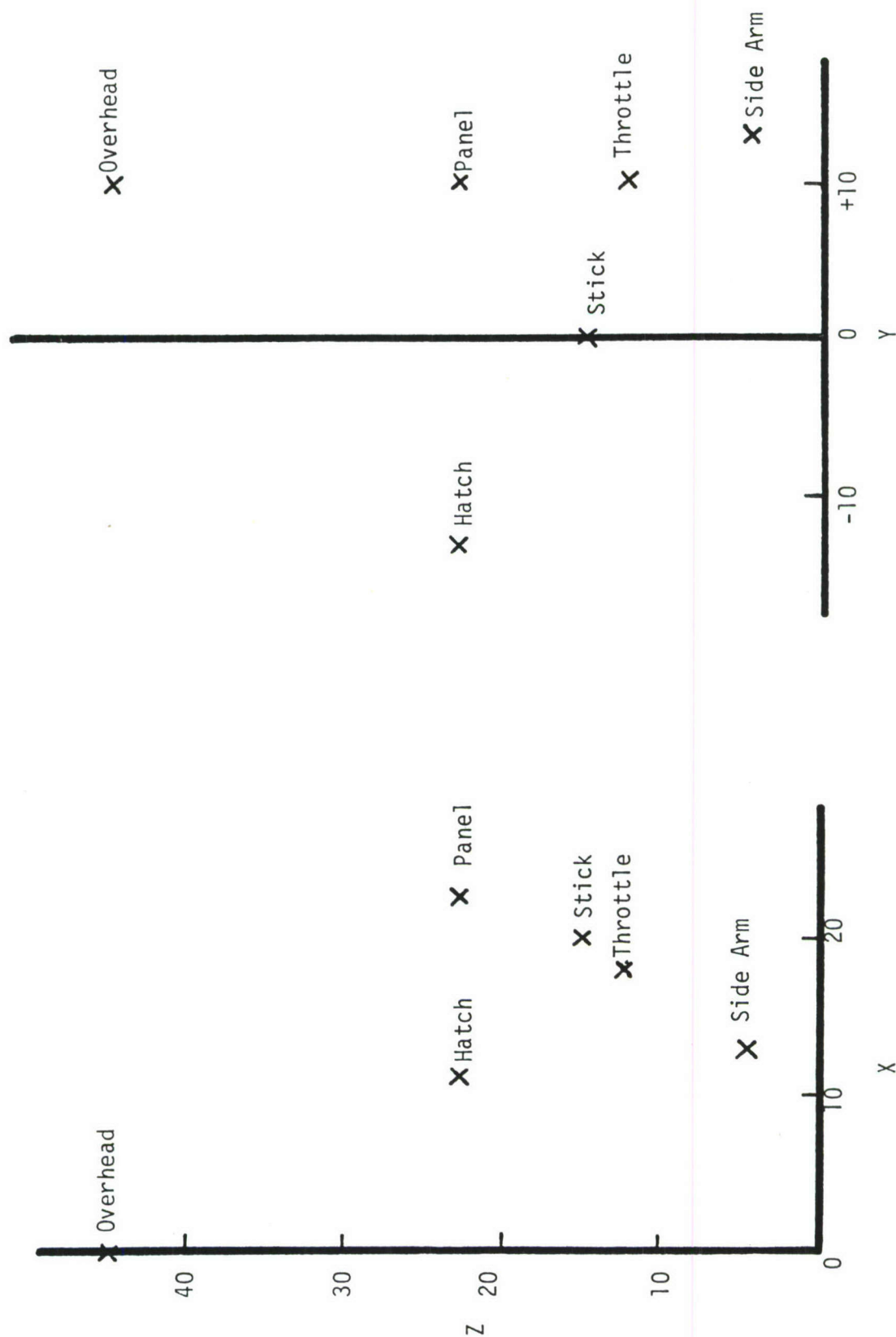


Fig. A-25. Controller Locations for 30° Back Rest Angle

MOVEMENT: RIGHT HAND MOVES FROM STICK CONTROLLER AT +20.0, 0.0, +15.0 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +45.0 AND RETURNS. THIS MOVEMENT IS PRECEDED BY LEFT HAND MOVING FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO STICK CONTROLLER AND IS FOLLOWED BY LEFT HAND RETURNING BACK TO STICK CONTROLLER.

MOTION NUMBER - 11130
 BACK ANGLE - 30

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RIGHT FWD	1.04	0.18	0.90 TO 1.30 SECS.
RIGHT REV	0.94	0.10	0.80 TO 1.10 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	SE	5 PCT	95 PCT	-----Y----- MEAN	SE	5 PCT	95 PCT	-----Z----- MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
G.0	7	0.62	1.23	-1.41	2.64	0.66	1.34	-1.54	2.85	28.07	1.29	25.95	30.19	0.0	0.0
G.10	7	-0.40	1.41	-2.72	1.91	0.67	0.57	-0.79	1.07	28.92	1.90	25.80	32.04	1.42	1.42
F 0.20	7	-1.33	1.31	-3.47	0.81	0.79	0.82	-0.55	2.14	29.45	2.00	26.16	32.73	1.25	2.67
D 0.30	7	-2.50	1.32	-4.67	-0.33	1.47	0.73	0.27	2.66	29.95	1.53	27.44	32.47	1.44	4.11
R 0.40	7	-3.76	1.14	-5.63	1.88	2.14	0.68	1.03	3.26	30.21	1.27	28.12	32.30	1.45	5.56
W 0.50	7	-4.74	1.10	-6.55	-2.94	2.95	0.80	1.64	4.27	30.26	1.31	28.11	32.41	1.28	6.84
A 0.60	7	-5.37	1.22	-7.37	-3.37	3.53	0.79	2.23	4.84	30.16	1.22	28.16	32.16	0.86	7.70
R 0.70	7	-5.81	1.34	-8.01	-3.61	4.10	0.89	2.64	5.56	30.12	1.35	27.91	32.34	0.72	8.42
D 0.80	7	-6.07	1.48	-8.50	-3.64	4.67	1.20	2.70	6.63	29.99	1.32	27.81	32.15	0.64	9.05
E 0.90	7	-6.17	1.58	-8.76	-3.58	5.30	1.40	3.00	7.59	29.91	1.40	27.61	32.21	0.64	9.70
1.00	7	-6.13	1.56	-8.69	-3.57	5.96	1.50	3.49	8.42	29.83	1.39	27.52	32.07	0.67	10.37
G.0	7	-6.13	1.56	-8.69	-3.57	5.96	1.50	3.49	8.42	29.80	1.39	27.52	32.07	0.0	0.0
0.10	7	-4.09	1.81	-7.05	-1.12	5.28	1.55	2.74	7.82	29.46	1.71	26.65	32.27	2.18	2.18
0.20	7	-3.29	2.03	-6.61	0.03	4.77	1.32	2.61	6.93	29.08	1.84	26.06	32.11	1.02	3.20
R 0.30	7	-2.62	1.88	-5.71	0.47	4.05	1.35	1.84	6.27	28.34	1.72	26.00	31.63	1.02	4.22
E 0.40	7	-1.81	1.75	-4.68	1.05	3.73	1.46	1.34	5.13	28.83	1.57	26.26	31.41	0.87	5.09
T 0.50	7	-1.10	1.72	-3.92	1.72	3.16	1.49	0.72	5.59	28.77	1.48	26.35	31.19	0.92	6.03
U 0.60	7	-0.56	1.22	-2.56	1.44	2.33	1.35	0.11	4.55	28.54	1.44	26.24	30.98	1.00	7.00
R 0.70	7	-0.09	1.17	-2.01	1.84	1.84	1.31	-0.31	3.98	28.48	1.52	25.99	30.98	0.69	7.70
N 0.80	7	0.33	1.10	-1.47	2.13	1.40	1.17	-0.53	3.32	28.29	1.43	25.94	30.64	0.64	8.33
0.90	7	0.57	1.20	-1.40	2.54	0.92	1.25	-1.12	2.97	28.25	1.33	26.05	30.44	0.53	8.87
1.00	7	0.62	1.23	-1.41	2.64	0.66	1.34	-1.54	2.85	28.07	1.29	25.95	30.19	0.33	9.19

LANDMARK - CERVICALE

(2)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	SE	5 PCT	95 PCT	-----Y----- MEAN	SE	5 PCT	95 PCT	-----Z----- MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-6.45	0.67	-7.55	-5.35	0.76	1.90	-2.35	3.87	21.57	1.24	19.53	23.61	0.0	0.0
0.10	7	-6.83	0.60	-7.81	-5.86	0.59	0.85	-0.81	1.98	21.50	1.46	19.20	24.00	0.42	0.42
F 0.20	7	-6.89	0.45	-7.64	-6.15	0.77	1.02	-0.90	2.44	21.57	1.46	19.17	23.96	0.20	0.62
D 0.30	7	-7.13	0.48	-7.92	-6.34	0.99	1.28	-1.10	3.08	21.50	1.38	19.25	23.76	0.33	0.94
R 0.40	7	-7.47	0.51	-8.30	-6.63	1.18	1.34	-1.02	3.38	21.45	1.37	19.20	23.70	0.40	1.34
W 0.50	7	-7.90	0.55	-8.80	-7.00	1.37	1.42	-0.96	3.69	21.47	1.51	18.99	23.95	0.41	1.81
A 0.60	7	-7.90	0.58	-8.85	-6.95	1.73	1.31	-0.43	3.88	21.58	1.41	19.36	23.93	0.41	2.22
R 0.70	7	-8.17	0.89	-9.63	-6.71	2.03	1.10	-0.23	4.45	21.85	1.49	19.42	24.29	0.44	2.67
D 0.80	7	-8.31	1.63	-10.93	-5.69	2.27	1.33	0.09	4.45	21.77	1.88	18.69	24.84	0.29	2.95
0.90	7	-8.37	1.55	-10.92	-5.83	2.84	1.48	0.41	5.26	21.73	1.77	18.82	24.64	0.57	3.53
1.00	7	-8.50	1.57	-11.07	-5.93	3.29	2.02	-0.03	6.61	21.75	1.81	18.79	24.72	0.47	4.00
0.0	7	-8.50	1.57	-11.07	-5.93	3.29	2.02	-0.03	6.61	21.75	1.81	18.79	24.72	0.0	0.0
0.10	7	-8.25	1.38	-10.52	-5.99	3.36	1.57	0.78	5.94	21.98	1.82	18.99	24.97	0.34	0.34
0.20	7	-8.15	1.47	-10.56	-5.74	3.15	1.55	0.61	5.68	21.73	1.69	18.96	24.51	0.34	0.68
R 0.30	7	-7.82	1.09	-9.81	-6.23	2.93	1.53	0.41	5.44	21.58	1.64	18.89	24.26	0.30	0.98
E 0.40	7	-7.63	1.01	-9.28	-5.97	2.59	1.57	0.04	5.16	21.64	1.43	19.29	23.99	0.53	1.51
T 0.50	7	-7.00	0.92	-8.91	-5.44	2.21	1.51	-0.26	4.69	21.94	1.30	19.67	23.94	0.61	2.11
U 0.60	7	-6.74	0.77	-8.50	-5.50	1.56	1.60	-1.06	4.19	21.82	1.21	19.86	23.83	0.67	2.79
R 0.70	7	-6.54	0.72	-8.00	-5.48	1.30	1.65	-1.41	4.01	21.82	1.23	19.81	23.83	0.37	3.16
N 0.80	7	-6.45	0.75	-7.73	-5.36	1.19	2.00	-2.09	4.48	21.58	1.23	19.66	23.70	0.26	3.42
0.90	7	-6.45	0.75	-7.73	-5.20	0.79	1.83	-2.21	3.79	21.54	1.18	19.71	23.57	0.41	3.84
1.00	7	-6.45	0.67	-7.55	-5.35	0.76	1.90	-2.55	3.87	21.57	1.24	19.53	23.61	0.07	3.91

(16)

LANDMARK - RT GRIP CENTER

TIME T	SAMPLE SIZE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	DISTANCE INCR	MOVED CUM
0.0	7	18.50	0.66	17.41	19.58	-1.52	0.61	-2.52	-0.53	13.76	0.58	12.80	14.72	0.0	0.0	0.0	0.0
0.10	7	17.36	1.10	15.56	19.16	-2.93	0.54	-3.81	-2.05	14.39	1.03	12.40	15.78	1.84	1.84	1.84	1.84
0.20	7	16.49	1.43	14.14	18.84	-3.22	0.63	-4.25	-1.18	15.62	1.88	12.54	18.71	1.78	3.62	3.62	3.62
0.30	7	15.70	2.63	10.39	19.01	-1.16	1.11	-4.98	-3.34	19.82	4.31	12.76	26.89	4.57	8.19	8.19	8.19
0.40	7	11.22	4.07	4.54	17.91	-2.00	1.76	-4.89	0.88	26.30	5.13	17.59	34.42	7.18	15.38	15.38	15.38
0.50	7	6.30	4.24	-0.65	13.25	0.47	1.77	-2.44	3.38	32.10	4.05	25.45	38.73	8.21	23.59	23.59	23.59
0.60	7	1.86	2.85	-2.82	6.34	3.59	1.33	1.40	5.77	36.71	2.61	32.43	40.99	7.12	30.71	30.71	30.71
0.70	7	-1.10	1.66	-3.82	1.61	6.41	0.79	5.12	7.70	40.38	1.47	37.67	42.49	5.30	36.02	36.02	36.02
0.80	7	-1.94	1.25	-3.99	0.11	8.44	0.58	7.49	9.39	42.51	1.03	40.82	44.21	3.28	39.29	39.29	39.29
0.90	6	-1.19	1.41	-3.01	0.62	9.54	0.45	8.80	10.28	43.88	0.91	42.38	45.37	1.90	41.19	41.19	41.19
1.00	6	-0.36	1.05	-2.09	1.36	10.17	0.55	9.27	11.08	44.14	0.57	43.22	45.07	1.08	42.27	42.27	42.27
0.0	6	-0.36	1.05	-2.09	1.36	10.17	0.55	9.27	11.08	44.14	0.57	43.22	45.07	0.0	0.0	0.0	0.0
0.10	7	-1.23	0.94	-2.77	0.30	8.07	1.76	5.18	10.95	41.59	2.04	38.24	44.94	3.42	3.42	3.42	3.42
0.20	7	0.56	2.22	-3.08	4.21	4.70	2.14	1.20	8.21	38.31	3.14	33.16	43.46	5.03	8.45	8.45	8.45
0.30	7	0.40	2.80	-0.19	8.99	1.59	1.50	1.53	4.70	34.43	4.54	26.99	41.87	6.29	14.74	14.74	14.74
0.40	7	9.85	2.63	5.54	14.16	-1.24	0.79	-2.54	0.06	29.14	5.46	20.19	38.10	8.10	22.84	22.84	22.84
0.50	7	14.68	1.80	11.73	17.63	-3.03	0.73	-4.23	-1.83	22.62	5.02	14.36	30.86	8.31	31.15	31.15	31.15
0.60	7	17.26	0.70	16.11	18.42	-3.32	0.88	-4.77	-1.87	17.22	3.37	11.70	22.75	5.99	37.14	37.14	37.14
0.70	7	18.34	0.63	17.31	19.36	-2.42	0.62	-3.44	-1.41	14.32	1.41	12.01	16.63	3.22	40.36	40.36	40.36
0.80	7	18.56	0.55	17.66	19.45	-2.57	0.43	-2.57	-1.16	13.80	0.81	12.48	15.12	0.79	41.16	41.16	41.16
0.90	7	18.51	0.55	17.61	19.41	-1.70	0.50	-2.53	-0.87	13.77	0.75	12.54	14.99	0.17	41.33	41.33	41.33
1.00	7	18.50	0.66	17.41	19.58	-1.52	0.61	-2.52	-0.53	13.76	0.58	12.80	14.72	0.18	41.51	41.51	41.51

(18)

LANDMARK - RT TROCHANTER

TIME T	SAMPLE SIZE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	DISTANCE INCR	MOVED CUM
0.0	7	3.69	1.22	1.69	5.69	-7.32	0.20	-8.80	-5.83	3.69	0.57	2.75	4.63	0.0	0.0	0.0	0.0
0.10	7	3.59	0.90	2.12	5.07	-7.37	0.93	-8.90	-5.84	3.70	0.58	2.74	4.66	0.11	0.11	0.11	0.11
0.20	7	3.63	1.17	1.71	5.56	-7.35	0.95	-8.92	-5.78	3.65	0.54	2.77	4.53	0.07	0.18	0.18	0.18
0.30	7	3.56	1.01	1.91	5.21	-7.38	0.84	-8.76	-6.01	3.57	0.61	2.57	4.56	0.11	0.29	0.29	0.29
0.40	7	3.41	0.94	1.86	4.96	-7.38	1.00	-9.02	-5.74	3.58	0.56	2.66	4.49	0.15	0.44	0.44	0.44
0.50	7	3.50	1.01	1.84	5.16	-7.41	1.00	-9.04	-5.77	3.59	0.60	2.70	4.67	0.14	0.58	0.58	0.58
0.60	7	3.59	1.02	1.92	5.27	-7.35	0.97	-8.94	-5.75	3.55	0.57	2.72	4.58	0.12	0.70	0.70	0.70
0.70	7	3.51	1.05	1.79	5.24	-7.43	1.13	-9.28	-5.58	3.71	0.55	2.81	4.62	0.13	0.83	0.83	0.83
0.80	7	3.64	1.17	1.72	5.57	-7.42	1.08	-9.18	-5.65	3.71	0.54	2.82	4.59	0.13	0.96	0.96	0.96
0.90	7	3.58	1.10	1.77	5.38	-7.31	1.10	-9.12	-5.51	3.79	0.53	2.93	4.66	0.15	1.10	1.10	1.10
1.00	7	3.77	1.37	1.53	6.02	-7.26	1.26	-9.32	-5.19	3.78	0.59	2.82	4.75	0.20	1.31	1.31	1.31
0.0	7	3.77	1.37	1.53	6.02	-7.26	1.26	-9.32	-5.19	3.78	0.59	2.82	4.75	0.0	0.0	0.0	0.0
0.10	7	3.63	1.20	1.66	5.60	-7.38	1.14	-9.25	-5.51	3.72	0.57	2.78	4.65	0.20	0.20	0.20	0.20
0.20	7	3.64	1.22	1.64	5.63	-7.22	1.07	-8.98	-5.46	3.71	0.54	2.82	4.59	0.16	0.36	0.36	0.36
0.30	7	3.58	1.35	1.36	5.79	-7.50	1.07	-9.26	-5.74	3.65	0.57	2.68	4.57	0.29	0.65	0.65	0.65
0.40	7	3.18	0.96	1.60	4.76	-7.27	1.30	-9.40	-5.14	3.54	0.59	2.66	4.61	0.46	1.11	1.11	1.11
0.50	7	3.55	1.01	1.90	5.20	-7.60	0.86	-9.01	-6.19	3.58	0.58	2.72	4.64	0.50	1.61	1.61	1.61
0.60	7	3.63	1.16	1.71	5.54	-7.64	0.97	-9.24	-6.04	3.62	0.57	2.68	4.56	0.11	1.72	1.72	1.72
0.70	7	3.56	1.13	1.71	5.41	-7.52	0.96	-9.09	-5.94	3.63	0.56	2.71	4.55	0.14	1.86	1.86	1.86
0.80	7	3.42	1.08	1.65	5.18	-7.36	1.01	-9.01	-5.70	3.51	0.56	2.69	4.53	0.21	2.08	2.08	2.08
0.90	7	3.59	1.11	1.77	5.41	-7.37	0.88	-8.81	-5.93	3.71	0.59	2.74	4.69	0.20	2.28	2.28	2.28
1.00	7	3.69	1.22	1.69	5.69	-7.32	0.90	-8.80	-5.83	3.69	0.57	2.75	4.63	0.11	2.40	2.40	2.40

LANDMARK - RT KNEE TOP (20)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE-----				Y - CO-ORDINATE-----				Z - CO-ORDINATE-----				DISTANCE				MVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR				CUM
0.0	7	19.20	0.57	18.27	20.14	-5.53	0.78	-6.81	-4.26	11.39	0.98	9.79	13.00	0.0	0.0			0.0
0.10	7	19.12	0.48	18.33	19.91	-5.59	0.87	-7.01	-4.17	11.48	1.01	9.82	13.13	0.13	0.13			0.13
F 0.20	7	19.11	0.50	18.29	19.94	-5.53	0.73	-6.73	-4.33	11.43	0.96	9.86	13.01	0.08	0.20			0.24
R 0.30	7	19.13	0.47	18.46	19.80	-5.54	0.77	-6.80	-4.28	11.41	0.97	9.81	13.00	0.03	0.24			0.29
R 0.40	7	19.10	0.41	18.34	19.87	-5.58	0.70	-6.72	-4.43	11.43	1.01	9.78	13.09	0.06	0.29			0.42
M 0.50	7	19.20	0.54	18.31	20.08	-5.57	0.85	-6.97	-4.18	11.51	0.96	9.94	13.09	0.12	0.42			0.55
A 0.60	7	19.31	0.64	18.26	20.36	-5.65	1.00	-7.29	-4.00	11.49	0.99	9.91	13.07	0.14	0.55			0.73
R 0.70	7	19.13	0.59	18.17	20.10	-5.65	0.76	-6.91	-4.40	11.47	0.99	9.85	13.08	0.18	0.73			0.77
D 0.80	7	19.15	0.57	18.21	20.08	-5.62	0.75	-6.84	-4.39	11.46	0.99	9.84	13.09	0.04	0.77			0.96
R 0.90	7	19.25	0.60	18.26	20.23	-5.48	0.71	-6.65	-4.31	11.55	1.03	9.86	13.24	0.19	0.96			1.01
1.00	7	19.26	0.60	18.28	20.25	-5.45	0.67	-6.55	-4.35	11.52	0.99	9.89	13.14	0.05	1.01			
0.0	7	19.26	0.60	18.28	20.25	-5.45	0.67	-6.55	-4.35	11.52	0.99	9.89	13.14	0.0	0.0			0.05
0.10	7	19.25	0.63	18.23	20.28	-5.49	0.76	-6.74	-4.24	11.48	1.03	9.80	13.17	0.05	0.05			0.21
0.20	7	19.37	0.65	18.30	20.44	-5.38	0.83	-6.74	-4.02	11.47	1.07	9.72	13.21	0.24	0.24			0.46
R 0.30	7	19.15	0.64	18.10	20.20	-5.48	0.85	-6.89	-4.08	11.41	1.07	9.66	13.17	0.06	0.52			0.70
E 0.40	7	19.12	0.54	18.23	20.01	-5.53	0.77	-6.79	-4.26	11.45	1.06	9.71	13.19	0.18	0.70			0.88
T 0.50	7	19.13	0.54	18.25	20.02	-5.70	0.99	-7.32	-4.08	11.48	1.03	9.79	13.17	0.05	0.74			1.03
U 0.60	7	19.09	0.70	17.95	20.24	-5.67	0.89	-7.12	-4.22	11.47	1.02	9.79	13.15	0.15	1.03			1.17
R 0.70	7	19.13	0.60	18.14	20.12	-5.54	0.86	-6.96	-4.13	11.46	1.05	9.73	13.19	0.14	1.31			
N 0.80	7	19.06	0.60	18.07	20.04	-5.66	0.96	-7.25	-4.08	11.40	1.03	9.71	13.09	0.15	1.03			0.88
0.90	7	19.19	0.59	18.23	20.15	-5.67	0.88	-7.11	-4.23	11.44	1.03	9.76	13.13	0.14	1.17			0.96
1.00	7	19.20	0.57	18.27	20.14	-5.53	0.78	-6.81	-4.26	11.39	0.98	9.79	13.00	0.15	1.31			

LANDMARK - RT SHOULDER CENTER (22)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE-----				Y - CO-ORDINATE-----				Z - CO-ORDINATE-----				DISTANCE				MVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR				CUM
0.0	7	-1.67	1.45	-4.06	0.71	-6.83	0.87	-8.25	-3.41	18.35	1.06	16.62	20.08	0.0	0.0			0.0
0.10	6	-2.86	1.23	-4.88	-0.84	-7.30	0.34	-7.86	-6.73	17.71	1.06	15.98	19.44	1.43	1.43			0.43
F 0.20	7	-2.89	1.04	-4.60	-1.18	-7.22	0.36	-7.81	-6.63	18.12	1.10	16.32	19.92	0.42	1.84			0.84
D 0.30	7	-2.96	1.21	-4.94	-0.98	-6.96	0.47	-7.72	-6.19	18.58	1.25	16.54	20.63	0.54	2.38			1.38
K 0.40	7	-3.16	1.35	-5.38	-0.94	-6.66	0.49	-7.46	-5.87	19.59	1.48	17.26	22.11	1.16	3.54			2.54
M 0.50	7	-3.21	1.57	-5.79	-0.63	-6.02	0.41	-6.69	-5.36	21.33	1.85	18.29	24.37	1.76	5.31			4.30
A 0.60	7	-3.92	1.59	-6.54	-1.31	-5.08	0.54	-5.96	-4.19	22.87	1.78	19.94	25.79	1.94	7.25			6.24
R 0.70	7	-4.78	1.61	-7.42	-2.13	-4.00	0.65	-5.07	-2.92	24.04	1.77	21.14	26.93	1.81	9.06			8.05
D 0.80	7	-5.36	1.88	-8.45	-2.27	-3.05	0.51	-3.89	-2.21	24.56	1.84	21.63	27.68	1.27	10.33			9.32
0.90	7	-5.59	1.83	-8.58	-2.59	-2.02	0.77	-3.28	-1.75	24.95	1.97	21.71	28.19	1.01	11.42			10.33
1.00	7	-5.74	1.52	-8.24	-3.24	-1.57	1.17	-3.48	0.35	25.30	1.65	22.66	28.07	0.63	12.06			11.42
0.0	7	-5.74	1.52	-8.24	-3.24	-1.57	1.17	-3.48	0.35	25.30	1.65	22.66	28.07	0.0	0.0			12.06
0.10	7	-4.97	1.78	-7.88	-2.05	-2.45	1.27	-4.53	-0.36	24.94	1.44	22.55	27.27	1.26	1.26			1.26
0.20	7	-4.37	2.23	-8.02	-0.72	-3.42	1.66	-6.14	-0.69	23.78	1.39	21.50	26.06	1.51	2.86			2.86
R 0.30	7	-4.03	2.07	-7.42	-0.64	-4.30	1.49	-6.74	-0.74	22.31	1.65	19.61	25.01	1.75	4.61			4.61
E 0.40	7	-3.66	1.82	-6.65	-0.67	-5.13	1.28	-7.23	-3.03	22.31	1.64	18.23	23.59	1.67	6.28			6.28
T 0.50	7	-2.94	1.62	-5.59	-0.29	-5.77	1.01	-7.42	-4.12	19.91	1.29	17.80	22.02	1.39	7.67			7.67
U 0.60	7	-2.32	1.24	-4.36	0.49	-6.45	1.02	-8.12	-4.78	18.19	1.06	17.12	21.25	1.17	8.84			8.84
R 0.70	7	-1.91	1.43	-4.27	0.44	-7.95	0.89	-8.14	-5.02	18.95	1.06	17.21	20.69	0.47	9.31			9.31
N 0.80	7	-1.65	1.31	-3.81	0.50	-6.73	0.86	-8.14	-5.32	18.58	1.02	16.90	20.26	0.52	9.83			9.83
0.90	7	-1.57	1.25	-3.61	0.47	-6.66	1.10	-8.47	-4.86	18.49	1.11	16.67	20.32	0.14	9.96			9.96
1.00	7	-1.67	1.45	-4.06	0.71	-6.83	0.87	-8.25	-5.41	18.35	1.06	15.62	20.08	0.24	10.21			10.21

LANDMARK - RT ELBOW CENTER (24)

TIME	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				-----				DISTANCE	MOVES
T		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	6.30	0.83	4.93	7.66	0.53	0.53	6.38	7.66	1.22	1.22	10.12	14.13	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	4.99	1.10	3.18	6.80	0.64	0.64	8.59	6.47	1.68	1.68	9.18	14.68	2.41	2.41	2.41	2.41	2.41	2.41
0.20	7	4.86	1.10	3.06	6.66	0.54	0.54	8.59	6.47	1.68	1.68	9.18	14.68	0.30	0.30	0.30	0.30	0.30	0.30
0.30	7	5.21	1.19	3.26	7.16	0.56	0.56	8.82	6.98	12.54	12.54	9.42	17.86	1.60	1.60	1.60	1.60	1.60	4.31
0.40	7	5.44	1.37	3.19	7.68	0.66	0.66	8.80	6.63	17.33	17.33	3.78	23.52	3.70	3.70	3.70	3.70	3.70	8.01
0.50	7	5.18	1.88	2.10	8.26	0.66	0.66	9.09	6.43	22.51	22.51	3.87	16.17	5.28	5.28	5.28	5.28	5.28	13.26
0.60	7	3.60	2.32	0.20	7.40	0.503	0.503	7.80	4.48	27.60	27.60	2.60	23.33	31.87	31.87	5.61	5.61	5.61	18.89
0.70	7	1.10	2.28	-2.65	4.84	0.484	0.484	4.50	0.70	31.23	31.23	1.99	28.94	33.51	33.51	5.03	5.03	5.03	23.92
0.80	7	-1.06	2.18	-4.63	2.51	0.483	0.483	1.63	1.09	32.95	32.95	0.96	31.37	34.53	34.53	3.61	3.61	3.61	27.54
0.90	7	-2.06	1.87	-5.13	1.00	0.52	0.52	0.03	3.01	33.62	33.62	0.85	32.23	35.01	35.01	2.16	2.16	2.16	29.70
1.00	7	-2.10	1.45	-4.48	0.28	0.29	0.29	0.21	4.38	33.73	33.73	0.82	32.39	35.07	35.07	0.78	0.78	0.78	30.48
0.0	7	-2.10	1.45	-4.48	0.28	0.28	0.28	0.21	4.38	33.73	33.73	0.82	32.39	35.07	35.07	0.0	0.0	0.0	0.0
0.10	7	0.13	1.74	-2.73	2.98	1.03	1.03	0.57	1.51	32.30	32.30	1.76	29.42	33.19	33.19	4.25	4.25	4.25	4.25
0.20	7	2.71	2.13	-0.79	6.21	1.78	1.78	0.47	2.94	29.30	29.30	2.94	24.20	33.83	33.83	4.81	4.81	4.81	9.05
0.30	7	4.19	2.06	0.81	7.57	1.55	1.55	0.38	2.60	24.30	24.30	3.91	17.89	30.71	30.71	5.25	5.25	5.25	14.30
0.40	7	5.02	1.31	2.86	7.17	1.22	1.22	0.38	4.37	19.28	19.28	4.19	12.40	26.16	26.16	5.23	5.23	5.23	19.53
0.50	7	5.20	0.67	4.10	6.29	1.02	1.02	0.47	5.07	15.55	15.55	3.53	9.76	21.34	21.34	3.75	3.75	3.75	23.28
0.60	7	5.56	0.49	4.76	6.36	0.66	0.66	0.59	5.72	13.45	13.45	2.49	9.36	17.54	17.54	2.13	2.13	2.13	25.41
0.70	7	6.08	0.79	4.78	7.38	0.66	0.66	0.46	5.35	12.54	12.54	1.76	9.36	15.39	15.39	1.22	1.22	1.22	26.63
0.80	7	6.18	1.03	4.49	7.86	0.69	0.69	0.46	4.71	12.24	12.24	1.43	9.90	14.59	14.59	0.50	0.50	0.50	27.13
0.90	7	6.36	0.89	4.90	7.83	0.68	0.68	0.46	4.58	12.24	12.24	1.22	9.96	14.52	14.52	0.19	0.19	0.19	27.31
1.00	7	6.30	0.83	4.93	7.66	0.53	0.53	0.38	4.63	12.13	12.13	1.22	10.12	14.13	14.13	0.23	0.23	0.23	27.55

258

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				DISTANCE			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	7	15.35	0.57	14.42	16.28	2.50	0.51	3.34	13.09	0.57	12.15	14.03	0.0	0.0	0.0		
0.10	7	13.98	1.15	12.09	15.86	4.01	0.55	4.90	13.56	1.18	11.73	15.60	2.12	2.12	0.0		
0.20	7	13.12	1.68	10.37	15.88	4.22	0.47	4.97	15.19	2.65	10.84	19.54	1.76	3.89	0.0		
0.30	7	11.67	3.23	6.38	16.96	3.86	1.00	5.49	19.24	6.31	9.24	29.93	4.64	8.53	0.0		
0.40	7	9.89	2.89	5.16	14.63	2.88	1.56	5.63	23.78	4.55	16.32	31.24	4.66	13.18	0.0		
0.50	7	6.37	3.18	1.16	11.58	0.85	1.70	3.65	29.43	3.85	23.12	35.75	6.96	20.15	0.0		
0.60	7	3.01	2.30	-0.75	6.78	2.07	1.55	4.61	34.16	2.72	29.71	38.62	6.50	26.65	0.0		
0.70	7	0.20	1.78	-2.71	3.12	4.75	0.87	3.32	37.50	1.59	35.00	40.20	5.19	31.83	0.0		
0.80	7	-1.24	1.58	-3.84	1.36	6.82	0.51	5.98	39.75	0.98	38.15	41.36	3.31	35.15	0.0		
0.90	7	-1.29	1.20	-3.25	0.67	8.09	0.44	7.37	8.81	0.75	39.65	42.11	1.70	36.84	0.0		
1.00	7	-0.97	1.02	-2.65	0.70	8.61	0.49	7.81	9.42	0.61	40.18	42.19	0.69	37.53	0.0		
0.0	7	-0.97	1.02	-2.65	0.70	8.61	0.49	7.81	9.42	41.19	0.61	40.18	42.19	0.0	0.0		
0.10	7	-0.16	1.20	-2.13	1.82	5.60	1.70	2.82	8.38	38.30	2.67	33.91	42.68	4.26	4.26		
0.20	7	2.23	1.96	-0.99	5.44	2.54	2.63	1.78	6.85	34.75	4.36	27.59	41.90	5.26	9.51		
0.30	7	5.63	2.74	1.13	10.13	0.42	1.54	-2.10	2.95	30.59	5.32	21.87	39.31	5.78	15.29		
0.40	7	10.47	3.85	4.15	16.78	-2.28	1.17	-4.19	-0.36	24.29	7.35	12.23	36.34	8.39	23.68		
0.50	7	12.90	1.90	9.77	16.02	-3.82	1.70	-6.61	-1.03	19.70	5.10	11.34	28.06	5.42	29.09		
0.60	7	14.18	0.50	13.36	15.00	-3.96	0.90	-5.43	-2.49	16.16	2.87	11.45	20.87	3.77	32.86		
0.70	7	15.08	0.62	14.07	16.10	-3.38	0.74	-4.60	-2.16	13.84	1.35	11.63	16.06	2.55	35.42		
0.80	7	15.30	0.72	14.11	16.49	-2.92	0.67	-4.03	-1.82	13.29	0.79	12.00	14.57	0.75	36.17		
0.90	7	15.33	0.58	14.38	16.28	-2.66	0.60	-3.65	-1.67	13.23	0.75	11.94	14.52	0.27	36.44		
1.00	7	15.35	0.57	14.42	16.28	-2.50	0.51	-3.34	-1.65	13.09	0.57	12.15	14.03	0.22	36.66		

MMWT NO. 1113J/3

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +13.0, -13.0, +4.8 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +45.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +18.0, +10.0, +12.4.

MOTION NUMBER - 12130
 BACK ANGLE - 30

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.97	0.10	0.80 TO 1.10 SECS.
RIGHT REV	1.07	0.19	0.80 TO 1.40 SECS.

LANDMARK - NASION (1)													
TIME	SAMPLE	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			DISTANCE		
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	CUM	MOVED
0.0	7	0.13	1.39	-2.15	-2.66	1.40	-4.96	26.94	1.61	24.30	29.58	0.0	0.0
0.10	7	-2.83	1.52	-0.33	0.83	1.96	-2.39	29.31	1.76	27.02	32.79	5.45	5.45
F 0.20	7	-3.98	1.51	-6.46	1.61	1.38	-0.66	30.20	1.74	27.35	32.06	1.42	6.87
O 0.30	7	-4.90	1.46	-7.31	2.11	1.36	-0.13	4.34	1.60	27.65	32.89	1.05	7.93
R 0.40	7	-5.52	1.48	-7.94	2.35	1.44	-0.02	4.71	1.44	27.82	32.53	0.66	8.59
W 0.50	7	-5.74	1.39	-8.02	2.61	1.56	0.06	5.17	1.33	27.72	32.71	0.36	8.95
A 0.60	7	-5.96	1.41	-8.27	2.86	1.57	0.30	30.18	1.33	28.01	32.36	0.33	9.28
R 0.70	7	-6.20	1.44	-8.63	3.50	1.66	0.78	30.15	1.33	27.97	32.32	0.68	9.96
D 0.80	7	-6.58	1.44	-8.94	4.11	1.84	1.10	7.12	1.31	27.95	32.24	0.72	10.68
O 0.90	7	-6.70	1.34	-8.90	4.52	2.07	1.14	29.97	1.26	27.90	32.03	0.45	11.13
1.00	7	-6.32	1.34	-8.51	5.33	2.16	1.79	30.07	1.26	28.01	32.13	0.90	12.03
0.0	7	-6.32	1.34	-8.51	5.33	2.16	1.79	30.07	1.26	28.01	32.13	0.0	0.0
0.10	7	-4.33	2.22	-7.97	3.34	1.60	0.71	29.53	1.99	26.17	32.69	2.88	2.88
R 0.20	7	-3.44	1.92	-6.60	2.02	1.63	-0.66	4.70	1.95	25.76	32.14	1.67	4.55
E 0.40	7	-1.63	1.38	-3.89	0.64	1.47	-1.92	2.90	1.82	25.55	31.51	1.27	5.83
T 0.50	7	-1.11	1.38	-3.37	1.15	-0.53	-2.58	28.07	1.67	25.33	30.82	1.26	7.09
U 0.60	7	-0.75	1.32	-2.91	1.41	-1.25	-3.12	27.72	1.64	25.03	30.41	1.20	8.28
N 0.70	7	-0.44	1.41	-2.75	1.86	-1.83	-3.99	27.35	1.58	24.76	29.94	0.68	8.97
R 0.80	7	-0.15	1.46	-2.55	2.25	-2.21	-6.43	27.21	1.57	24.84	29.78	0.50	10.29
O 0.90	7	0.04	1.49	-2.40	2.47	-2.50	-4.80	27.07	1.57	24.49	29.65	0.38	10.67
1.00	7	0.13	1.39	-2.15	2.41	-2.66	-4.96	26.94	1.61	24.30	29.58	0.22	10.89

LANDMARK - CERVICALE (2)													
TIME	SAMPLE	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			DISTANCE		
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	CUM	MOVED
0.0	7	-7.46	1.03	-9.15	0.07	1.19	-1.88	21.41	1.23	19.39	23.44	0.0	0.0
0.10	7	-7.54	0.69	-8.67	0.84	0.81	-0.49	21.49	1.45	19.11	23.87	0.78	0.78
F 0.20	7	-7.49	0.94	-9.04	1.27	1.02	-0.40	21.37	1.49	18.93	23.82	0.45	1.23
O 0.30	7	-7.56	0.72	-8.74	1.82	1.16	-0.07	3.72	1.41	19.10	23.73	0.56	1.79
R 0.40	7	-7.95	1.11	-9.78	1.71	1.12	-0.12	21.50	1.29	19.38	23.62	0.42	2.20
W 0.50	7	-7.91	0.97	-9.50	1.78	1.17	-0.15	21.45	1.38	19.19	23.72	0.09	2.30
A 0.60	7	-8.11	1.18	-10.04	2.01	1.49	-0.43	4.46	1.35	19.32	23.76	0.32	2.62
R 0.70	7	-7.72	1.14	-9.59	2.50	1.39	0.22	4.78	1.24	19.80	23.87	0.69	3.31
D 0.80	7	-7.78	1.08	-9.55	2.93	1.41	0.62	5.24	1.21	19.60	23.58	0.50	3.81
O 0.90	7	-7.86	1.03	-9.54	3.22	1.24	1.19	5.25	1.22	19.64	23.63	0.30	4.11
1.00	7	-7.84	1.03	-9.53	3.64	1.36	1.41	5.87	1.30	19.58	23.85	0.43	4.54
0.0	7	-7.84	1.03	-9.53	3.64	1.36	1.41	5.87	1.30	19.58	23.85	0.0	0.0
0.10	7	-7.86	0.88	-9.30	3.67	1.02	2.01	5.34	1.22	19.78	23.78	0.07	0.07
0.20	7	-8.12	1.55	-10.66	3.19	1.17	1.27	5.12	1.20	19.69	23.63	0.56	0.63
R 0.30	7	-7.71	1.18	-9.54	3.24	0.97	1.65	4.82	1.11	19.71	23.37	0.43	1.06
E 0.40	7	-7.69	0.96	-9.26	2.74	1.33	0.55	4.92	1.18	19.25	23.77	0.50	1.56
T 0.50	7	-7.57	0.96	-9.14	1.99	1.74	-0.85	4.84	1.38	19.30	23.82	0.75	2.31
U 0.60	7	-7.70	0.73	-8.90	1.33	1.46	-1.06	3.73	1.30	19.56	23.82	0.69	3.00
R 0.70	7	-7.72	0.87	-9.14	0.80	1.30	-1.33	2.93	1.31	19.54	23.83	0.53	3.53
N 0.80	7	-7.63	0.94	-9.17	0.41	1.33	-1.78	2.59	1.22	19.58	23.59	0.42	3.95
O 0.90	7	-7.53	1.01	-9.19	0.21	1.19	-1.75	2.17	1.26	19.44	23.59	0.23	4.18
1.00	7	-7.46	1.03	-9.15	0.07	1.19	-1.88	2.02	1.23	19.39	23.44	0.19	4.37

LANDMARK - RT GRIP CENTER (16)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	INCR	MOVED	CUM
0.0	T	7	11.89	0.79	10.60	13.19	CO-ORDINATE	11.89	0.88	-14.56	-11.68	CO-ORDINATE	11.89	0.98	2.98	6.19	0.0	0.0	0.0	0.0
0.10	F	7	10.46	0.74	9.25	11.66	CO-ORDINATE	10.46	1.43	-14.23	-9.54	CO-ORDINATE	10.46	2.14	4.65	11.65	4.04	4.04	4.04	4.04
0.20	R	7	9.86	0.81	8.53	11.18	CO-ORDINATE	9.86	2.35	-12.64	-8.93	CO-ORDINATE	9.86	3.57	8.82	20.52	7.24	7.24	7.24	7.24
0.30	T	7	7.98	1.22	5.97	9.99	CO-ORDINATE	7.98	2.32	-9.01	-1.39	CO-ORDINATE	7.98	4.03	15.61	28.83	8.57	8.57	19.85	19.85
0.40	R	7	4.58	1.29	2.46	6.99	CO-ORDINATE	4.58	1.95	-4.55	1.85	CO-ORDINATE	4.58	4.02	22.49	35.69	8.58	8.58	28.43	28.43
0.50	W	7	1.52	1.28	-0.58	3.62	CO-ORDINATE	1.52	2.01	-0.93	5.65	CO-ORDINATE	1.52	3.80	28.04	40.51	7.07	7.07	35.50	35.50
0.60	A	7	-0.81	0.99	-2.44	0.82	CO-ORDINATE	-0.81	2.37	1.65	9.44	CO-ORDINATE	-0.81	3.11	33.34	43.53	5.74	5.74	41.23	41.23
0.70	R	7	-1.86	0.84	-3.23	-0.49	CO-ORDINATE	-1.86	2.22	4.42	11.71	CO-ORDINATE	-1.86	2.70	37.48	46.34	4.42	4.42	45.65	45.65
0.80	D	7	-1.81	0.93	-3.33	-0.29	CO-ORDINATE	-1.81	1.02	7.32	10.67	CO-ORDINATE	-1.81	0.73	41.96	44.35	1.56	1.56	47.21	47.21
0.90	T	7	-1.10	1.17	-3.02	0.81	CO-ORDINATE	-1.10	0.57	8.60	10.48	CO-ORDINATE	-1.10	0.26	43.74	44.57	1.34	1.34	48.55	48.55
1.00	5	5	-0.70	1.44	-3.06	1.66	CO-ORDINATE	-0.70	0.31	9.36	10.39	CO-ORDINATE	-0.70	0.18	44.12	44.71	0.58	0.58	49.13	49.13
0.0	T	5	-0.70	1.44	-3.06	1.66	CO-ORDINATE	-0.70	0.31	9.36	10.39	CO-ORDINATE	-0.70	0.18	44.12	44.71	0.0	0.0	0.0	0.0
0.10	R	6	-1.34	1.43	-3.68	1.00	CO-ORDINATE	-1.34	1.57	5.20	10.34	CO-ORDINATE	-1.34	2.31	36.52	44.11	4.65	4.65	4.65	4.65
0.20	E	7	0.07	1.95	-3.13	3.26	CO-ORDINATE	0.07	2.18	0.38	7.54	CO-ORDINATE	0.07	4.14	29.03	42.59	6.07	6.07	10.72	10.72
0.30	R	7	3.17	2.49	-0.91	7.25	CO-ORDINATE	3.17	2.77	-4.28	4.80	CO-ORDINATE	3.17	6.16	19.96	40.16	7.51	7.51	18.23	18.23
0.40	T	7	6.69	2.74	2.20	11.18	CO-ORDINATE	6.69	3.34	-9.71	1.25	CO-ORDINATE	6.69	6.95	12.38	35.16	8.49	8.49	26.72	26.72
0.50	U	7	9.04	1.71	6.23	11.85	CO-ORDINATE	9.04	3.91	-14.58	-1.75	CO-ORDINATE	9.04	5.33	2.39	28.35	8.12	8.12	34.84	34.84
0.60	U	7	9.87	1.38	7.61	12.12	CO-ORDINATE	9.87	3.13	-16.10	-5.84	CO-ORDINATE	9.87	5.33	2.39	28.35	8.12	8.12	34.84	34.84
0.70	R	7	10.86	1.54	8.33	13.39	CO-ORDINATE	10.86	1.98	-15.99	-9.48	CO-ORDINATE	10.86	3.21	1.59	12.11	4.74	4.74	46.19	46.19
0.80	N	7	11.57	1.18	9.63	13.50	CO-ORDINATE	11.57	1.39	-14.96	-10.38	CO-ORDINATE	11.57	2.57	1.98	10.41	0.97	0.97	47.16	47.16
0.90	T	7	11.63	1.03	9.94	13.32	CO-ORDINATE	11.63	0.84	-14.36	-11.61	CO-ORDINATE	11.63	1.38	2.74	7.28	1.23	1.23	48.39	48.39
1.00	7	7	11.89	0.79	10.60	13.19	CO-ORDINATE	11.89	0.88	-14.56	-11.68	CO-ORDINATE	11.89	0.98	2.98	6.19	0.52	0.52	48.91	48.91

LANDMARK - RT TROCHANTER (18)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	INCR	MOVED	CUM
0.0	T	7	3.33	0.76	2.08	4.57	CO-ORDINATE	3.33	0.91	-8.58	-5.60	CO-ORDINATE	3.33	0.52	2.89	4.61	0.0	0.0	0.0	0.0
0.10	F	7	3.10	0.70	1.96	4.25	CO-ORDINATE	3.10	0.67	-8.57	-6.39	CO-ORDINATE	3.10	0.56	2.72	4.56	0.0	0.0	0.0	0.0
0.20	D	7	3.22	0.81	1.89	4.55	CO-ORDINATE	3.22	0.82	-8.75	-6.06	CO-ORDINATE	3.22	0.61	2.64	4.64	0.14	0.14	0.60	0.60
0.30	R	7	3.15	0.85	1.76	4.55	CO-ORDINATE	3.15	0.79	-8.49	-5.90	CO-ORDINATE	3.15	0.66	2.57	4.76	0.22	0.22	0.82	0.82
0.40	T	7	3.31	0.84	1.93	4.68	CO-ORDINATE	3.31	0.99	-8.74	-5.49	CO-ORDINATE	3.31	0.66	2.51	4.67	0.19	0.19	1.01	1.01
0.50	W	7	3.29	0.83	1.93	4.66	CO-ORDINATE	3.29	0.96	-8.68	-5.53	CO-ORDINATE	3.29	0.71	2.51	4.83	0.08	0.08	1.09	1.09
0.60	A	7	3.20	0.96	1.63	4.78	CO-ORDINATE	3.20	1.19	-9.04	-5.14	CO-ORDINATE	3.20	0.67	2.59	4.81	0.10	0.10	1.19	1.19
0.70	R	7	2.99	0.93	1.46	4.52	CO-ORDINATE	2.99	1.48	-9.23	-4.36	CO-ORDINATE	2.99	0.74	2.68	5.12	0.41	0.41	1.63	1.63
0.80	D	7	3.17	1.94	4.40	4.40	CO-ORDINATE	3.17	1.28	-8.96	-4.77	CO-ORDINATE	3.17	0.66	2.80	4.96	0.19	0.19	1.83	1.83
0.90	T	7	3.47	1.02	1.80	5.14	CO-ORDINATE	3.47	1.14	-8.68	-4.93	CO-ORDINATE	3.47	0.62	2.87	4.90	0.31	0.31	2.11	2.11
1.00	6	6	3.19	0.87	1.76	4.62	CO-ORDINATE	3.19	0.74	-8.53	-6.10	CO-ORDINATE	3.19	0.38	3.39	4.65	0.60	0.60	2.71	2.71
0.0	T	6	3.19	0.87	1.76	4.62	CO-ORDINATE	3.19	0.74	-8.53	-6.10	CO-ORDINATE	3.19	0.38	3.39	4.65	0.0	0.0	0.0	0.0
0.10	R	7	3.29	0.76	2.04	4.53	CO-ORDINATE	3.29	0.85	-8.29	-5.49	CO-ORDINATE	3.29	0.73	2.76	5.14	0.45	0.45	0.45	0.45
0.20	E	7	3.24	0.66	2.16	4.32	CO-ORDINATE	3.24	0.97	-8.74	-5.55	CO-ORDINATE	3.24	0.68	2.80	5.05	0.26	0.26	0.71	0.71
0.30	R	7	3.30	0.66	2.21	4.38	CO-ORDINATE	3.30	0.87	-8.52	-5.67	CO-ORDINATE	3.30	0.67	2.72	4.93	0.13	0.13	0.84	0.84
0.40	T	7	3.44	0.73	2.24	4.65	CO-ORDINATE	3.44	0.92	-8.62	-5.61	CO-ORDINATE	3.44	0.71	2.56	4.89	0.18	0.18	1.02	1.02
0.50	U	7	3.43	1.01	1.77	5.09	CO-ORDINATE	3.43	0.94	-8.79	-5.71	CO-ORDINATE	3.43	0.71	2.61	4.80	0.14	0.14	1.15	1.15
0.60	U	7	3.14	1.39	0.86	5.42	CO-ORDINATE	3.14	1.09	-9.18	-5.59	CO-ORDINATE	3.14	0.61	2.70	4.71	0.32	0.32	1.47	1.47
0.70	R	7	3.23	1.22	1.23	5.23	CO-ORDINATE	3.23	1.01	-9.04	-5.71	CO-ORDINATE	3.23	0.66	2.63	4.78	0.09	0.09	1.57	1.57
0.80	N	7	3.47	0.73	2.27	4.67	CO-ORDINATE	3.47	0.84	-8.52	-5.77	CO-ORDINATE	3.47	0.57	2.76	4.61	0.33	0.33	1.90	1.90
0.90	T	7	3.45	0.87	2.02	4.89	CO-ORDINATE	3.45	0.92	-8.63	-5.63	CO-ORDINATE	3.45	0.52	2.88	4.54	0.04	0.04	1.94	1.94
1.00	7	7	3.33	0.76	2.08	4.57	CO-ORDINATE	3.33	0.91	-8.58	-5.60	CO-ORDINATE	3.33	0.52	2.89	4.61	0.14	0.14	2.08	2.08

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED
T	SIZE,N														CUM
0.0	7	19.05	0.59	18.08	20.02	-5.32	0.84	-6.70	-3.93	11.26	1.09	9.48	13.04	0.0	0.0
0.10	7	18.85	0.64	17.81	19.90	-5.46	1.10	-7.26	-3.66	11.35	0.98	9.74	12.95	0.26	0.26
F 0.20	7	18.03	0.50	18.21	19.86	-5.40	1.08	-7.17	-3.63	11.34	1.01	9.68	12.99	0.19	0.45
U 0.30	7	18.82	0.52	17.97	19.67	-5.42	1.08	-7.19	-3.66	11.31	0.95	9.76	12.87	0.21	0.66
R 0.40	7	18.83	0.64	17.78	19.87	-5.54	1.07	-7.21	-3.87	11.39	1.00	9.76	13.03	0.14	0.80
W 0.50	7	18.88	0.51	18.05	19.72	-5.44	1.07	-7.19	-3.63	11.38	1.01	9.72	13.04	0.12	0.92
A 0.60	7	18.96	0.62	17.95	19.97	-5.40	1.05	-7.12	-3.67	11.32	0.98	9.71	12.93	0.10	1.02
R 0.70	7	18.97	0.59	18.00	19.95	-5.41	1.02	-7.08	-3.73	11.37	1.08	9.59	13.14	0.05	1.07
D 0.80	7	18.96	0.59	17.99	19.92	-5.22	0.91	-6.71	-3.73	11.33	1.01	9.68	12.99	0.19	1.26
0.90	7	18.85	0.59	17.88	19.82	-5.15	0.98	-6.76	-3.54	11.28	0.97	9.69	12.87	0.14	1.40
1.00	7	18.91	0.63	17.88	19.94	-5.26	0.94	-6.80	-3.72	11.37	1.08	9.60	13.14	0.16	1.56
0.0	7	18.91	0.63	17.88	19.94	-5.26	0.94	-6.80	-3.72	11.37	1.08	9.60	13.14	0.0	0.0
0.10	7	18.94	0.82	17.60	20.27	-5.20	1.04	-6.90	-3.49	11.30	0.97	9.72	12.89	0.10	0.10
0.20	7	18.94	0.70	17.79	20.09	-5.37	1.06	-7.11	-3.62	11.26	1.04	9.55	12.97	0.18	0.27
R 0.30	7	18.99	0.63	17.96	20.02	-5.27	0.98	-6.87	-3.66	11.25	1.04	9.55	12.95	0.11	0.39
E 0.40	7	19.07	0.52	18.21	19.92	-5.21	0.94	-6.76	-3.67	11.18	1.08	9.41	12.96	0.11	0.50
U 0.50	7	18.99	0.59	18.03	19.95	-5.26	0.88	-6.71	-3.81	11.19	1.08	9.42	12.96	0.09	0.59
T 0.60	7	19.01	0.49	18.21	19.81	-5.20	0.95	-6.76	-3.63	11.26	1.02	9.59	12.92	0.09	0.68
R 0.70	7	19.07	0.47	13.29	19.84	-5.23	0.53	-6.76	-3.71	11.25	1.08	9.47	13.02	0.07	0.75
N 0.80	7	19.04	0.58	18.10	19.99	-5.23	0.86	-6.64	-3.83	11.25	1.06	9.51	12.99	0.02	0.77
0.90	7	18.98	0.60	18.00	19.97	-5.22	0.92	-6.73	-3.71	11.28	1.11	9.46	13.10	0.07	0.84
1.00	7	19.05	0.59	18.08	20.02	-5.32	0.84	-6.70	-3.93	11.26	1.09	9.48	13.04	0.12	0.96

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED
T	SIZE,N														CUM
0.0	6	-3.53	0.97	-5.13	-1.94	-7.89	0.93	-9.42	-6.35	17.25	0.82	15.90	18.60	0.0	0.0
0.10	7	-4.26	0.86	-5.67	-2.86	-7.26	0.53	-8.13	-6.40	18.13	1.06	16.40	19.87	1.30	1.30
F 0.20	7	-4.70	0.76	-5.94	-3.46	-6.97	0.69	-8.11	-5.84	18.78	1.16	16.88	20.68	0.83	2.14
R 0.30	7	-4.95	0.83	-6.31	-3.58	-6.92	0.61	-7.93	-5.92	19.50	1.49	17.07	21.94	0.76	2.90
W 0.40	7	-4.75	0.82	-6.10	-3.41	-6.22	0.74	-7.43	-5.00	20.81	2.26	17.10	24.52	1.50	4.40
A 0.50	7	-4.35	0.88	-5.78	-2.91	-5.78	0.85	-7.17	-4.39	22.41	1.81	19.43	25.38	1.70	6.10
R 0.60	7	-4.70	1.12	-6.53	-2.86	-4.71	0.86	-6.12	-3.31	23.40	1.72	20.58	26.22	1.50	7.60
D 0.70	7	-4.97	1.07	-6.72	-3.22	-3.53	0.79	-4.83	-2.24	24.31	1.33	22.13	26.50	1.52	9.12
0.80	7	-5.33	1.25	-7.39	-3.28	-2.69	0.99	-4.31	-1.07	24.78	1.07	23.01	26.54	1.03	10.15
0.90	7	-5.46	1.18	-7.38	-3.53	-2.11	0.57	-3.70	-0.53	24.94	1.01	23.29	26.60	0.61	10.76
1.00	7	-5.58	1.13	-7.43	-3.73	-2.00	1.21	-3.98	-0.02	25.14	0.84	23.77	26.52	0.26	11.02
0.0	7	-5.58	1.13	-7.43	-3.73	-2.00	1.21	-3.98	-0.02	25.14	0.84	23.77	26.52	0.0	0.0
0.10	7	-5.25	0.88	-6.70	-3.80	-2.81	0.85	-4.21	-1.42	24.79	1.17	22.87	26.72	0.94	0.94
0.20	7	-4.96	0.87	-6.39	-3.53	-4.28	1.19	-6.24	-2.32	23.47	1.38	21.20	25.74	2.00	2.94
R 0.30	7	-4.82	0.61	-5.82	-3.82	-5.08	1.07	-6.83	-3.33	22.07	1.35	19.86	24.29	1.62	4.55
E 0.40	7	-4.76	0.72	-5.94	-3.59	-5.91	1.04	-7.61	-4.20	22.40	1.40	18.11	22.70	1.86	6.42
T 0.50	7	-4.78	0.91	-6.28	-3.29	-6.70	1.16	-8.60	-4.79	19.20	1.37	16.95	21.44	1.44	7.86
U 0.60	7	-4.61	0.80	-5.92	-3.30	-7.17	1.10	-8.96	-5.37	18.38	1.21	16.40	20.36	0.96	8.82
R 0.70	7	-4.25	0.78	-5.52	-2.88	-7.46	0.89	-8.91	-6.00	17.83	1.11	16.02	19.65	0.72	9.54
N 0.80	7	-3.90	0.92	-5.41	-2.39	-7.65	0.94	-9.19	-6.11	17.36	1.17	15.45	19.28	0.51	10.15
0.90	7	-3.72	0.80	-5.03	-2.40	-7.64	0.79	-8.94	-6.35	17.30	0.92	15.79	18.61	0.20	10.35
1.00	6	-3.53	0.97	-5.13	-1.94	-7.89	0.93	-9.42	-6.35	17.25	0.82	15.90	18.60	0.31	10.65

LANDMARK - RT ELBOW CENTER (24)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	SE	CO-ORDINATE 5 PCT	95 PCT	-----Y----- MEAN	SE	CO-ORDINATE 5 PCT	95 PCT	-----Z----- MEAN	SE	CO-ORDINATE 5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	0.21	0.47	-0.56	0.98	-9.81	0.81	-11.14	-8.48	8.05	1.51	5.56	10.53	0.0	0.0
0.10	7	-1.14	0.96	-2.72	0.45	-10.27	1.06	-12.01	-8.53	8.42	1.35	6.21	10.63	1.47	1.47
0.20	7	-0.81	1.26	-2.87	1.25	-10.28	1.17	-12.20	-8.36	9.50	1.90	6.38	12.61	1.13	2.60
0.30	7	1.74	1.35	-0.48	3.96	-10.26	1.12	-12.10	-8.41	9.50	1.90	6.38	12.61	1.13	3.73
0.40	7	4.29	1.36	2.06	6.53	-8.76	1.53	-11.26	-6.25	19.13	3.75	12.97	25.28	7.27	13.79
0.50	7	4.45	1.85	1.41	4.48	-6.01	1.58	-8.60	-3.42	19.13	3.75	12.97	25.28	6.89	20.69
0.60	7	2.74	2.15	-0.79	6.27	-3.38	1.27	-5.46	-1.30	29.58	2.56	25.38	33.79	5.19	25.88
0.70	7	0.77	1.87	-2.29	3.83	-1.16	0.88	-2.61	0.28	32.02	1.45	29.63	34.40	3.83	29.71
0.80	7	-0.80	1.24	-2.83	1.22	0.34	0.62	-0.67	1.35	33.04	0.94	31.50	34.58	2.40	32.12
0.90	7	-1.34	0.80	-2.65	-0.04	1.23	0.61	0.22	2.24	33.52	0.77	32.26	34.78	1.15	33.26
1.00	7	-1.67	0.72	-2.85	-0.49	1.69	0.75	0.46	2.92	33.51	0.68	32.50	34.71	0.57	33.83
0.0	7	-1.67	0.72	-2.85	-0.49	1.69	0.75	0.46	2.92	33.61	0.68	32.50	34.71	0.0	0.0
0.10	7	0.58	1.14	-1.29	2.45	-2.22	2.14	-5.72	1.28	31.35	1.72	29.03	34.67	4.84	4.84
0.20	7	2.15	1.60	-0.47	4.78	-5.52	2.99	-10.43	-0.62	27.91	2.82	23.28	32.54	5.38	10.22
0.30	7	2.78	2.14	-0.72	6.29	-8.23	2.72	-12.70	-3.77	22.12	3.81	15.87	28.37	6.42	16.64
0.40	7	1.78	2.00	-1.49	5.06	-9.95	1.90	-13.07	-6.83	15.79	3.79	9.62	21.96	6.84	23.27
0.50	7	-0.10	1.78	-3.02	2.81	-10.39	1.17	-12.31	-8.48	11.66	2.89	6.92	16.40	4.56	27.84
0.60	7	-0.90	1.52	-3.39	1.59	-10.46	0.94	-12.00	-8.92	10.04	2.20	6.44	13.65	1.81	29.64
0.70	7	-0.82	1.30	-2.95	1.31	-10.48	0.99	-12.10	-8.85	9.18	1.84	6.16	12.21	0.86	30.51
0.80	7	-0.23	1.34	-2.42	1.96	-10.22	0.94	-11.76	-8.67	8.55	1.67	5.92	11.38	0.84	31.34
0.90	7	0.13	0.95	-1.44	1.69	-9.86	0.95	-11.42	-8.31	8.33	1.61	5.69	10.97	0.60	31.94
1.00	7	0.21	0.47	-0.56	0.98	-9.81	0.81	-11.14	-8.48	8.05	1.51	5.56	10.53	0.30	32.24

LANDMARK - RT WRIST CENTER (26)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	SE	CO-ORDINATE 5 PCT	95 PCT	-----Y----- MEAN	SE	CO-ORDINATE 5 PCT	95 PCT	-----Z----- MEAN	SE	CO-ORDINATE 5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	8.83	0.61	7.82	9.83	-12.10	0.79	-13.39	-10.80	5.02	1.34	2.82	7.21	0.0	0.0
0.10	7	8.01	0.63	6.98	9.05	-10.91	1.45	-13.28	-8.54	8.49	1.39	6.21	10.76	3.76	3.76
0.20	7	7.37	1.26	5.30	9.44	-8.47	2.51	-12.58	-4.36	14.24	3.35	8.74	19.73	6.28	10.04
0.30	7	6.14	1.35	3.92	8.36	-5.07	3.96	-11.57	1.43	22.05	6.44	11.49	32.60	8.60	18.64
0.40	7	4.29	0.81	2.96	5.62	-2.31	2.55	-6.50	1.87	27.81	5.76	18.35	37.26	6.65	25.29
0.50	7	2.73	1.26	0.67	4.80	0.41	1.94	-2.77	3.59	31.87	3.26	26.51	37.22	5.13	30.42
0.60	7	0.78	0.74	-0.44	2.00	3.54	1.93	0.37	6.71	35.71	2.56	31.51	39.91	5.34	35.76
0.70	7	-0.35	0.52	-1.20	0.50	6.03	1.15	4.13	7.92	38.52	1.63	35.84	41.19	3.91	39.66
0.80	7	-1.02	0.70	-2.16	0.13	7.39	0.81	6.07	8.72	40.12	0.69	38.99	41.25	2.21	41.87
0.90	7	-0.83	0.74	-2.03	0.38	8.07	0.39	7.44	8.71	40.87	0.40	40.21	41.52	1.03	42.90
1.00	7	-0.67	0.96	-2.24	0.90	8.25	0.47	7.49	9.02	41.16	0.27	40.71	41.60	0.38	43.28
0.0	7	-0.67	0.96	-2.24	0.90	8.25	0.47	7.49	9.02	41.16	0.27	40.71	41.60	0.0	0.0
0.10	7	-0.08	1.71	-1.71	1.55	5.49	1.65	2.77	8.20	38.07	2.01	34.77	41.37	4.19	4.19
0.20	7	1.22	1.24	-0.82	3.26	1.73	2.49	-2.35	5.82	33.55	3.47	27.86	39.25	6.01	10.20
0.30	7	3.59	1.67	0.85	6.32	-1.82	2.91	-6.58	2.95	28.07	4.88	20.06	36.08	6.95	17.15
0.40	7	6.07	1.76	3.19	8.95	-5.44	3.21	-10.71	-0.18	21.45	5.31	12.73	30.16	7.95	25.10
0.50	7	7.24	1.68	4.48	9.99	-8.65	3.05	-13.65	-3.65	14.39	4.94	6.79	23.00	7.39	32.49
0.60	7	8.15	1.83	5.07	11.23	-12.10	2.32	-15.90	-8.30	7.42	4.25	0.44	14.39	8.29	40.77
0.70	7	7.78	1.48	5.35	10.21	-11.69	1.94	-14.87	-8.51	7.56	3.46	1.99	13.32	0.60	41.33
0.80	7	8.47	1.27	6.38	10.56	-12.02	1.46	-14.41	-9.63	6.15	2.26	2.45	9.84	1.69	43.07
0.90	7	8.88	0.80	7.57	10.19	-12.00	0.97	-13.59	-10.40	5.17	1.65	2.47	7.87	1.06	44.13
1.00	7	8.83	0.61	7.82	9.83	-12.10	0.79	-13.39	-10.80	5.02	1.34	2.82	7.21	0.19	44.32

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +45.0 AND RETURNS. RIGHT HAND REMAINS AT STICK CONTROLLER AT +20.0, 0.0, +15.0.

MOTION NUMBER - 21230
 BACK ANGLE - 30

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.77	0.11	0.60 TO 0.90 SECS.
LEFT REV	0.70	0.12	0.60 TO 0.90 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT
0.0	7	-2.02	1.29	-2.09	2.13	-0.11	1.24	-2.15	1.93
0.10	7	-2.25	1.55	-4.78	0.28	0.55	0.99	-1.07	2.18
F 0.20	7	-3.47	1.67	-6.20	-0.73	0.40	0.62	-0.62	1.41
D 0.30	7	-3.83	1.61	-6.47	-1.18	0.29	0.65	-0.77	1.35
R 0.40	7	-4.13	1.54	-6.65	-1.61	0.22	0.71	-0.94	1.38
W 0.50	7	-4.37	1.52	-6.87	-1.85	0.20	0.77	-1.05	1.45
A 0.60	7	-4.43	1.57	-7.01	-1.87	0.35	0.86	-1.07	1.76
R 0.70	7	-4.45	1.57	-7.03	-1.88	0.21	0.64	-0.84	1.25
D 0.80	7	-4.57	1.47	-6.98	-2.17	0.09	0.76	-1.15	1.34
0.90	7	-4.54	1.22	-6.54	-2.55	-0.08	0.85	-1.47	1.31
1.00	7	-4.35	1.23	-6.38	-2.35	-0.16	0.66	-1.25	0.92
0.0	7	-4.36	1.23	-6.38	-2.35	-0.16	0.66	-1.25	0.92
0.10	7	-2.08	1.29	-4.19	0.04	-0.07	0.88	-1.52	1.38
0.20	7	-1.03	1.08	-2.79	0.08	1.09	-1.88	1.71	28.22
R 0.30	7	-0.84	1.02	-2.51	0.82	-0.18	1.08	-1.95	1.60
E 0.40	7	-0.87	0.91	-2.36	0.63	-0.18	1.14	-2.05	1.70
T 0.50	7	-0.80	0.89	-2.25	0.65	-0.33	1.32	-2.50	1.84
U 0.60	7	-0.49	0.77	-1.74	0.77	-0.38	1.28	-2.49	1.72
R 0.70	7	-0.19	0.85	-1.58	1.21	-0.45	1.35	-2.66	1.75
N 0.80	7	-0.05	1.13	-1.90	1.80	-0.27	1.41	-2.58	2.04
0.90	7	-0.01	1.23	-2.03	2.01	-0.14	1.39	-2.42	2.14
1.00	7	0.02	1.29	-2.09	2.13	-0.11	1.24	-2.15	1.93

LANDMARK - CERVICALE

(2)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT
0.0	7	-6.65	1.74	-9.50	-3.79	-1.17	0.85	-2.56	0.23
0.10	7	-6.86	1.46	-9.26	-4.47	-1.22	1.01	-2.88	0.44
F 0.20	7	-7.04	1.24	-9.06	-5.01	-1.62	0.86	-3.02	-0.21
D 0.30	7	-7.15	1.10	-8.95	-5.35	-1.96	0.83	-3.31	-0.61
R 0.40	7	-7.25	1.25	-9.31	-5.20	-1.88	0.85	-3.28	-0.49
W 0.50	7	-7.37	1.44	-9.73	-5.02	-1.77	0.96	-3.35	-0.20
A 0.60	7	-7.55	1.25	-9.60	-5.49	-1.79	0.82	-3.13	-0.45
R 0.70	7	-7.49	1.06	-9.23	-5.75	-1.94	0.65	-3.00	-0.87
D 0.80	7	-7.56	0.93	-9.09	-6.03	-1.94	0.56	-2.86	-1.02
0.90	7	-7.53	1.03	-9.16	-5.89	-2.04	0.62	-3.06	-1.02
1.00	7	-7.37	1.17	-9.29	-5.45	-2.14	0.79	-3.44	-0.85
0.0	7	-7.37	1.17	-9.29	-5.45	-2.14	0.79	-3.44	-0.85
0.10	7	-7.33	1.13	-9.18	-5.48	-2.00	0.86	-3.42	-0.59
0.20	7	-7.30	1.20	-9.28	-5.33	-2.02	0.88	-3.46	-0.57
R 0.30	7	-7.25	1.21	-9.23	-5.27	-2.04	0.95	-3.59	-0.49
E 0.40	7	-7.30	1.20	-9.28	-5.33	-2.04	0.97	-3.48	-0.29
T 0.50	7	-7.38	1.27	-9.47	-5.29	-1.63	0.92	-3.15	-0.12
U 0.60	7	-7.11	1.25	-9.18	-5.04	-1.49	1.00	-3.13	0.16
R 0.70	7	-6.90	1.34	-9.09	-4.71	-1.50	1.00	-3.14	0.14
N 0.80	7	-6.83	1.49	-9.27	-4.40	-1.43	0.93	-2.96	0.10
0.90	7	-6.78	1.65	-9.49	-4.08	-1.29	0.88	-2.74	0.16
1.00	7	-6.65	1.74	-9.50	-3.79	-1.17	0.85	-2.56	0.23

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE SIZE, N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-3.19	1.35	-5.40	-0.98	-0.85	1.46	-3.24	1.55	21.03	0.69	19.89	22.17	0.0	0.0	0.0	0.0
0.10	7	-3.50	0.61	-4.51	-2.49	-0.67	1.28	-2.77	1.44	21.05	0.77	19.79	22.31	0.36	0.36	0.36	0.36
F 0.20	7	-3.85	0.58	-4.80	-2.90	-1.00	1.20	-2.97	0.97	21.09	0.87	19.66	22.52	0.48	0.85	0.48	0.85
O 0.30	7	-4.10	0.40	-4.77	-3.44	-1.28	1.28	-3.38	0.82	21.19	0.86	19.78	22.60	0.39	1.24	0.39	1.24
R 0.40	7	-4.08	0.69	-5.21	-2.95	-1.27	1.35	-3.48	0.93	21.28	0.71	20.12	22.44	0.09	1.33	0.09	1.33
W 0.50	7	-3.96	0.84	-5.33	-2.58	-1.14	1.33	-3.33	1.04	21.33	0.68	20.22	22.44	0.19	1.51	0.19	1.51
A 0.60	7	-4.03	0.80	-5.35	-2.72	-1.05	1.26	-3.12	1.02	21.34	0.80	20.03	22.66	0.12	1.64	0.12	1.64
R 0.70	7	-4.17	0.69	-5.30	-3.04	-1.12	1.27	-3.19	0.96	21.45	0.91	19.95	22.95	0.18	1.82	0.18	1.82
D 0.80	7	-4.28	0.74	-5.50	-3.07	-1.15	1.30	-3.28	0.98	21.50	0.99	19.88	23.12	0.13	1.95	0.13	1.95
O 0.90	7	-4.17	0.80	-5.48	-2.86	-1.20	1.28	-3.30	0.90	21.51	1.13	19.76	23.46	0.17	2.12	0.17	2.12
1.00	7	-3.99	0.75	-5.22	-2.76	-1.33	1.34	-3.52	0.87	21.51	1.01	19.96	23.26	0.22	2.34	0.22	2.34
0.0	7	-3.99	0.75	-5.22	-2.76	-1.33	1.34	-3.52	0.87	21.51	1.01	19.96	23.26	0.0	0.0	0.0	0.0
0.10	7	-3.97	0.98	-5.58	-2.36	-1.11	1.51	-3.59	1.37	21.48	0.95	19.92	23.03	0.25	0.25	0.25	0.25
0.20	7	-3.99	1.01	-5.65	-2.33	-1.17	1.51	-3.65	1.31	21.38	0.85	19.98	22.78	0.12	0.37	0.12	0.37
R 0.30	7	-3.89	0.94	-5.43	-2.35	-1.19	1.59	-3.79	1.41	21.29	0.81	19.96	22.62	0.14	0.51	0.14	0.51
E 0.40	7	-3.50	0.88	-4.93	-2.06	-0.77	1.47	-3.17	1.64	21.22	0.76	19.97	22.46	0.58	1.09	0.58	1.09
T 0.50	7	-3.26	1.05	-4.98	-1.54	-0.60	1.35	-2.82	1.63	21.21	0.78	19.94	22.48	0.29	1.38	0.29	1.38
U 0.60	7	-3.14	0.70	-4.28	-2.00	-0.54	1.28	-2.63	1.55	21.07	0.66	20.00	22.15	0.19	1.57	0.19	1.57
R 0.70	7	-3.02	0.53	-3.89	-2.16	-0.64	1.29	-2.76	1.49	21.02	0.69	19.88	22.15	0.16	1.73	0.16	1.73
N 0.80	7	-2.95	0.58	-3.91	-2.00	-0.63	1.24	-2.67	1.42	20.99	0.69	19.86	22.12	0.08	1.81	0.08	1.81
O 0.90	7	-2.93	0.60	-3.91	-1.95	-0.59	1.17	-2.51	1.33	20.99	0.70	19.83	22.14	0.04	1.85	0.04	1.85
1.00	7	-3.19	1.35	-5.40	-0.98	-0.85	1.46	-3.24	1.55	21.03	0.69	19.89	22.17	0.36	2.21	0.36	2.21

LANDMARK - LT ACROMION (5)

TIME	SAMPLE SIZE, N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-5.80	0.95	-7.35	-4.24	7.21	0.90	5.74	8.68	20.95	0.87	19.52	22.37	0.0	0.0	0.0	0.0
0.10	7	-6.47	1.06	-8.20	-4.73	6.99	1.32	4.83	9.16	20.76	0.98	19.16	22.36	0.73	0.73	0.73	0.73
F 0.20	7	-7.03	0.96	-8.60	-5.46	6.80	0.87	5.37	8.23	20.85	1.10	19.03	22.66	0.60	1.33	0.60	1.33
O 0.30	7	-7.55	0.80	-8.86	-6.24	6.59	0.73	5.39	7.79	20.37	1.11	19.15	22.80	0.57	1.90	0.57	1.90
R 0.40	7	-8.04	0.69	-9.17	-6.91	6.47	0.80	5.16	7.78	21.22	1.10	19.42	23.02	0.56	2.47	0.56	2.47
W 0.50	7	-8.37	0.77	-9.62	-7.11	6.38	0.81	5.06	7.70	21.59	1.17	19.67	23.52	0.50	2.97	0.50	2.97
A 0.60	6	-8.45	1.09	-10.24	-6.66	5.78	0.99	4.16	7.39	21.82	1.31	19.68	23.96	0.65	3.62	0.65	3.62
R 0.70	6	-8.49	0.95	-10.04	-6.93	5.49	0.83	4.14	6.85	21.91	1.29	19.79	24.03	0.30	3.92	0.30	3.92
D 0.80	6	-8.69	0.91	-10.18	-7.20	5.42	0.83	4.05	6.78	22.08	1.24	20.05	24.11	0.28	4.20	0.28	4.20
O 0.90	6	-8.64	0.88	-10.09	-7.19	5.32	0.90	3.84	6.79	22.22	1.24	20.19	24.25	0.18	4.37	0.18	4.37
1.00	6	-8.45	0.77	-9.71	-7.18	5.39	0.76	4.14	6.64	22.23	1.30	20.11	24.36	0.21	4.58	0.21	4.58
0.0	6	-8.45	0.77	-9.71	-7.18	5.39	0.76	4.14	6.64	22.23	1.30	20.11	24.36	0.0	0.0	0.0	0.0
0.10	6	-8.65	0.80	-9.96	-7.35	5.28	0.70	4.12	6.44	22.21	1.35	19.99	24.43	0.23	0.23	0.23	0.23
0.20	6	-8.79	0.83	-10.14	-7.43	5.40	0.67	4.31	6.50	22.15	1.24	20.11	24.48	0.19	0.42	0.19	0.42
R 0.30	6	-8.86	1.12	-10.70	-7.02	6.01	1.04	4.30	7.72	22.02	1.25	19.97	24.08	0.63	1.05	0.63	1.05
E 0.40	6	-8.35	1.11	-10.17	-6.54	6.22	0.86	4.80	7.63	21.75	1.09	19.96	23.53	0.61	1.66	0.61	1.66
T 0.50	7	-7.46	0.79	-8.75	-6.18	6.19	0.61	5.19	7.19	21.65	1.15	19.77	23.53	0.89	2.56	0.89	2.56
U 0.60	7	-6.80	0.88	-8.24	-5.36	6.52	0.73	5.32	7.73	21.41	1.07	19.66	23.15	0.78	3.34	0.78	3.34
R 0.70	7	-6.65	1.56	-9.20	-4.09	6.51	0.82	5.17	7.86	21.08	1.06	19.35	22.81	0.36	3.70	0.36	3.70
N 0.80	7	-7.36	4.02	-13.94	-0.77	5.84	2.87	1.13	10.55	20.54	1.59	18.01	23.21	1.09	4.78	1.09	4.78
O 0.90	7	-6.89	3.16	-12.07	-1.71	6.28	2.06	2.89	9.67	20.54	1.37	18.40	22.88	0.64	5.42	0.64	5.42
1.00	7	-5.80	0.95	-7.35	-4.24	7.21	0.90	5.74	8.68	20.95	0.87	19.52	22.37	1.47	6.89	1.47	6.89

(17)

LANDMARK - LT GRIP CENTER

TIME	SAMPLE	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	INCR	CUM
0.0	6	16.79	0.53	15.92	17.66	9.73	0.47	8.97	10.49	12.87	0.40	12.22	13.52	12.87	0.40	12.22	13.52	0.0	0.0
0.10	6	13.66	2.17	10.11	17.22	9.90	0.79	8.61	11.19	18.48	0.07	11.81	25.16	18.48	0.07	11.81	25.16	6.43	6.43
F 0.20	7	9.72	3.84	3.43	16.01	9.43	0.65	8.37	10.50	25.46	5.80	15.95	34.97	25.46	5.80	15.95	34.97	8.03	14.46
R 0.30	7	5.77	5.54	-3.31	14.85	9.04	0.69	7.92	10.16	29.92	6.55	19.18	40.65	29.92	6.55	19.18	40.65	5.97	20.42
O 0.40	7	2.97	2.22	-0.66	6.81	9.00	0.67	7.90	10.10	32.97	3.49	27.25	38.70	32.97	3.49	27.25	38.70	4.14	24.57
W 0.50	7	-0.45	2.43	-4.44	3.54	9.13	0.80	7.81	10.45	37.08	4.17	30.23	43.92	37.08	4.17	30.23	43.92	5.34	29.91
A 0.60	6	-3.00	3.43	-8.63	2.33	9.01	0.99	7.39	10.63	40.59	3.14	35.55	45.83	40.59	3.14	35.55	45.83	4.42	34.33
R 0.70	6	-2.43	1.23	-4.45	-0.41	9.34	0.58	8.38	10.29	41.53	1.05	39.82	43.25	41.53	1.05	39.82	43.25	1.07	35.40
D 0.80	6	-2.24	1.41	-4.55	0.06	9.47	0.55	8.57	10.37	42.58	0.83	41.22	43.94	42.58	0.83	41.22	43.94	1.07	36.47
0.90	5	-2.21	0.98	-3.81	-0.60	9.55	0.51	9.05	10.06	42.82	0.47	42.04	43.60	42.82	0.47	42.04	43.60	0.26	36.73
1.00	5	-1.57	0.60	-2.55	-0.58	9.77	0.50	8.94	10.59	42.91	0.50	42.08	43.74	42.91	0.50	42.08	43.74	0.68	37.41
0.0	5	-1.57	0.60	-2.55	-0.58	9.77	0.50	8.94	10.59	42.91	0.50	42.08	43.74	42.91	0.50	42.08	43.74	0.0	0.0
0.10	5	-0.95	0.75	-2.18	0.28	9.10	0.83	7.74	10.46	40.34	1.64	37.63	42.99	40.34	1.64	37.63	42.99	2.76	2.76
0.20	6	0.81	1.95	-2.38	4.00	8.08	1.21	6.10	10.06	36.80	2.72	32.33	41.27	36.80	2.72	32.33	41.27	4.06	6.81
R 0.30	7	3.02	2.33	-0.80	6.83	7.24	1.56	4.69	9.79	32.97	3.33	27.51	38.43	32.97	3.33	27.51	38.43	4.50	11.31
E 0.40	7	5.51	2.23	1.85	9.18	7.52	0.69	6.40	8.65	29.70	1.68	26.95	32.45	29.70	1.68	26.95	32.45	4.12	15.44
T 0.50	7	8.77	1.93	5.60	11.95	7.73	0.58	6.77	8.68	24.90	1.76	22.01	27.79	24.90	1.76	22.01	27.79	5.80	21.24
U 0.60	6	11.53	1.51	9.04	14.01	8.55	0.68	7.43	9.67	20.52	2.16	17.07	24.17	20.52	2.16	17.07	24.17	5.15	26.40
R 0.70	6	14.04	1.29	11.93	16.15	9.34	1.37	7.10	11.59	16.78	2.72	12.31	21.25	16.78	2.72	12.31	21.25	4.66	31.05
N 0.80	6	15.86	1.80	12.90	18.81	10.16	1.90	7.05	13.28	13.44	3.97	6.92	19.95	13.44	3.97	6.92	19.95	3.90	34.95
0.90	6	16.33	1.12	14.50	18.17	9.89	0.56	8.96	10.81	12.97	1.21	10.99	14.95	12.97	1.21	10.99	14.95	0.72	35.67
1.00	6	16.79	0.53	15.92	17.66	9.73	0.47	8.97	10.49	12.87	0.40	12.22	13.52	12.87	0.40	12.22	13.52	0.49	36.16

(19)

LANDMARK - LT TROCHANTER

TIME	SAMPLE	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	-----Y-----	-----Z-----	-----X-----	INCR	CUM
0.0	7	3.02	0.60	2.03	4.01	6.81	0.75	5.59	8.03	3.54	0.39	2.91	4.18	3.54	0.39	2.91	4.18	0.0	0.0
0.10	7	3.02	0.31	2.52	3.53	6.91	0.85	5.51	8.30	3.49	0.33	2.95	4.04	3.49	0.33	2.95	4.04	0.10	0.10
F 0.20	7	2.97	0.35	2.40	3.55	6.66	0.81	5.33	7.98	3.48	0.32	2.98	4.07	3.48	0.32	2.98	4.07	0.14	0.24
O 0.30	7	3.03	0.58	2.07	3.99	6.54	0.54	4.99	8.08	3.52	0.33	2.98	4.07	3.52	0.33	2.98	4.07	0.14	0.38
R 0.40	7	3.22	0.90	1.74	4.71	6.62	0.96	5.05	8.19	3.50	0.32	3.04	4.08	3.50	0.32	3.04	4.08	0.21	0.59
W 0.50	7	3.24	1.03	1.55	4.92	6.58	0.54	5.04	8.13	3.57	0.35	2.99	4.15	3.57	0.35	2.99	4.15	0.04	0.63
A 0.60	7	3.23	1.04	1.53	4.94	6.57	0.79	5.27	7.87	3.53	0.40	2.97	4.28	3.53	0.40	2.97	4.28	0.06	0.69
R 0.70	7	3.23	0.74	2.02	4.44	6.69	0.74	5.48	7.91	3.59	0.40	2.94	4.24	3.59	0.40	2.94	4.24	0.13	0.82
D 0.80	7	3.15	0.64	2.09	4.21	6.68	0.85	5.28	8.08	3.51	0.44	2.89	4.33	3.51	0.44	2.89	4.33	0.08	0.90
0.90	7	3.14	0.57	2.21	4.07	6.63	0.84	5.25	8.02	3.65	0.45	2.91	4.40	3.65	0.45	2.91	4.40	0.07	0.97
1.00	7	3.27	0.45	2.53	4.02	6.80	0.86	5.39	8.21	3.64	0.45	2.91	4.38	3.64	0.45	2.91	4.38	0.21	1.18
0.0	7	3.27	0.45	2.53	4.02	6.80	0.86	5.39	8.21	3.64	0.45	2.91	4.38	3.64	0.45	2.91	4.38	0.0	0.0
0.10	7	3.22	0.59	2.26	4.18	6.66	0.96	5.10	8.23	3.50	0.45	2.87	4.34	3.50	0.45	2.87	4.34	0.15	0.15
0.20	7	3.08	0.60	2.10	4.06	6.64	0.88	5.19	8.09	3.61	0.43	2.90	4.31	3.61	0.43	2.90	4.31	0.14	0.29
R 0.30	7	2.97	0.55	2.06	3.87	6.77	0.88	5.66	7.88	3.59	0.47	2.81	4.36	3.59	0.47	2.81	4.36	0.17	0.47
E 0.40	7	3.00	0.56	2.09	3.92	6.93	0.72	5.82	8.03	3.51	0.45	2.77	4.25	3.51	0.45	2.77	4.25	0.18	0.65
T 0.50	7	2.99	0.57	2.06	3.93	7.00	0.72	5.81	8.19	3.47	0.45	2.73	4.21	3.47	0.45	2.73	4.21	0.09	0.73
U 0.60	7	3.08	0.50	2.26	3.90	6.87	0.73	5.66	8.07	3.51	0.44	2.80	4.23	3.51	0.44	2.80	4.23	0.16	0.90
R 0.70	7	3.08	0.49	2.27	3.89	6.81	1.01	4.95	8.26	3.54	0.42	2.81	4.20	3.54	0.42	2.81	4.20	0.26	1.16
N 0.80	7	3.16	0.72	1.98	4.34	6.69	0.88	5.24	8.14	3.50	0.41	2.82	4.18	3.50	0.41	2.82	4.18	0.11	1.27
0.90	7	3.17	0.84	1.80	4.54	6.83	0.80	5.52	8.15	3.52	0.44	2.81	4.24	3.52	0.44	2.81	4.24	0.15	1.42
1.00	7	3.02	0.60	2.03	4.01	6.81	0.75	5.59	8.03	3.54	0.39	2.91	4.18	3.54	0.39	2.91	4.18	0.16	1.57

MVHT NO. 21230/30

LANDMARK - LT KNEE TOP (21)														
TIME	SAMPLE	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			DISTANCE			MOVED
T	SIZE	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	INCR	CUM	
0.0	6	19.37	1.06	17.34	5.48	0.70	4.33	11.30	1.33	9.12	13.47	0.0	0.0	
0.10	5	19.30	0.74	17.79	5.71	0.49	4.90	11.59	1.11	9.87	13.52	0.46	0.46	
0.20	5	18.99	0.71	17.83	5.54	0.60	4.55	11.72	1.16	9.82	13.63	0.17	0.63	
0.30	5	19.02	0.74	17.80	5.30	0.79	4.01	11.85	1.16	9.94	13.75	0.27	0.90	
0.40	5	19.32	1.88	16.83	23.00	4.87	1.68	11.88	1.09	10.10	13.67	0.99	1.89	
0.50	5	19.79	1.55	17.25	22.33	5.02	2.12	11.86	1.12	10.02	13.69	0.20	2.09	
0.60	5	19.49	1.07	17.73	21.24	5.14	0.95	11.35	1.20	9.88	13.82	0.32	2.42	
0.70	5	20.22	2.15	16.70	23.75	4.72	1.83	11.95	1.24	9.92	13.99	0.85	3.27	
0.80	5	19.64	1.09	17.84	21.43	5.15	1.17	11.89	1.23	9.88	13.91	0.73	4.00	
0.90	5	19.19	1.02	17.52	20.86	5.41	0.68	11.87	1.22	9.87	13.86	0.52	4.52	
1.00	5	19.39	0.98	17.78	20.99	5.46	0.73	11.83	1.23	9.82	13.85	0.21	4.73	
0.0	5	19.39	0.98	17.78	20.99	5.46	0.73	11.83	1.23	9.82	13.85	0.0	0.0	
0.10	5	19.21	1.07	17.45	20.96	5.42	4.06	11.81	1.28	9.72	13.91	0.19	0.19	
0.20	5	19.11	1.15	17.22	21.00	5.40	4.25	11.84	1.17	9.92	13.76	0.10	0.29	
0.30	5	19.15	1.19	17.21	21.10	5.47	4.59	11.77	1.18	9.83	13.70	0.11	0.40	
0.40	5	19.18	1.04	17.48	20.88	5.52	4.60	11.69	1.19	9.73	13.65	0.09	0.49	
0.50	6	19.04	0.84	17.66	20.42	5.60	4.63	11.33	1.35	9.08	13.52	0.43	0.92	
0.60	6	19.03	0.88	17.59	20.48	5.46	4.50	11.33	1.43	8.99	13.67	0.14	1.06	
0.70	6	19.08	0.89	17.61	20.54	5.36	4.36	11.33	1.51	8.86	13.80	0.11	1.17	
0.80	6	18.98	0.93	17.46	20.49	5.38	4.35	11.38	1.42	9.05	13.71	0.11	1.29	
0.90	6	18.97	0.96	17.40	20.54	5.50	4.35	11.36	1.33	9.17	13.54	0.12	1.40	
1.00	6	19.07	1.06	17.34	20.81	5.48	4.33	11.30	1.33	9.12	13.47	0.12	1.52	

LANDMARK - LT SHOULDER CENTER (23)														
TIME	SAMPLE	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			DISTANCE			MOVED
T	SIZE	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	INCR	CUM	
0.0	7	-4.09	1.02	-5.77	7.57	0.73	6.37	19.12	0.67	18.01	20.23	0.0	0.0	
0.10	7	-4.39	1.11	-6.22	7.54	1.18	5.60	18.97	0.81	17.65	20.30	0.34	0.34	
0.20	7	-5.15	0.95	-6.25	7.43	1.02	5.77	19.18	0.95	17.62	20.74	0.39	0.73	
0.30	7	-5.15	1.04	-6.85	7.34	1.01	5.68	19.35	0.99	18.23	21.48	0.81	1.54	
0.40	7	-5.50	1.43	-7.85	7.16	1.35	4.95	20.84	1.08	19.07	22.60	1.06	2.60	
0.50	7	-5.66	1.09	-7.46	7.19	1.23	5.17	21.42	1.25	19.38	23.47	0.61	3.21	
0.60	7	-5.96	1.14	-7.84	6.87	0.96	5.30	22.10	1.42	19.78	24.42	0.81	4.02	
0.70	7	-6.18	1.24	-8.21	6.55	0.81	5.22	22.46	1.57	19.89	25.03	0.53	4.55	
0.80	7	-6.22	1.21	-8.20	6.47	0.95	4.92	22.30	1.86	19.84	25.95	0.44	4.99	
0.90	7	-6.21	1.09	-8.01	6.46	1.03	4.77	23.29	2.07	19.89	26.68	0.39	5.38	
1.00	7	-6.19	0.95	-7.74	6.36	0.99	4.74	23.11	1.84	20.09	26.12	0.21	5.59	
0.0	7	-6.19	0.95	-7.74	6.36	0.99	4.74	23.11	1.84	20.09	26.12	0.0	0.0	
0.10	7	-6.12	0.91	-7.61	6.70	0.99	5.07	23.11	1.84	20.09	26.12	0.47	0.47	
0.20	7	-6.07	1.07	-7.83	7.00	1.07	5.24	22.79	1.67	20.05	25.53	0.65	1.12	
0.30	7	-5.90	1.03	-7.54	7.20	1.02	5.52	22.44	1.33	20.03	24.39	0.81	1.93	
0.40	7	-5.61	0.84	-6.98	7.33	0.81	6.01	21.45	1.11	19.64	23.26	0.79	2.71	
0.50	7	-5.23	0.80	-6.55	7.34	0.48	6.55	20.73	1.02	19.06	22.40	0.88	3.59	
0.60	7	-4.78	0.87	-6.20	7.34	0.72	6.17	19.94	0.91	19.45	21.43	0.50	4.09	
0.70	7	-4.32	1.06	-6.06	7.37	0.81	6.04	19.72	0.84	18.35	21.09	0.52	4.61	
0.80	7	-4.17	1.33	-6.35	7.42	0.82	6.08	19.48	0.78	18.06	20.62	0.21	4.82	
0.90	7	-4.14	1.35	-6.35	7.49	0.72	6.31	19.26	0.70	18.11	20.40	0.11	4.93	
1.00	7	-4.09	1.02	-5.77	7.57	0.73	6.37	19.12	0.67	18.01	20.23	0.17	5.10	

LANDMARK - LT ELBOW CENTER (25)

TIME	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT		
0.0	7	3.22	0.75	1.98	4.46	11.91	0.81	10.58	13.23	13.08	1.42	10.74	15.41	0.0	0.0
0.10	7	2.61	0.88	1.16	4.05	12.24	0.52	11.40	13.09	13.55	2.10	10.20	17.10	0.0	0.0
0.20	7	2.28	0.66	1.20	3.37	12.71	0.75	11.48	13.93	15.31	2.80	10.71	19.90	0.90	0.90
0.30	7	1.89	0.77	0.63	3.15	13.16	0.90	11.69	14.63	17.41	3.36	11.91	22.91	1.75	2.65
0.40	7	1.38	1.46	-1.01	3.77	13.43	1.03	11.73	15.13	21.06	3.52	15.29	26.83	2.19	4.84
0.50	7	0.66	1.52	-1.84	3.16	13.31	1.05	11.59	15.03	26.08	3.52	15.29	26.83	3.69	8.54
0.60	7	-0.67	1.37	-2.94	1.55	12.68	0.96	11.11	14.25	28.78	1.98	20.84	29.32	3.11	11.64
0.70	7	-1.91	1.09	-3.69	-0.12	11.99	1.02	10.32	13.65	28.53	1.15	26.64	30.41	3.09	14.73
0.80	7	-2.64	1.11	-4.46	-0.82	11.57	1.12	9.74	13.41	29.50	1.08	27.73	31.27	2.24	16.97
0.90	7	-2.83	1.17	-4.75	-0.91	11.28	1.14	9.42	13.14	30.05	1.03	28.36	31.74	1.29	18.25
1.00	7	-2.81	1.01	-4.47	-1.16	11.05	1.24	9.02	13.08	30.10	0.84	28.72	31.49	0.65	18.90
														0.24	19.14
0.0	7	-2.81	1.01	-4.47	-1.16	11.05	1.24	9.02	13.08	30.10	0.84	28.72	31.49	0.0	0.0
0.10	7	-1.58	0.97	-3.17	0.01	12.10	0.83	10.73	13.46	30.10	0.84	28.72	31.49	0.0	0.0
0.20	7	-0.29	1.01	-1.95	1.37	12.80	0.67	11.71	13.89	25.88	0.73	27.00	29.39	2.50	2.50
0.30	7	0.96	1.10	-0.84	2.77	13.26	0.76	12.01	14.52	22.97	0.64	21.92	24.01	2.75	5.25
0.40	7	1.60	1.10	-0.20	3.41	13.32	1.00	11.69	14.96	19.76	1.01	18.11	21.42	3.20	8.45
0.50	7	1.88	1.13	0.03	3.73	13.15	0.98	11.55	14.75	18.72	1.61	14.08	19.37	3.27	11.72
0.60	7	2.41	1.15	0.53	4.29	12.90	1.13	11.05	14.75	15.06	1.69	12.29	17.82	3.05	14.77
0.70	7	2.68	1.10	0.88	4.49	12.43	1.06	10.68	14.17	14.05	1.71	11.25	16.85	1.77	16.54
0.80	7	2.80	1.02	1.13	4.47	12.30	0.87	10.87	13.73	13.57	1.70	10.88	16.46	1.14	17.69
0.90	7	2.98	0.91	1.49	4.47	12.20	0.84	10.83	13.58	13.43	1.63	10.76	16.10	0.42	18.11
1.00	7	3.22	0.75	1.98	4.46	11.91	0.81	10.58	13.23	13.08	1.42	10.74	15.41	0.31	18.42
														0.52	18.94

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	-----X-----					-----Y-----					-----Z-----					DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT			
0.0	4	13.39	0.80	12.09	14.70		10.30	0.54	9.42	11.19		12.77	0.68	11.65	13.89	0.0		
0.10	4	11.46	0.20	11.14	11.79		10.99	0.65	9.93	12.06		15.81	3.91	9.40	22.23	3.67		
0.20	5	9.45	1.21	7.46	11.43		10.57	0.50	9.75	11.40		21.07	4.70	13.35	28.78	5.64		
0.30	6	7.19	1.70	4.39	9.98		10.09	0.57	9.15	11.02		24.52	2.62	20.22	28.81	9.31		
0.40	7	3.68	2.11	0.23	7.14		10.19	0.70	9.04	11.34		29.94	3.37	24.39	35.43	13.47		
0.50	7	0.98	2.45	-3.03	5.00		10.20	0.79	8.89	11.50		34.30	4.36	27.15	41.45	19.90		
0.60	6	-1.45	2.74	-5.94	3.05		10.22	0.82	8.87	11.56		37.59	3.03	32.72	42.66	25.05		
0.70	6	-1.61	0.98	-3.21	-0.01		10.15	0.77	8.88	11.42		38.30	1.05	36.57	40.03	29.23		
0.80	6	-1.88	1.09	-3.66	-0.10		10.16	0.83	8.81	11.52		39.16	0.83	37.81	40.52	29.86		
0.90	6	-1.75	1.08	-3.52	0.03		10.17	0.69	9.04	11.31		39.61	0.69	38.48	40.75	30.76		
1.00	6	-1.45	0.87	-2.88	-0.02		10.25	0.51	9.42	11.08		39.73	0.67	38.63	40.84	31.56		
0.0	6	-1.45	0.87	-2.88	-0.02		10.25	0.51	9.42	11.08		39.73	0.67	38.63	40.84	0.0		
0.10	6	-0.22	1.44	-2.58	2.14		10.00	0.65	8.93	11.07		37.33	1.53	34.82	39.85	2.71		
0.20	7	1.74	2.34	-2.10	5.58		9.43	0.68	8.32	10.55		34.04	2.66	29.67	38.41	6.58		
0.30	6	2.97	2.06	-0.40	6.35		9.19	0.69	8.06	10.32		31.20	1.37	28.96	33.44	3.11		
0.40	5	5.17	2.02	1.86	8.99		9.17	0.51	8.34	10.00		26.94	1.55	24.41	29.48	9.69		
0.50	5	7.39	1.59	4.79	9.99		9.09	0.35	8.52	9.66		22.69	1.34	20.49	24.89	14.48		
0.60	4	9.27	1.22	7.27	11.27		9.73	0.39	9.08	10.37		19.12	1.46	16.72	21.52	19.27		
0.70	4	10.88	0.91	9.39	12.38		10.23	0.74	9.02	11.44		16.39	0.91	14.89	3.01	23.36		
0.80	4	11.74	0.81	10.41	13.07		10.59	0.61	9.59	11.60		14.52	0.14	14.30	14.75	26.57		
0.90	4	12.60	1.02	10.93	14.28		10.61	0.53	9.74	11.49		13.13	0.62	11.80	14.47	28.66		
1.00	4	13.39	0.80	12.09	14.70		10.30	0.54	9.42	11.19		12.77	0.67	11.65	14.87	30.29		
																31.22		

MMVT NO. 21230/30

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO OVER-HEAD CONTROLLER AT 0.0, +10.0, +45.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +13.0, -13.0, +4.8.

MOTION NUMBER - 22230
 BACK ANGLE - 30

SUB-MOUMENT	---TIME DATA---		
	MEAN	STD DEV	RANGE
LEFT FWD	0.80	0.14	0.60 TO 0.90 SECS.
LEFT REV	0.71	0.11	0.60 TO 0.90 SECS.

LANDMARK - NASION (1)													
TIME	SAMPLE	-----X-----			-----Y-----			-----Z-----			-----		
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	MOVED
0.0	7	-0.08	1.10	-1.88	0.48	1.02	-1.19	2.15	27.50	1.78	24.69	30.52	0.0
0.10	7	-3.01	1.67	-5.75	0.87	0.42	0.19	1.55	29.51	1.36	27.29	31.73	3.52
F 0.20	7	-6.19	1.83	-7.19	0.84	0.41	0.17	1.50	30.08	1.24	28.04	32.12	1.31
O 0.30	7	-8.50	1.53	-7.02	1.99	0.46	-0.01	1.48	30.12	1.27	28.04	32.19	0.33
R 0.40	7	-5.05	1.18	-6.67	0.66	0.45	-0.07	1.39	30.42	1.20	28.25	32.18	0.26
W 0.50	7	-8.73	1.10	-6.86	0.66	0.46	-0.09	1.40	30.30	1.31	28.16	32.45	0.33
A 0.60	7	-5.16	0.97	-6.75	0.76	0.41	0.09	1.43	30.34	1.34	28.14	32.55	0.16
R 0.70	7	-3.20	1.05	-6.93	0.74	0.58	-0.22	1.69	30.28	1.38	28.02	32.54	0.08
D 0.80	7	-5.17	1.21	-7.16	0.73	0.68	-0.38	1.84	30.21	1.37	27.97	32.45	0.08
O 0.90	7	-5.01	1.35	-7.22	0.75	0.58	-0.20	1.71	30.10	1.43	27.76	32.44	0.20
1.00	7	-4.34	1.61	-6.98	0.49	0.78	-0.79	1.78	29.75	1.68	26.99	32.50	0.80
0.0	7	-6.34	1.61	-6.98	0.49	0.78	-0.79	1.78	29.75	1.68	26.99	32.50	0.0
0.10	7	-2.36	0.65	-1.30	0.49	0.70	-0.65	1.64	28.53	1.80	25.59	31.48	2.32
0.20	7	-1.42	0.66	-2.49	0.26	1.05	-1.47	1.99	28.02	1.82	25.04	31.01	1.10
R 0.30	7	-1.07	0.87	-2.50	0.36	1.29	-2.01	2.22	27.37	1.73	25.13	30.81	0.38
E 0.40	7	-1.10	0.78	-2.38	0.17	1.22	-1.93	2.06	27.89	1.59	25.28	30.50	0.09
U 0.50	7	-0.97	0.86	-2.39	0.44	1.08	-1.81	1.75	27.77	1.64	25.08	30.47	0.20
O 0.60	7	-0.79	0.90	-2.26	0.69	-0.01	-1.83	1.81	27.74	1.57	25.17	30.31	0.19
R 0.70	7	-0.86	0.97	-2.44	0.73	0.41	-1.98	2.79	27.67	1.64	24.97	30.36	0.43
N 0.80	7	-0.50	0.82	-1.85	0.85	0.31	-1.63	2.25	27.69	1.73	24.86	30.52	0.37
O 0.90	7	-0.20	1.03	-1.88	1.48	0.26	-1.55	2.08	27.67	1.71	24.87	30.48	0.31
1.00	7	-0.08	1.10	-1.88	1.73	1.02	-1.19	2.15	27.50	1.78	24.69	30.52	0.26

LANDMARK - CERVICALE (2)													
TIME	SAMPLE	-----X-----			-----Y-----			-----Z-----			-----		
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	95 PCT	95 PCT	MOVED
0.0	7	-7.38	0.61	-8.38	-0.50	0.76	-1.75	0.75	21.59	1.06	19.95	23.43	0.0
0.10	7	-7.57	0.76	-8.82	-0.76	0.87	-2.18	0.66	21.54	1.25	19.49	23.58	0.36
F 0.20	7	-7.89	0.79	-9.18	-0.85	0.85	-2.24	0.54	21.42	1.22	19.41	23.43	0.35
O 0.30	7	-7.94	0.80	-9.25	-0.91	0.86	-2.32	0.53	21.33	1.17	19.41	23.25	0.12
R 0.40	7	-7.96	0.74	-9.16	-0.75	0.79	-2.32	0.27	21.38	1.18	19.44	23.32	0.12
W 0.50	7	-7.94	0.83	-9.31	-0.57	1.14	-2.38	0.09	21.40	1.31	19.25	23.55	0.12
A 0.60	7	-8.00	0.79	-9.30	-0.97	1.06	-2.71	0.76	21.50	1.25	19.43	23.57	0.20
R 0.70	7	-8.11	0.75	-9.34	-0.93	1.22	-2.93	1.08	21.50	1.26	19.51	23.61	0.13
D 0.80	7	-8.09	0.70	-9.23	-0.94	1.01	-2.91	0.89	21.57	1.23	19.56	23.58	0.09
O 0.90	7	-7.99	0.79	-9.28	-0.71	1.23	-3.10	0.95	21.54	1.10	19.74	23.35	0.12
1.00	7	-7.92	0.92	-9.43	-1.14	1.26	-3.22	0.93	21.53	1.11	19.70	23.35	0.10
0.0	7	-7.92	0.92	-9.43	-1.14	1.26	-3.22	0.93	21.53	1.11	19.70	23.35	0.0
0.10	7	-7.91	0.58	-8.85	-1.24	0.96	-2.82	0.34	21.48	1.15	19.60	23.36	0.11
0.20	7	-7.84	0.62	-8.86	-1.09	0.82	-2.58	0.11	21.55	1.12	19.72	23.39	0.21
R 0.30	7	-7.81	0.76	-9.07	-0.84	1.24	-2.47	0.29	21.56	1.16	19.79	23.58	0.20
E 0.40	7	-7.78	0.70	-9.03	-0.96	0.77	-2.22	0.30	21.52	1.20	19.64	23.59	0.16
U 0.50	7	-7.76	0.70	-8.90	-0.62	0.75	-2.34	0.11	21.51	1.15	19.72	23.49	0.19
T 0.60	7	-7.65	0.67	-8.75	-0.55	1.04	-2.28	0.20	21.56	1.15	19.76	23.55	0.14
R 0.70	7	-7.53	0.63	-8.57	-0.86	0.76	-2.11	0.39	21.50	1.18	19.72	23.59	0.21
O 0.80	7	-7.51	0.58	-8.46	-0.70	0.79	-2.00	0.59	21.58	1.18	19.64	23.52	0.18
N 0.90	7	-7.43	0.54	-8.32	-0.60	0.77	-1.87	0.67	21.58	1.18	19.64	23.52	0.13
1.00	7	-7.38	0.61	-8.36	-0.50	0.76	-1.75	0.75	21.59	1.06	19.95	23.43	0.15

(3)

TIME	SAMPLE SIZE, N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVEMENT CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	-2.69	1.47	-5.09	0.28	-0.06	0.71	-1.23	1.11	20.80	0.64	19.75	21.85	0.0	0.0	
0.10	7	-3.02	1.09	-4.81	-1.23	-0.10	0.80	-1.41	1.22	20.91	0.76	19.67	22.15	0.35	0.35	
0.20	7	-3.36	1.10	-5.16	-1.55	-0.20	0.94	-1.75	1.35	20.93	0.84	19.56	22.31	0.36	0.71	
0.30	7	-3.43	1.10	-5.07	-1.79	-0.11	0.75	-1.34	1.11	20.95	0.79	19.66	22.24	0.12	0.83	
0.40	7	-3.73	1.03	-5.43	-2.03	-0.38	0.69	-1.51	0.75	21.14	0.78	19.86	22.42	0.45	1.27	
0.50	7	-3.93	1.30	-6.07	-1.79	-0.52	0.76	-1.76	0.73	21.23	0.90	19.76	22.71	0.26	1.53	
0.60	7	-3.53	1.68	-6.28	-0.78	-0.68	0.98	-2.28	0.52	21.32	0.99	19.69	22.95	0.44	1.97	
0.70	7	-3.22	2.07	-6.61	0.16	-0.88	1.83	-3.88	2.13	21.39	1.08	19.62	23.16	0.37	2.34	
0.80	7	-3.87	1.37	-6.12	-1.62	-0.45	0.82	-1.79	0.89	21.39	1.02	19.72	23.06	0.77	3.11	
0.90	7	-3.92	1.40	-6.21	-1.62	-0.57	0.81	-1.90	0.76	21.49	1.01	19.83	23.15	0.16	3.27	
1.00	7	-3.82	1.37	-6.07	-1.57	-0.60	0.75	-1.84	0.64	21.43	0.96	19.86	22.99	0.12	3.39	
0.0	7	-3.82	1.37	-6.07	-1.57	-0.60	0.75	-1.84	0.64	21.43	0.96	19.86	22.99	0.0	0.0	
0.10	7	-3.56	1.31	-5.71	-1.41	-0.33	0.74	-1.54	0.88	21.34	0.96	19.77	22.92	0.38	0.38	
0.20	7	-3.42	1.33	-5.60	-1.24	-0.28	0.76	-1.52	0.95	21.22	0.90	19.75	22.70	0.19	0.57	
0.30	7	-3.18	1.11	-5.00	-1.36	-0.26	0.66	-1.33	0.82	21.15	0.84	19.77	22.53	0.25	0.82	
0.40	7	-3.11	1.14	-4.99	-1.24	-0.35	0.59	-1.32	0.62	21.13	0.77	19.86	22.39	0.12	0.94	
0.50	7	-3.12	1.34	-5.32	-0.93	-0.44	0.45	-1.18	0.30	20.99	0.74	19.78	22.21	0.16	1.10	
0.60	7	-2.96	1.26	-5.02	-0.89	-0.50	0.42	-1.19	0.19	20.89	0.70	19.73	22.04	0.21	1.31	
0.70	7	-2.87	1.30	-5.01	-0.73	-0.51	0.60	-1.49	0.47	20.88	0.71	19.72	22.04	0.09	1.40	
0.80	7	-2.74	1.31	-4.89	-0.60	-0.41	0.67	-1.41	0.79	20.83	0.73	19.63	22.03	0.24	1.64	
0.90	7	-2.63	1.32	-4.80	-0.46	-0.31	0.69	-1.25	1.03	20.80	0.70	19.66	21.94	0.23	1.87	
1.00	7	-2.69	1.47	-5.09	-0.28	-0.06	0.71	-1.23	1.11	20.80	0.64	19.75	21.85	0.07	1.94	

—

TIME	SAMPLE SIZE, N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0	6	-5.77	1.25	-7.82	-3.72	7.45	0.69	6.31	8.58	20.58	0.98	19.08	22.28	0.0	0.0	0.0	
0.10	6	-6.57	1.05	-8.29	-4.85	7.37	0.71	6.31	8.54	20.44	0.99	18.81	22.07	0.84	0.84	0.84	
0.20	6	-7.05	0.98	-8.65	-5.45	7.20	0.84	5.82	8.59	20.44	1.10	18.63	22.45	0.51	1.35	1.35	
0.30	6	-7.51	0.89	-8.97	-6.05	7.15	0.84	5.78	8.52	20.64	1.24	18.60	22.68	0.50	1.85	1.85	
0.40	6	-7.98	1.03	-9.66	-6.29	6.99	0.88	5.54	8.43	20.90	1.31	18.75	23.05	0.56	2.41	2.41	
0.50	6	-8.27	1.31	-10.42	-6.12	6.73	0.89	5.27	8.43	21.23	1.34	19.04	23.43	0.52	2.93	2.93	
0.60	6	-8.52	1.34	-10.72	-6.32	6.68	0.93	5.16	8.20	21.52	1.30	19.49	23.75	0.46	3.39	3.39	
0.70	6	-8.80	1.48	-11.22	-6.37	6.51	1.06	4.77	8.25	21.90	1.28	19.81	24.00	0.43	3.82	3.82	
0.80	6	-8.63	1.49	-11.08	-6.18	5.96	0.99	4.34	7.57	22.13	1.33	19.95	24.31	0.62	4.44	4.44	
0.90	6	-8.53	1.51	-11.00	-6.05	5.93	0.91	4.43	7.43	22.18	1.22	20.18	24.17	0.12	4.56	4.56	
1.00	6	-8.56	1.41	-10.89	-6.24	5.72	0.65	4.66	6.79	22.15	1.16	20.25	24.05	0.21	4.77	4.77	
0.0	6	-8.56	1.41	-10.89	-6.24	5.72	0.65	4.66	6.79	22.15	1.16	20.25	24.05	0.0	0.0	0.0	
0.10	6	-8.65	1.36	-10.87	-6.42	5.78	0.70	4.64	6.93	21.97	1.30	19.83	24.00	0.21	0.21	0.21	
0.20	6	-7.69	0.91	-9.18	-6.20	6.52	2.27	2.80	10.24	21.94	1.18	20.00	23.88	1.21	1.42	1.42	
0.30	6	-7.39	1.08	-9.16	-5.62	6.62	2.33	2.80	10.44	21.39	1.16	19.98	23.79	0.32	1.74	1.74	
0.40	6	-7.97	0.99	-9.59	-6.34	6.62	0.62	5.15	7.18	21.59	1.25	19.55	23.64	0.79	2.52	2.52	
0.50	6	-7.66	1.05	-9.37	-5.94	6.56	0.66	5.48	7.65	21.34	1.24	19.30	23.38	0.56	3.09	3.09	
0.60	6	-7.07	0.95	-8.63	-5.52	6.80	0.62	5.79	7.81	21.10	1.26	19.04	23.16	0.67	3.76	3.76	
0.70	6	-6.61	1.01	-8.27	-4.95	7.03	0.60	6.05	8.01	20.95	1.24	18.92	22.97	0.54	4.30	4.30	
0.80	6	-6.29	1.07	-8.05	-4.54	7.30	0.73	6.10	8.51	20.81	1.17	18.89	22.73	0.44	4.74	4.74	
0.90	6	-6.02	1.17	-7.95	-4.09	7.44	0.81	6.11	8.78	20.72	1.07	18.97	22.48	0.32	5.06	5.06	
1.00	6	-5.77	1.25	-7.82	-3.72	7.45	0.69	6.31	8.58	20.58	0.98	19.08	22.28	0.25	5.31	5.31	

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	-----X----- 5 PCT	-----X----- 95 PCT	-----Y----- MEAN	-----Y----- SE	-----Y----- 5 PCT	-----Y----- 95 PCT	-----Z----- MEAN	-----Z----- SE	-----Z----- 5 PCT	-----Z----- 95 PCT	DISTANCE INCR	MOVED CUM
0.0	4	19.53	0.75	18.30	20.77	5.45	0.33	4.91	5.99	11.46	1.58	8.86	14.05	0.0	0.0
0.10	4	18.99	0.80	17.69	20.30	5.68	0.33	4.91	5.99	11.46	1.58	8.86	14.05	0.0	0.0
F 0.20	4	19.08	0.59	18.12	20.05	5.97	0.62	4.95	6.98	11.54	1.73	8.70	14.38	0.59	0.59
D 0.30	4	19.03	0.82	17.68	20.38	5.95	0.63	4.91	6.99	11.53	1.73	8.70	14.37	0.31	0.90
R 0.40	4	18.96	1.00	17.32	20.61	5.76	0.63	4.72	6.81	11.55	1.62	8.89	14.22	0.06	0.95
W 0.50	4	19.13	1.03	17.44	20.82	5.78	0.66	4.70	6.87	11.55	1.58	8.86	14.22	0.20	1.15
A 0.60	4	19.11	1.01	17.46	20.77	5.86	0.66	4.74	6.83	11.73	1.43	9.38	14.08	0.17	1.32
R 0.70	4	18.99	1.07	17.24	20.75	5.82	0.66	4.74	6.90	11.85	1.42	9.53	14.18	0.20	1.51
D 0.80	4	19.20	1.08	17.43	20.97	5.77	0.82	4.44	7.11	11.48	1.74	8.62	14.33	0.18	1.69
0.90	3	19.46	1.04	17.76	21.16	5.61	0.87	4.44	7.04	11.96	1.66	9.24	14.68	0.43	2.12
1.00	3	19.54	0.86	18.13	20.95	5.64	0.82	4.29	6.99	11.87	1.73	9.02	14.72	0.57	2.69
0.0	3	19.54	0.86	18.13	20.95	5.64	0.82	4.29	6.99	11.87	1.73	9.02	14.72	0.12	2.81
0.10	3	19.40	0.82	18.05	20.75	5.52	0.85	4.13	6.91	11.88	1.83	8.88	14.87	0.0	0.0
0.20	4	19.24	0.73	18.04	20.44	5.53	0.69	4.39	6.91	11.88	1.83	8.88	14.87	0.19	0.19
R 0.30	4	19.35	0.74	18.14	20.56	5.52	0.72	4.34	6.71	11.52	1.73	8.62	14.30	0.45	0.63
E 0.40	4	19.32	0.82	17.99	20.66	5.49	0.65	4.34	6.55	11.52	1.68	8.77	14.27	0.13	0.76
T 0.50	4	19.29	0.83	17.92	20.65	5.43	0.58	4.47	6.39	11.52	1.74	8.67	14.38	0.04	0.80
U 0.60	4	18.85	0.62	17.83	19.86	5.87	0.85	4.48	7.25	11.50	1.71	8.71	14.30	0.08	0.87
R 0.70	4	17.18	3.93	10.73	23.63	7.50	3.98	0.98	14.02	10.38	2.19	6.79	13.97	0.67	1.54
N 0.80	4	18.50	1.24	16.46	20.53	6.48	1.98	3.24	9.73	10.95	1.61	8.31	13.58	2.49	4.03
0.90	4	19.56	0.99	17.93	21.18	5.60	0.42	4.91	6.30	11.38	1.61	8.74	14.02	1.76	5.79
1.00	4	19.53	0.75	18.30	20.77	5.45	0.33	4.91	5.99	11.46	1.58	8.86	14.05	1.44	7.24
														0.17	7.41

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	-----X----- 5 PCT	-----X----- 95 PCT	-----Y----- MEAN	-----Y----- SE	-----Y----- 5 PCT	-----Y----- 95 PCT	-----Z----- MEAN	-----Z----- SE	-----Z----- 5 PCT	-----Z----- 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-3.99	1.29	-6.11	-1.86	7.57	0.54	6.02	9.11	18.93	0.93	17.40	20.46	0.0	0.0
0.10	7	-4.47	1.00	-6.11	-2.83	7.91	1.04	6.20	9.62	18.64	0.81	17.31	19.96	0.0	0.0
F 0.20	7	-4.97	0.89	-6.43	-3.50	7.88	1.08	6.11	9.65	18.85	0.96	17.27	20.42	0.66	0.66
D 0.30	7	-5.20	1.02	-6.88	-3.52	8.05	1.18	6.12	9.98	19.39	1.05	17.66	21.11	0.54	1.20
R 0.40	7	-5.37	0.90	-6.84	-3.90	7.97	1.24	5.94	10.00	20.11	1.02	18.43	21.79	0.81	1.81
W 0.50	7	-5.68	1.10	-7.47	-3.88	7.65	1.22	5.65	9.65	20.83	1.07	19.07	22.59	0.75	2.56
A 0.60	7	-6.07	1.16	-7.97	-4.16	7.22	1.08	5.45	8.99	21.50	1.03	19.81	23.19	0.84	3.40
R 0.70	7	-6.36	1.19	-8.31	-4.42	6.88	1.07	5.12	8.63	21.95	1.04	20.24	23.67	0.89	4.29
D 0.80	7	-6.40	1.39	-8.68	-4.12	6.63	1.20	4.66	8.60	22.15	1.19	20.21	24.10	0.64	4.93
0.90	7	-6.28	1.19	-8.24	-4.32	6.57	1.10	4.77	8.36	22.26	1.14	20.40	24.13	0.32	5.25
1.00	7	-6.24	0.99	-7.86	-4.63	6.64	0.97	5.05	8.23	22.35	1.10	20.55	24.15	0.18	5.43
0.0	7	-6.24	0.99	-7.86	-4.63	6.64	0.97	5.05	8.23	22.35	1.10	20.55	24.15	0.12	5.54
0.10	7	-6.23	1.05	-7.96	-4.50	6.66	0.95	5.10	8.23	22.35	1.10	20.55	24.15	0.0	0.0
0.20	7	-6.07	1.15	-7.95	-4.19	6.80	0.97	5.21	8.39	21.90	1.21	19.99	23.97	0.37	0.37
R 0.30	7	-5.88	1.21	-7.87	-3.90	7.09	1.07	5.34	8.85	21.70	1.28	19.61	23.80	0.35	0.72
E 0.40	7	-5.85	1.07	-7.60	-4.10	7.20	0.87	5.78	8.62	21.39	1.37	19.14	23.63	0.47	1.19
T 0.50	7	-5.74	0.90	-7.22	-4.27	7.29	0.87	6.19	8.39	20.80	1.34	18.61	23.00	0.59	1.78
U 0.60	7	-5.29	1.06	-7.02	-3.55	7.35	0.58	6.40	8.30	20.16	1.24	18.13	22.20	0.65	2.44
R 0.70	7	-4.79	1.15	-6.68	-2.91	7.42	0.57	6.49	8.35	19.71	1.12	17.88	21.55	0.65	3.08
N 0.80	7	-4.49	1.12	-6.33	-2.65	7.59	0.81	6.26	8.93	19.36	1.04	17.65	21.08	0.61	3.69
0.90	7	-4.18	1.18	-6.11	-2.25	7.64	0.93	6.11	9.18	19.16	1.00	17.52	20.80	0.41	4.10
1.00	7	-3.99	1.29	-6.11	-1.86	7.57	0.94	6.02	9.11	18.93	0.93	17.40	20.46	0.34	4.43
														0.23	4.67

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	-----X-----					-----Y-----					-----Z-----					-----					DISTANCE					MOVED				
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR					INCR				
0.0	6	3.36	1.49	0.91	5.81		11.67	1.52	9.18	13.16		13.45	1.61	10.81	16.09		13.45	1.61	10.81	16.09		0.0		0.0		0.0		0.0		0.0	
0.10	6	2.87	0.40	2.21	3.53		12.41	1.06	10.67	14.15		13.44	1.44	11.07	15.80		13.44	1.44	11.07	15.80		0.89		0.89		0.89		0.89		0.89	
F 0.20	6	2.33	0.23	1.95	2.71		12.76	1.00	11.12	14.40		14.86	1.96	11.64	18.08		14.86	1.96	11.64	18.08		1.56		1.56		1.56		1.56		1.56	
U 0.30	6	2.20	0.68	1.09	3.31		13.11	1.38	10.84	15.38		17.74	3.04	12.76	22.73		17.74	3.04	12.76	22.73		2.91		2.91		2.91		2.91		2.91	
R 0.40	6	2.15	1.16	0.24	4.05		13.17	1.69	10.39	15.94		21.29	3.31	15.86	26.72		21.29	3.31	15.86	26.72		3.54		3.54		3.54		3.54		3.54	
W 0.50	6	1.75	1.85	-0.96	4.45		13.14	1.31	10.99	15.29		23.95	1.66	21.24	26.67		23.95	1.66	21.24	26.67		2.69		2.69		2.69		2.69		2.69	
A 0.60	7	-0.21	1.89	-3.32	2.89		12.87	1.00	11.23	14.50		26.78	1.37	24.53	29.03		26.78	1.37	24.53	29.03		3.45		3.45		3.45		3.45		3.45	
R 0.70	7	-2.13	2.95	-6.98	2.71		12.55	1.00	10.91	14.20		28.84	1.53	26.32	31.35		28.84	1.53	26.32	31.35		2.83		2.83		2.83		2.83		2.83	
D 0.80	7	-2.34	1.29	-4.45	-0.22		12.02	1.64	10.32	13.73		29.42	0.91	27.93	30.91		29.42	0.91	27.93	30.91		0.82		0.82		0.82		0.82		0.82	
0.90	5	-2.90	1.38	-5.17	-0.63		11.67	1.37	9.42	13.92		30.12	0.61	29.13	31.14		30.12	0.61	29.13	31.14		0.98		0.98		0.98		0.98		0.98	
1.00	5	-2.95	1.42	-5.28	-0.62		11.42	1.28	9.33	13.52		30.12	0.50	29.30	30.94		30.12	0.50	29.30	30.94		0.25		0.25		0.25		0.25		0.25	
0.0	5	-2.95	1.42	-5.28	-0.62		11.42	1.28	9.33	13.52		30.12	0.50	29.30	30.94		30.12	0.50	29.30	30.94		0.0		0.0		0.0		0.0		0.0	
0.10	5	-1.88	1.32	-4.06	0.29		12.25	1.07	10.49	14.01		28.81	1.23	26.80	30.82		28.81	1.23	26.80	30.82		1.88		1.88		1.88		1.88		1.88	
0.20	6	-0.64	1.15	-2.53	1.25		12.91	0.59	11.29	14.53		28.23	3.13	21.09	31.37		28.23	3.13	21.09	31.37		2.94		2.94		2.94		2.94		2.94	
R 0.30	6	0.50	1.29	-1.62	2.61		13.79	1.07	12.03	15.55		22.71	5.42	13.82	31.61		22.71	5.42	13.82	31.61		3.80		3.80		3.80		3.80		3.80	
E 0.40	6	0.77	1.22	-1.24	2.77		13.87	0.82	12.53	15.21		20.64	3.44	15.00	26.27		20.64	3.44	15.00	26.27		2.09		2.09		2.09		2.09		2.09	
T 0.50	6	1.17	0.99	-0.46	2.80		13.71	1.27	11.63	15.79		17.63	3.53	11.84	23.42		17.63	3.53	11.84	23.42		3.04		3.04		3.04		3.04		3.04	
U 0.60	6	1.75	0.83	0.38	3.11		13.29	1.52	10.81	15.78		17.73	3.19	10.50	20.96		17.73	3.19	10.50	20.96		2.33		2.33		2.33		2.33		2.33	
R 0.70	6	2.19	0.87	0.77	3.61		13.00	1.17	11.08	14.91		14.47	2.73	10.00	18.94		14.47	2.73	10.00	18.94		1.37		1.37		1.37		1.37		1.37	
U 0.80	6	2.76	0.85	1.37	4.15		12.74	0.75	11.50	13.98		13.85	2.22	10.22	17.49		13.85	2.22	10.22	17.49		0.88		0.88		0.88		0.88		0.88	
N 0.90	6	3.26	1.01	1.60	4.91		12.32	0.74	11.11	13.54		13.54	1.85	10.50	16.57		13.54	1.85	10.50	16.57		0.72		0.72		0.72		0.72		0.72	
1.00	6	3.36	1.49	0.91	5.81		11.67	1.52	9.18	14.16		13.45	1.61	10.81	16.09		13.45	1.61	10.81	16.09		0.66		0.66		0.66		0.66		0.66	

LANDMARK - LT WRIST CENTER (27)

TIME	SAMPLE	-----X-----					-----Y-----					-----Z-----					DISTANCE					MOVED							
T	SIZE,N	MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR							
0.0	5	13.68	0.51	12.84	14.52		10.69	0.52	9.84	11.55		13.01	0.53	12.14	13.88		13.01	0.53	12.14	13.88		0.0		0.0		0.0		0.0	
0.10	5	12.34	0.58	11.39	13.29		11.05	0.36	10.47	11.64		14.77	1.34	12.57	16.97		14.77	1.34	12.57	16.97		2.24		2.24		2.24		2.24	
0.20	5	10.44	0.96	8.86	12.01		10.91	0.88	9.46	12.37		18.33	2.01	15.04	21.63		18.33	2.01	15.04	21.63		4.04		4.04		4.04		4.04	
0.30	6	7.17	1.44	4.81	9.54		10.67	1.26	8.61	12.74		23.97	2.04	20.62	27.33		23.97	2.04	20.62	27.33		6.52		6.52		6.52		6.52	
0.40	6	4.19	1.83	1.20	7.19		10.56	1.34	8.37	12.76		28.99	2.22	25.35	32.63		28.99	2.22	25.35	32.63		5.83		5.83		5.83		5.83	
0.50	6	2.03	1.46	-0.36	4.42		10.59	1.39	8.31	12.86		32.59	1.51	30.12	35.06		32.59	1.51	30.12	35.06		4.20		4.20		4.20		4.20	
0.60	6	-0.78	3.08	-5.84	4.27		10.61	1.32	8.45	12.77		37.31	3.51	31.26	42.76		37.31	3.51	31.26	42.76		5.24		5.24		5.24		5.24	
0.70	6	-1.33	1.32	-3.49	0.84		10.68	1.06	8.95	12.42		37.99	0.99	36.36	39.62		37.99	0.99	36.36	39.62		1.13		1.13		1.13		1.13	
0.80	6	-1.72	1.18	-3.66	0.22		10.61	0.81	9.28	11.94		39.16	0.86	37.75	40.57		39.16	0.86	37.75	40.57		1.23		1.23		1.23		1.23	
0.90	5	-1.32	0.64	-2.36	-0.27		10.59	0.73	9.40	11.79		39.75	0.82	38.41	41.09		39.75	0.82	38.41	41.09		0.71		0.71		0.71		0.71	
1.00	5	-1.18	0.81	-2.50	0.15		10.58	0.56	9.65	11.50		39.84	0.53	38.97	40.71		39.84	0.53	38.97	40.71		0.17		0.17		0.17		0.17	
0.0	5	-1.18	0.81	-2.50	0.15		10.58	0.56	9.65	11.50		39.84	0.53	38.97	40.71		39.84	0.53	38.97	40.71		0.0		0.0		0.0		0.0	
0.10	5	-0.75	0.86	-2.16	0.66		10.52	0.64	9.46	11.57		38.73	0.75	37.50	39.96		38.73	0.75	37.50	39.96		1.19		1.19		1.19		1.19	
0.20	6	0.37	0.99	-1.25	1.99		10.41	0.75	9.18	11.64		35.50	2.95	30.66	40.35		35.50	2.95	30.66	40.35		3.41		3.41		3.41		3.41	
0.30	7	2.39	1.88	-0.69	5.46		10.03	0.87	8.61	11.66		31.17	5.12	18.36	35.16		31.17	5.12	18.36	35.16		4.79		4.79		4.79		4.79	
0.40	7	4.58	2.37	0.69	8.47		9.69	1.00	8.05	11.33		26.76	5.12	18.36	35.16		26.76	5.12	18.36	35.16		4.93		4.93		4.93		4.93	
0.50	7	6.37	1.48	3.94	8.80		9.50	1.03	7.82	11.18		23.31	3.19	18.08	28.53		23.31	3.19	18.08	28.53		3.90		3.90		3.90		3.90	
0.60	6	8.42	1.41	6.10	10.74		9.44	0.71	8.29	10.60		20.20	2.19	16.66	23.85		20.20	2.19	16.66	23.85		3.68		3.68		3.68		3.68	
0.70	6	10.53	1.63	7.86	13.20		9.79	0.67	8.68	10.89		17.38	1.79	14.15	20.01		17.38	1.79	14.15	20.01		3.83		3.83		3.83		3.83	
0.80	5	12.14	1.49	9.69	14.59		10.29	0.55	9.38	11.20		15.34	1.30	13.21	17.47		15.34	1.30	13.21	17.47		2.43		2.43		2.43		2.43	
0.90	5	13.01	0.97	11.42	14.60		10.60	0.55	9.71	11.50		15.50	0.90	12.43	15.36		15.50	0.90	12.43	15.36		1.71		1.71		1.71		1.71	
1.00	5	13.68	0.51	12.84	14.52		10.69	0.52	9.84	11.55		13.01	0.53	12.14	13.88		13.01	0.53	12.14	13.88		1.11		1.11		1.11		1.11	

MOVEMENT: RIGHT HAND MOVES FROM STICK CONTROLLER AT +20.0, 0.0, +15.0 TO PANEL CONTROLLER AT +23.0, +10.0, +23.0 AND RETURNS. THIS MOVEMENT IS PRECEDED BY LEFT HAND MOVING FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO STICK CONTROLLER AND IS FOLLOWED BY LEFT HAND RETURNING BACK TO STICK CONTROLLER.

MOTION NUMBER - 11140
 BACK ANGLE - 30

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.77	0.14	0.60 TO 1.00 SECS.
RIGHT REV	0.71	0.13	0.50 TO 0.90 SECS.

LANDMARK - NASION (1)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	-----X----- 5 PCT	-----X----- 95 PCT	-----Y----- MEAN	-----Y----- SE	-----Y----- 5 PCT	-----Y----- 95 PCT	-----Z----- MEAN	-----Z----- SE	-----Z----- 5 PCT	-----Z----- 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	1.14	1.09	-0.64	2.93	0.80	1.26	-1.26	2.86	27.95	1.48	25.53	30.37	0.0	0.0
0.10	7	0.40	1.36	-1.84	2.63	0.68	1.12	-1.16	2.52	28.28	1.44	25.92	30.63	0.82	0.82
F 0.20	7	0.45	1.41	-1.86	2.76	0.68	1.17	-0.81	3.03	28.37	1.38	26.10	30.63	0.44	1.26
O 0.30	7	0.48	1.41	-1.84	2.79	1.76	1.10	-0.03	3.56	28.44	1.21	26.52	30.47	0.67	1.93
R 0.40	7	0.50	1.51	-1.97	2.97	2.35	0.97	0.76	3.94	28.44	1.31	26.29	30.59	0.59	2.52
W 0.50	7	0.53	1.44	-1.82	2.89	2.79	0.92	1.29	4.29	28.39	1.27	26.31	30.46	0.44	2.96
A 0.60	7	0.56	1.44	-1.80	2.92	3.21	1.12	1.37	5.05	28.50	1.21	26.52	30.48	0.44	3.40
R 0.70	7	0.54	1.67	-2.21	3.28	3.61	1.40	1.32	5.91	28.51	1.18	26.68	30.54	0.42	3.82
D 0.80	7	0.55	1.65	-2.17	3.27	4.16	1.89	1.07	7.26	28.50	1.25	26.60	30.71	0.55	4.37
U 0.90	7	0.51	1.77	-2.40	3.41	4.44	1.97	1.21	7.68	28.50	1.42	26.26	30.93	0.29	4.66
1.00	7	0.57	1.81	-2.40	3.55	4.72	2.17	1.17	8.28	28.53	1.49	26.08	30.98	0.29	4.95
0.0	7	0.57	1.81	-2.40	3.55	4.72	2.17	1.17	8.28	28.53	1.49	26.08	30.98	0.0	0.0
0.10	7	0.77	1.56	-1.78	3.33	4.02	2.17	0.47	7.53	28.25	1.44	25.90	30.62	0.78	0.78
0.20	7	0.85	1.49	-1.60	3.29	3.68	2.14	0.18	7.18	28.13	1.40	25.83	30.42	0.38	1.15
R 0.30	7	0.81	1.42	-1.53	3.15	3.40	2.00	0.12	6.67	28.06	1.35	25.85	30.26	0.30	1.45
E 0.40	7	0.72	1.31	-1.43	3.01	3.01	1.97	-0.23	6.25	28.09	1.34	25.90	30.29	0.40	1.84
T 0.50	7	0.81	1.35	-1.40	2.87	2.75	1.90	-0.36	5.85	28.15	1.27	26.07	30.23	0.29	2.13
U 0.60	7	0.82	1.29	-1.30	2.94	2.29	1.73	-0.54	5.13	28.14	1.25	26.10	30.19	0.45	2.58
R 0.70	7	0.83	1.18	-1.09	2.76	1.79	1.59	-0.82	4.43	28.11	1.25	26.06	30.17	0.50	3.09
N 0.80	7	0.96	1.05	-0.76	2.69	1.41	1.43	-0.94	3.75	28.09	1.31	25.95	30.24	0.41	3.49
0.90	7	1.13	1.06	-0.61	2.86	1.06	1.37	-1.18	3.30	28.03	1.38	25.76	30.30	0.38	3.83
1.00	7	1.14	1.09	-0.64	2.93	0.80	1.26	-1.26	2.86	27.95	1.48	25.53	30.37	0.28	4.16

LANDMARK - CERVICALE (2)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	-----X----- 5 PCT	-----X----- 95 PCT	-----Y----- MEAN	-----Y----- SE	-----Y----- 5 PCT	-----Y----- 95 PCT	-----Z----- MEAN	-----Z----- SE	-----Z----- 5 PCT	-----Z----- 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-5.63	1.34	-7.82	-3.43	1.52	1.53	-0.98	4.03	21.43	1.07	19.68	23.18	0.0	0.0
G 0.10	7	-6.68	1.56	-9.24	-4.11	1.09	1.26	-0.97	3.16	21.38	1.03	19.70	23.06	1.14	1.14
F 0.20	7	-6.64	1.51	-9.11	-4.16	1.14	1.14	-0.73	3.02	21.43	0.98	19.82	23.04	0.08	1.22
O 0.30	7	-6.57	1.52	-9.07	-4.08	1.30	1.02	-0.37	2.95	21.50	0.95	19.95	23.06	0.18	1.40
R 0.40	7	-6.52	1.52	-9.02	-4.02	1.60	0.84	0.22	2.99	21.57	0.95	20.01	23.12	0.32	1.72
W 0.50	7	-6.44	1.47	-8.85	-4.03	1.89	0.77	0.62	3.16	21.59	1.02	19.93	23.26	0.30	2.02
A 0.60	7	-6.29	1.52	-8.78	-3.81	2.14	0.95	0.58	3.69	21.79	1.02	20.12	23.46	0.35	2.37
R 0.70	7	-5.96	1.45	-8.33	-3.59	2.31	1.17	0.39	4.23	21.95	1.16	20.04	23.86	0.40	2.77
D 0.80	7	-5.70	1.51	-8.18	-3.22	2.69	1.49	0.24	5.14	22.12	1.00	20.48	23.75	0.49	3.26
0.90	7	-5.72	1.72	-8.55	-2.90	2.75	1.39	0.47	5.03	22.05	1.34	19.85	24.25	0.09	3.35
1.00	7	-5.61	1.68	-8.37	-2.85	2.87	1.60	0.25	5.48	22.06	1.26	19.99	24.14	0.16	3.52
0.0	7	-5.61	1.68	-8.37	-2.85	2.87	1.60	0.25	5.48	22.06	1.26	19.99	24.14	0.0	0.0
0.10	7	-5.78	1.44	-8.14	-3.42	2.95	1.37	0.71	5.20	21.97	1.27	19.88	24.06	0.22	0.22
0.20	7	-5.94	1.47	-8.35	-3.52	2.89	1.31	0.75	5.03	21.78	1.31	19.63	23.93	0.25	0.47
R 0.30	7	-5.97	1.35	-8.18	-3.76	2.87	1.36	0.63	5.10	21.65	1.26	19.59	23.71	0.14	0.61
E 0.40	7	-6.07	1.13	-7.91	-4.22	2.75	1.51	0.30	5.20	21.56	1.14	19.69	23.43	0.17	0.78
T 0.50	7	-6.00	1.18	-7.94	-4.06	2.55	1.49	0.07	5.03	21.49	1.06	19.75	23.23	0.22	1.00
U 0.60	7	-5.91	1.13	-7.77	-4.05	2.21	1.48	-0.22	4.64	21.54	0.97	19.92	23.09	0.36	1.36
R 0.70	7	-5.89	1.17	-7.80	-3.98	1.92	1.46	-0.47	4.32	21.54	1.02	19.87	23.22	0.29	1.64
N 0.80	7	-5.77	1.16	-7.57	-3.86	1.78	1.61	-0.86	4.42	21.40	1.04	19.75	23.17	0.21	1.85
0.90	7	-5.71	1.13	-7.56	-3.86	1.52	1.77	-1.39	4.42	21.32	1.01	19.66	22.98	0.30	2.16
1.00	7	-5.63	1.34	-7.82	-3.43	1.52	1.53	-0.98	4.03	21.43	1.07	19.66	23.18	0.14	2.29

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	0.0	7	-1.63	1.36	-3.85	0.60	1.39	1.65	1.32	-0.63	3.92	1.46	18.34	1.46	18.34	23.13	0.0	0.0
0.10	0.10	7	-2.32	1.07	-4.08	-0.57	1.32	1.22	-0.67	3.32	20.97	1.04	19.27	1.04	19.27	22.67	0.80	0.80
0.20	0.20	7	-2.53	1.51	-5.01	-0.05	1.09	1.03	-0.59	2.77	21.01	1.07	19.25	1.07	19.25	22.77	0.31	1.12
0.30	0.30	7	-2.55	1.38	-4.82	-0.28	1.19	0.91	-0.29	2.68	21.07	1.03	19.38	1.03	19.38	22.77	0.12	1.24
0.40	0.40	7	-2.23	1.03	-3.93	-0.54	1.74	0.66	0.66	2.82	21.00	1.09	19.20	1.09	19.20	22.79	0.63	1.87
0.50	0.50	7	-2.10	1.04	-3.81	-0.39	2.10	0.51	1.27	2.93	21.06	1.05	19.34	1.05	19.34	22.78	0.39	2.26
0.60	0.60	7	-2.05	1.07	-3.81	-0.30	2.34	0.62	1.33	3.35	21.25	1.10	19.45	1.10	19.45	23.05	0.31	2.57
0.70	0.70	7	-1.94	1.08	-3.70	-0.17	2.55	0.72	1.34	3.75	21.46	1.22	19.46	1.22	19.46	23.46	0.32	2.89
0.80	0.80	7	-1.67	0.98	-3.28	-0.07	2.98	1.21	1.00	4.95	21.60	1.38	19.33	1.38	19.33	23.87	0.52	3.41
0.90	0.90	7	-1.64	0.93	-3.17	-0.11	3.33	1.48	0.90	5.75	21.59	1.61	18.95	1.61	18.95	24.23	0.35	3.77
1.00	1.00	7	-1.67	1.07	-3.43	0.09	3.45	1.56	0.90	6.00	21.72	1.59	19.11	1.59	19.11	24.33	0.18	3.95
0.0	0.0	7	-1.67	1.07	-3.43	0.09	3.45	1.56	0.90	6.00	21.72	1.59	19.11	1.59	19.11	24.33	0.0	0.0
0.10	0.10	7	-1.84	1.02	-3.52	-0.16	3.33	1.48	0.89	5.76	21.64	1.61	18.99	1.61	18.99	24.28	0.23	0.23
0.20	0.20	7	-1.94	1.12	-3.78	-0.10	3.34	1.30	1.20	5.47	21.55	1.39	19.27	1.39	19.27	23.82	0.13	0.36
0.30	0.30	7	-2.05	1.26	-4.12	0.01	3.29	1.33	1.10	5.47	21.27	1.28	19.17	1.28	19.17	23.37	0.30	0.66
0.40	0.40	7	-2.17	1.34	-4.37	0.03	3.19	1.36	0.95	5.42	21.09	1.37	18.84	1.37	18.84	23.34	0.24	0.90
0.50	0.50	7	-2.02	1.31	-4.16	0.12	2.89	1.28	0.79	4.99	20.97	1.36	18.74	1.36	18.74	23.21	0.35	1.25
0.60	0.60	7	-1.80	1.16	-3.70	0.10	2.46	1.28	0.36	4.56	20.85	1.41	18.53	1.41	18.53	23.17	0.50	1.75
0.70	0.70	7	-1.85	0.92	-3.35	-0.35	2.19	1.42	-0.13	4.52	20.80	1.47	18.38	1.47	18.38	23.21	0.28	2.03
0.80	0.80	7	-1.79	1.11	-3.61	0.03	1.95	1.42	-0.37	4.27	20.74	1.50	18.28	1.50	18.28	23.21	0.25	2.28
0.90	0.90	7	-1.74	1.20	-3.70	0.22	1.76	1.28	-0.34	3.86	20.71	1.45	18.32	1.45	18.32	23.09	0.20	2.49
1.00	1.00	7	-1.63	1.36	-3.85	0.60	1.65	1.39	-0.63	3.92	20.73	1.46	18.34	1.46	18.34	23.13	0.16	2.65

LANDMARK - RT ACROMION (4)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	0.0	7	-3.29	0.90	-4.76	-1.81	-6.89	0.95	-8.44	-5.34	20.67	1.24	18.64	1.24	18.64	22.70	0.0	0.0
0.10	0.10	7	-4.83	0.84	-6.21	-3.44	-7.42	0.70	-8.57	-6.28	20.55	1.18	18.61	1.18	18.61	22.49	1.63	1.63
0.20	0.20	7	-4.77	0.90	-6.24	-3.29	-7.34	0.65	-8.41	-6.26	20.54	1.35	18.53	1.35	18.53	22.75	0.11	1.74
0.30	0.30	7	-4.63	0.99	-6.25	-3.01	-7.07	0.66	-8.15	-5.99	20.85	1.37	18.50	1.37	18.50	23.10	0.43	2.17
0.40	0.40	7	-4.32	1.10	-6.13	-2.51	-6.71	0.77	-7.97	-5.44	21.37	1.32	19.20	1.32	19.20	23.53	0.70	2.88
0.50	0.50	7	-3.81	1.32	-5.97	-1.64	-6.19	0.86	-7.61	-4.78	21.76	1.38	19.51	1.38	19.51	24.02	0.83	3.70
0.60	0.60	7	-3.16	1.49	-5.60	-0.72	-5.93	1.10	-7.39	-3.78	22.32	1.39	20.05	1.39	20.05	24.59	1.05	4.75
0.70	0.70	7	-2.30	1.46	-4.69	0.09	-4.93	1.41	-7.24	-2.62	22.96	1.39	20.88	1.39	20.88	25.25	1.26	6.01
0.80	0.80	7	-1.85	0.87	-3.28	-0.42	-4.42	1.41	-7.29	-1.55	23.31	1.01	21.66	1.01	21.66	24.96	3.77	6.77
0.90	0.90	7	-1.82	0.88	-3.27	-0.37	-4.19	1.56	-6.74	-1.63	23.61	0.76	22.17	0.76	22.17	24.65	0.26	7.03
1.00	1.00	7	-1.45	0.89	-2.91	0.02	-3.71	1.67	-6.45	-0.98	23.69	0.65	22.43	0.65	22.43	24.55	0.61	7.64
0.0	0.0	7	-1.45	0.89	-2.91	0.02	-3.71	1.67	-6.45	-0.98	23.69	0.65	22.43	0.65	22.43	24.55	0.0	0.0
0.10	0.10	7	-1.86	1.11	-3.67	-0.04	-3.89	1.62	-6.55	-1.23	23.67	0.82	21.93	0.82	21.93	24.62	0.50	0.50
0.20	0.20	7	-2.41	1.04	-4.12	-0.71	-4.29	1.54	-6.83	-1.76	22.91	0.86	21.50	0.86	21.50	24.32	0.78	1.28
0.30	0.30	7	-2.84	1.01	-4.50	-1.19	-4.74	1.45	-7.13	-2.36	22.52	0.87	21.09	0.87	21.09	23.95	0.73	2.01
0.40	0.40	7	-3.08	1.04	-4.79	-1.37	-5.30	1.48	-7.73	-2.87	22.59	0.98	20.48	0.98	20.48	23.71	0.74	2.75
0.50	0.50	7	-3.08	0.92	-4.58	-1.58	-5.99	1.63	-8.67	-3.31	21.50	1.16	19.64	1.16	19.64	23.50	0.85	3.95
0.60	0.60	7	-3.04	0.78	-4.32	-1.76	-6.26	1.19	-8.21	-4.30	21.37	1.05	19.64	1.05	19.64	23.09	0.36	3.65
0.70	0.70	7	-3.25	0.89	-4.71	-1.79	-6.36	1.16	-8.26	-4.45	21.17	1.21	19.18	1.21	19.18	23.16	0.31	4.26
0.80	0.80	7	-3.13	0.85	-4.52	-1.74	-6.66	1.26	-8.72	-4.59	21.01	1.25	18.94	1.25	18.94	23.08	0.36	4.62
0.90	0.90	7	-3.13	0.82	-4.47	-1.78	-6.99	1.30	-9.12	-4.86	20.81	1.26	18.76	1.26	18.76	22.87	0.39	5.01
1.00	1.00	7	-3.29	0.90	-4.76	-1.81	-6.89	0.95	-8.44	-5.34	20.67	1.24	18.64	1.24	18.64	22.70	0.24	5.25

LANDMARK - RT GRIP CENTER (16)

[illegible]

LANDMARK - RT TROCHANTER (18)

TIME	SAMPLE SIZE	(-)---X - CO-ORDINATE-----			(-)---Y - CO-ORDINATE-----			(-)---Z - CO-ORDINATE-----			DISTANCE		
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVES
0.0	7	3.34	1.26	1.27	5.41	0.95	-5.88	3.54	0.57	2.70	4.57	0.0	0.0
0.10	7	3.26	1.42	0.92	5.59	0.91	-8.90	3.51	0.60	2.63	4.60	0.16	0.16
0.20	7	3.07	1.21	1.08	5.05	0.83	-8.70	3.59	0.56	2.64	4.61	0.20	0.37
0.30	7	3.12	1.02	1.45	4.80	0.86	-8.72	3.69	0.56	2.77	4.61	0.09	0.46
0.40	7	3.16	0.87	1.73	4.59	0.82	-8.82	3.73	0.61	2.73	4.72	0.05	0.51
0.50	7	3.38	1.13	1.53	5.23	0.97	-8.95	3.57	0.57	2.73	4.60	0.23	0.74
0.60	7	3.44	1.13	1.58	5.30	0.97	-9.04	3.51	0.54	2.73	4.50	0.12	0.86
0.70	7	3.38	1.12	1.54	5.22	0.82	-8.77	3.53	0.49	2.82	4.43	0.08	0.94
0.80	7	3.28	1.23	1.27	5.29	0.92	-8.90	3.71	0.52	2.86	4.56	0.14	1.08
0.90	7	3.27	1.24	1.24	5.31	0.95	-8.97	3.75	0.52	2.93	4.59	0.05	1.13
1.00	7	3.36	1.17	1.45	5.27	0.97	-8.88	3.77	0.45	3.02	4.51	0.15	1.27
0.0	7	3.36	1.17	1.45	5.27	0.97	-8.88	3.77	0.45	3.02	4.51	0.0	0.0
0.10	7	3.29	1.09	1.50	5.08	0.94	-8.92	3.70	0.51	2.86	4.54	0.13	0.13
0.20	7	3.32	1.08	1.55	5.08	0.88	-8.82	3.71	0.54	2.82	4.60	0.03	0.16
0.30	7	3.31	1.19	1.36	5.26	0.90	-8.90	3.70	0.50	2.78	4.62	0.03	0.19
0.40	7	3.14	1.25	1.10	5.19	0.99	-9.04	3.60	0.59	2.69	4.62	0.17	0.35
0.50	7	3.21	1.07	1.45	4.96	0.96	-8.81	3.53	0.59	2.67	4.60	0.20	0.56
0.60	7	3.11	1.07	1.37	4.86	0.94	-8.94	3.54	0.54	2.75	4.53	0.10	0.67
0.70	7	3.20	1.33	1.02	5.39	0.87	-8.87	3.50	0.55	2.71	4.50	0.18	0.85
0.80	7	3.16	1.34	0.97	5.35	0.89	-8.66	3.52	0.57	2.68	4.56	0.07	0.92
0.90	7	3.12	1.34	0.92	5.32	0.84	-8.84	3.51	0.59	2.64	4.57	0.04	0.95
1.00	7	3.34	1.26	1.27	5.41	0.85	-8.66	3.54	0.57	2.70	4.57	0.26	1.21

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	-----X-----	CO-ORDINATE-----	5 PCT	95 PCT	MEAN	SE	-----Y-----	CO-ORDINATE-----	5 PCT	95 PCT	MEAN	SE	-----Z-----	CO-ORDINATE-----	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	18.92	0.60	17.93	19.91	-5.56	0.82	-6.90	-4.22	11.35	0.93	9.82	12.88	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	18.96	0.58	18.01	19.91	-5.58	0.81	-6.90	-4.25	11.35	1.04	9.64	13.05	0.04	0.04	0.04	0.04	0.04	0.04
F 0.20	7	18.93	0.60	17.94	19.91	-5.63	0.84	-7.00	-4.25	11.34	1.01	9.69	12.99	0.06	0.10	0.06	0.10	0.06	0.10
O 0.30	7	18.93	0.62	17.92	19.95	-5.58	0.75	-6.80	-4.36	11.34	0.93	9.86	12.92	0.07	0.18	0.07	0.18	0.07	0.18
R 0.40	7	18.89	0.59	17.93	19.85	-5.53	0.61	-6.54	-4.33	11.40	0.96	9.82	12.98	0.07	0.24	0.07	0.24	0.07	0.24
W 0.50	7	18.93	0.60	17.94	19.92	-5.49	0.63	-6.53	-4.46	11.34	0.95	9.87	12.91	0.06	0.30	0.06	0.30	0.06	0.30
A 0.60	7	18.97	0.61	17.97	19.97	-5.47	0.69	-6.61	-4.34	11.40	0.95	9.84	12.96	0.04	0.34	0.04	0.34	0.04	0.34
R 0.70	7	19.01	0.56	18.10	19.92	-5.48	0.77	-6.74	-4.22	11.42	0.97	9.82	13.01	0.04	0.39	0.04	0.39	0.04	0.39
D 0.80	7	19.05	0.60	18.05	20.04	-5.45	0.67	-6.54	-4.35	11.41	0.92	9.89	12.92	0.05	0.44	0.05	0.44	0.05	0.44
O 0.90	7	18.97	0.56	18.05	19.90	-5.47	0.74	-6.69	-4.25	11.36	0.94	9.83	12.90	0.09	0.52	0.09	0.52	0.09	0.52
1.00	7	18.94	0.68	17.83	20.05	-5.26	0.55	-6.16	-4.36	11.38	0.94	9.84	12.92	0.21	0.73	0.21	0.73	0.21	0.73
0.0	7	18.94	0.68	17.83	20.05	-5.26	0.55	-6.16	-4.36	11.38	0.94	9.84	12.92	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	18.97	0.63	17.95	20.00	-5.29	0.51	-6.13	-4.46	11.39	0.95	9.83	12.95	0.05	0.05	0.05	0.05	0.05	0.05
0.20	7	18.98	0.62	17.96	20.00	-5.33	0.55	-6.23	-4.44	11.38	0.97	9.79	12.96	0.04	0.09	0.04	0.09	0.04	0.09
R 0.30	7	19.04	0.56	18.12	19.96	-5.35	0.60	-6.34	-4.36	11.33	0.94	9.79	12.87	0.08	0.16	0.08	0.16	0.08	0.16
E 0.40	7	19.04	0.47	18.27	19.82	-5.31	0.71	-6.47	-4.14	11.27	0.90	9.80	12.75	0.07	0.23	0.07	0.23	0.07	0.23
T 0.50	7	19.04	0.61	18.05	20.04	-5.36	0.64	-6.42	-4.30	11.25	0.85	9.86	12.65	0.05	0.29	0.05	0.29	0.05	0.29
U 0.60	7	18.93	0.69	17.80	20.06	-5.56	0.71	-6.72	-4.40	11.26	0.87	9.84	12.68	0.23	0.52	0.23	0.52	0.23	0.52
K 0.70	7	18.87	0.55	17.97	19.76	-5.58	0.78	-6.85	-4.31	11.34	0.94	9.77	12.85	0.08	0.60	0.08	0.60	0.08	0.60
N 0.80	7	18.84	0.60	17.76	19.93	-5.60	0.84	-6.97	-4.23	11.34	0.96	9.76	12.92	0.04	0.64	0.04	0.64	0.04	0.64
O 0.90	7	18.85	0.72	17.67	20.02	-5.68	0.80	-6.99	-4.37	11.34	0.94	9.79	12.89	0.08	0.72	0.08	0.72	0.08	0.72
1.00	7	18.92	0.60	17.93	19.90	-5.56	0.82	-6.90	-4.22	11.35	0.93	9.82	12.88	0.14	0.86	0.14	0.86	0.14	0.86

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	-----X-----	CO-ORDINATE-----	5 PCT	95 PCT	MEAN	SE	-----Y-----	CO-ORDINATE-----	5 PCT	95 PCT	MEAN	SE	-----Z-----	CO-ORDINATE-----	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	-1.42	0.70	-2.57	-0.26	-6.56	0.68	-7.67	-5.46	18.75	1.27	16.67	20.83	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	-1.25	1.13	-5.10	-1.40	-6.86	0.69	-8.00	-5.72	18.58	1.28	16.58	20.77	1.86	1.86	1.86	1.86	1.86	1.86
F 0.20	7	-3.18	1.10	-4.98	-1.37	-6.71	0.67	-7.81	-5.60	18.74	1.37	16.48	20.99	0.18	2.04	0.18	2.04	0.18	2.04
O 0.30	7	-3.06	1.10	-4.88	-1.25	-6.48	0.69	-7.61	-5.35	18.96	1.45	16.53	21.33	0.34	2.37	0.34	2.37	0.34	2.37
R 0.40	7	-2.78	0.98	-4.38	-1.18	-6.21	0.73	-7.41	-5.03	19.33	1.50	16.88	21.79	0.54	2.92	0.54	2.92	0.54	2.92
W 0.50	7	-2.25	0.79	-3.54	-0.96	-6.06	0.86	-7.48	-4.65	19.81	1.35	17.61	22.05	0.74	3.66	0.74	3.66	0.74	3.66
A 0.60	7	-1.61	0.79	-2.91	-0.30	-5.78	1.04	-7.48	-4.08	20.37	1.18	18.44	22.30	0.89	4.55	0.89	4.55	0.89	4.55
R 0.70	7	-0.85	0.93	-2.45	0.75	-5.12	1.23	-7.14	-3.11	20.99	1.05	19.27	22.71	1.18	5.72	1.18	5.72	1.18	5.72
D 0.80	7	-0.60	0.91	-2.10	0.89	-4.62	1.50	-7.09	-2.16	21.39	0.83	20.03	22.74	0.68	6.41	0.68	6.41	0.68	6.41
O 0.90	7	-0.29	0.95	-1.84	1.26	-4.22	1.41	-6.53	-1.92	21.63	0.62	20.61	22.66	0.57	6.97	0.57	6.97	0.57	6.97
1.00	7	-0.24	1.20	-2.21	1.73	-3.59	1.38	-5.86	-1.33	21.85	0.53	20.98	22.73	0.67	7.64	0.67	7.64	0.67	7.64
0.0	7	-0.24	1.20	-2.21	1.73	-3.59	1.38	-5.86	-1.33	21.85	0.53	20.98	22.73	0.0	0.0	0.0	0.0	0.0	0.0
0.10	7	-0.44	1.14	-2.31	1.42	-3.94	1.46	-6.33	-1.54	21.49	0.64	20.44	22.55	0.53	0.53	0.53	0.53	0.53	0.53
0.20	7	-0.72	0.86	-2.13	0.69	-4.66	1.49	-7.11	-2.22	21.00	0.73	19.80	22.20	0.92	1.45	0.92	1.45	0.92	1.45
R 0.30	7	-1.11	0.69	-2.24	0.03	-5.11	1.45	-7.49	-2.73	20.54	0.83	19.17	21.91	0.75	2.20	0.75	2.20	0.75	2.20
E 0.40	7	-1.27	0.61	-2.28	-0.26	-5.36	1.25	-7.41	-3.30	20.11	0.99	18.49	21.73	0.52	2.72	0.52	2.72	0.52	2.72
U 0.50	7	-1.33	0.70	-2.49	-0.18	-5.68	1.17	-7.59	-3.76	19.76	1.08	17.99	21.53	0.48	3.20	0.48	3.20	0.48	3.20
T 0.60	7	-1.54	0.53	-2.41	-0.68	-6.02	1.07	-7.77	-4.26	19.42	1.11	17.59	21.25	0.53	3.73	0.53	3.73	0.53	3.73
R 0.70	7	-1.65	0.56	-2.57	-0.73	-6.19	1.05	-7.90	-4.47	19.12	1.18	17.19	21.05	0.36	4.09	0.36	4.09	0.36	4.09
N 0.80	7	-1.65	0.59	-2.62	-0.68	-6.38	1.01	-8.04	-4.72	18.94	1.20	16.97	20.91	0.26	4.35	0.26	4.35	0.26	4.35
O 0.90	7	-1.46	0.74	-2.68	-0.24	-6.63	0.99	-8.26	-5.03	18.81	1.21	16.83	20.80	0.34	4.69	0.34	4.69	0.34	4.69
1.00	7	-1.42	0.70	-2.57	-0.26	-6.56	0.68	-7.67	-5.46	18.75	1.27	16.67	20.83	0.10	4.79	0.10	4.79	0.10	4.79

LANDMARK - RT ELBOW CENTER (24)

TIME	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	6.12	0.63	5.09	7.15	-5.96	0.76	-7.19	-4.72	11.57	0.71	10.40	12.74	0.0	0.0	0.0	
0.10	7	5.19	0.60	4.20	6.18	-7.11	0.89	-8.58	-5.65	12.24	1.22	10.24	14.25	1.63	1.63	1.63	
0.20	7	5.23	0.81	3.90	6.56	-7.40	0.90	-8.88	-6.92	12.31	1.62	9.65	14.96	0.29	1.93	1.93	
0.30	7	5.24	0.95	3.69	6.79	-7.41	0.85	-8.80	-6.02	12.81	2.12	9.32	16.29	0.50	2.43	2.43	
0.40	7	6.06	1.14	4.18	7.93	-6.75	1.14	-8.62	-4.88	12.81	2.42	9.98	18.14	1.63	4.06	4.06	
0.50	7	7.15	1.16	5.24	9.05	-5.59	1.82	-8.58	-2.60	15.30	2.57	11.70	20.11	2.44	6.50	6.50	
0.60	7	8.31	1.14	6.44	10.18	-3.78	2.03	-7.11	-0.45	18.01	2.51	13.90	22.13	3.01	9.51	9.51	
0.70	7	9.44	1.30	7.30	11.58	-1.59	1.87	-4.66	1.48	19.70	2.26	15.99	23.41	2.99	12.50	12.50	
0.80	7	10.24	1.84	7.22	13.26	0.22	2.00	-3.66	3.51	20.31	1.81	17.94	23.87	2.32	14.82	14.82	
0.90	7	10.26	1.18	8.32	12.20	0.39	1.00	-1.25	2.02	21.05	0.87	19.62	22.49	0.22	15.04	15.04	
1.00	7	10.23	1.03	8.54	11.92	0.47	1.12	-2.34	3.28	20.90	0.99	19.27	22.52	0.18	15.22	15.22	
0.0	7	10.23	1.03	8.54	11.92	0.47	1.12	-2.34	3.28	20.90	0.99	19.27	22.52	0.0	0.0	0.0	
0.10	7	10.30	1.14	8.44	12.16	-1.28	1.18	-3.21	0.66	20.19	0.94	18.66	21.72	1.89	1.89	1.89	
0.20	7	9.64	0.71	8.48	10.80	-3.25	0.92	-4.76	-1.73	18.59	0.84	17.32	20.06	2.56	4.45	4.45	
0.30	7	8.38	0.93	6.85	9.90	-5.16	1.57	-7.74	-2.57	16.50	1.28	14.46	18.67	3.12	7.57	7.57	
0.40	7	7.62	1.14	5.75	9.48	-5.91	0.58	-6.86	-4.97	15.10	1.23	13.08	17.12	1.82	9.39	9.39	
0.50	7	6.89	0.99	5.26	8.52	-6.56	0.52	-7.41	-5.71	13.54	1.08	11.88	15.40	1.75	11.14	11.14	
0.60	7	6.45	0.86	5.04	7.86	-6.69	0.57	-7.62	-5.75	12.56	1.04	10.95	14.36	1.08	12.23	12.23	
0.70	7	6.13	0.75	4.90	7.37	-6.39	0.77	-7.65	-5.14	12.08	1.01	10.42	13.74	0.72	12.94	12.94	
0.80	7	6.03	0.72	4.85	7.20	-6.20	0.78	-7.63	-4.78	11.75	0.90	10.28	13.23	0.40	13.34	13.34	
0.90	7	6.04	0.68	4.93	7.15	-6.13	0.78	-7.41	-4.85	11.58	0.83	10.22	12.94	0.19	13.53	13.53	
1.00	7	6.12	0.63	5.09	7.15	-5.96	0.76	-7.19	-4.72	11.57	0.71	10.40	12.74	0.19	13.72	13.72	

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0	7	15.24	0.51	14.40	16.08	-2.62	0.65	-3.68	-1.56	13.18	0.21	12.83	13.53	0.0	0.0	
0.10	6	14.21	0.92	12.70	15.72	-3.52	0.56	-5.09	-1.94	13.59	1.58	11.10	16.29	1.46	1.46	
0.20	7	13.96	0.95	12.41	15.52	-3.09	1.40	-5.38	-0.80	15.01	2.58	10.78	19.25	1.41	2.87	
0.30	7	13.90	1.05	12.18	15.62	-2.46	2.78	-7.02	2.10	16.76	3.96	10.27	23.24	1.85	4.74	
0.40	7	13.98	1.15	12.10	15.85	-1.98	2.44	-5.98	2.02	18.14	2.20	14.53	21.74	1.46	6.18	
0.50	6	13.98	1.25	11.94	16.03	0.01	2.62	-4.28	4.30	20.24	2.05	16.87	23.60	2.89	9.08	
0.60	6	14.41	1.16	12.51	16.32	2.90	2.57	-1.32	7.12	22.15	1.48	19.73	24.57	3.49	12.57	
0.70	6	15.28	1.13	13.43	17.13	5.33	2.45	1.31	9.35	23.27	0.97	21.67	24.86	2.81	15.38	
0.80	6	15.96	1.05	14.23	17.69	7.19	2.19	3.59	10.79	23.76	0.98	22.16	25.37	2.64	17.42	
0.90	6	16.65	0.86	15.24	18.05	7.02	0.98	5.41	8.63	23.24	0.54	22.35	24.09	0.90	18.32	
1.00	6	17.35	0.77	16.10	18.61	7.20	2.07	3.80	10.60	22.81	0.44	22.09	23.53	0.83	19.15	
0.0	6	17.35	0.77	16.10	18.61	7.20	2.07	3.80	10.60	22.81	0.44	22.09	23.53	0.0	0.0	
0.10	6	16.70	1.14	14.84	18.57	5.53	2.26	1.82	9.24	22.85	1.15	20.96	24.53	1.80	1.80	
0.20	6	16.07	1.39	13.78	18.35	3.16	2.17	-0.40	6.72	22.29	1.56	19.73	24.85	2.51	4.31	
0.30	7	15.72	1.39	13.44	18.01	0.10	1.36	-2.13	2.33	20.50	1.81	17.64	23.56	3.51	7.82	
0.40	7	15.37	1.29	13.25	17.50	-2.84	2.03	-6.18	0.49	18.00	2.33	14.91	21.81	3.95	11.77	
0.50	7	15.48	1.16	13.57	17.38	-3.14	0.80	-4.45	-1.83	16.35	1.22	14.95	18.94	1.10	12.87	
0.60	7	15.34	0.88	13.89	16.78	-3.63	0.75	-4.86	-2.40	15.15	0.96	13.57	16.73	1.87	14.74	
0.70	7	15.25	0.67	14.14	16.35	-3.47	0.81	-4.79	-2.15	14.10	0.59	13.14	15.06	1.07	15.80	
0.80	7	15.27	0.62	14.25	16.29	-3.17	0.76	-4.41	-1.93	13.25	0.28	13.09	14.00	0.63	16.44	
0.90	7	15.25	0.57	14.31	16.19	-2.98	0.74	-4.20	-1.76	13.27	0.16	13.01	13.54	0.33	16.76	
1.00	7	15.24	0.51	14.40	16.08	-2.62	0.65	-3.68	-1.56	13.18	0.21	12.83	13.53	0.37	17.14	

MMVT NO. 11140/33

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +13.0, -13.0, +4.8 TO PANEL CONTROLLER AT +23.0, +10.0, +23.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +18.0, +10.0, +12.4.

MOTION NUMBER - 12140
 BACK ANGLE - 30

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.73	0.08	0.60 TO 0.80 SECS.
RIGHT REV	0.83	0.13	0.70 TO 1.00 SECS.

LANDMARK - NASION

(1)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N													INCR	CUM
0.0	7	0.60	1.53	-1.91	3.11	-2.44	1.15	-4.33	0.55	26.78	1.76	23.90	29.66	0.0	0.0
0.10	7	0.28	1.48	-2.14	2.71	0.00	0.41	-0.67	0.68	27.80	1.38	25.60	30.13	2.69	2.69
F 0.20	7	0.05	1.47	-2.36	2.45	1.25	0.80	-0.07	2.56	28.17	1.32	26.01	30.34	1.30	3.99
O 0.30	7	-0.24	1.55	-2.79	2.31	1.91	1.37	-0.35	4.16	28.12	1.25	26.07	30.17	0.72	4.72
R 0.40	7	-0.38	1.54	-2.91	2.15	2.35	1.49	-0.10	4.80	28.31	1.31	26.15	30.46	0.50	5.22
W 0.50	7	-0.49	1.51	-2.96	1.99	2.53	1.55	-0.01	5.07	28.36	1.37	26.11	30.61	0.22	5.43
A 0.60	7	-0.35	1.60	-2.97	2.27	2.76	1.78	-0.15	5.68	28.29	1.27	26.20	30.38	0.28	5.71
R 0.70	7	-0.15	1.64	-2.84	2.54	3.13	1.94	-0.06	6.31	28.37	1.29	26.26	30.48	0.42	6.14
D 0.80	7	-0.08	1.63	-2.71	2.55	3.69	2.08	0.28	7.10	28.47	1.30	26.35	30.60	0.57	6.71
O 0.90	7	0.07	1.42	-2.26	2.40	3.98	2.09	0.55	7.41	28.51	1.32	26.35	30.68	0.33	7.04
1.00	7	0.18	1.27	-1.91	2.27	3.95	2.38	0.06	7.85	28.52	1.34	26.31	30.72	0.11	7.15
0.0	7	0.18	1.27	-1.91	2.27	3.95	2.38	0.06	7.85	28.52	1.34	26.31	30.72	0.0	0.0
0.10	7	0.46	1.51	-2.01	2.93	2.55	2.34	-1.29	6.39	27.88	1.86	24.82	30.93	1.57	1.57
0.20	7	0.34	1.59	-2.07	3.15	1.86	2.26	-1.84	5.56	27.62	1.73	24.79	30.45	0.75	2.31
R 0.30	7	0.61	1.55	-1.94	3.15	1.29	2.05	-2.07	4.66	27.47	1.60	24.84	30.10	0.59	2.90
E 0.40	7	0.56	1.57	-2.02	3.13	0.71	1.82	-2.27	3.69	27.39	1.54	24.86	29.91	0.59	3.49
T 0.50	7	0.55	1.44	-1.82	2.92	0.09	1.56	-2.47	2.65	27.28	1.51	24.80	29.75	0.64	4.12
U 0.60	7	0.32	1.48	-1.91	2.95	-0.57	1.28	-2.67	1.52	27.17	1.56	24.61	29.72	0.67	4.79
R 0.70	7	0.36	1.45	-1.82	2.94	-1.26	1.11	-3.09	0.56	27.05	1.67	24.31	29.78	0.70	5.49
N 0.80	7	0.64	1.40	-1.66	2.94	-1.82	1.06	-3.57	-0.08	26.98	1.77	24.08	29.88	0.57	6.06
O 0.90	7	0.72	1.43	-1.62	3.05	-2.23	1.10	-4.04	0.42	26.94	1.78	24.00	29.84	0.42	6.48
1.00	7	0.60	1.53	-1.91	3.11	-2.44	1.15	-4.33	0.55	26.78	1.76	23.90	29.66	0.28	6.76

LANDMARK - CERVICALE

(2)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N													INCR	CUM
0.0	7	-6.61	1.10	-8.42	-4.80	0.66	1.42	-1.66	2.99	21.33	1.31	19.19	23.47	0.0	0.0
0.10	7	-6.88	1.06	-8.61	-5.15	1.13	1.12	-0.71	2.96	21.27	1.41	18.96	23.58	0.54	0.54
F 0.20	7	-6.82	1.05	-8.53	-5.10	1.46	1.03	-0.23	3.15	21.27	1.41	18.96	23.57	0.34	0.88
O 0.30	7	-6.85	1.04	-8.35	-4.95	1.71	0.94	0.18	3.25	21.34	1.37	19.09	23.60	0.31	1.19
R 0.40	7	-6.65	0.92	-8.16	-5.15	1.81	0.90	0.34	3.28	21.52	1.35	19.31	23.73	0.20	1.39
W 0.50	7	-6.49	1.06	-8.22	-4.75	1.87	0.69	0.75	3.00	21.68	1.34	19.49	23.88	0.24	1.63
A 0.60	7	-6.08	1.00	-7.71	-4.44	2.11	0.70	0.96	3.26	21.82	1.32	19.65	23.98	0.49	2.13
R 0.70	7	-5.59	1.07	-7.44	-4.95	2.46	0.87	1.03	3.89	22.00	1.22	20.00	23.99	0.55	2.67
D 0.80	7	-5.49	0.91	-6.98	-4.00	2.87	0.84	1.49	4.26	22.19	1.12	20.36	24.03	0.50	3.17
O 0.90	7	-5.50	0.82	-6.85	-4.16	3.11	0.80	1.80	4.42	22.28	1.10	20.47	24.09	0.26	3.43
1.00	7	-5.43	0.71	-6.59	-4.27	3.36	1.04	1.65	5.07	22.29	1.22	20.29	24.30	0.26	3.69
0.0	7	-5.43	0.71	-6.59	-4.27	3.36	1.04	1.65	5.07	22.29	1.22	20.29	24.30	0.0	0.0
0.10	7	-5.88	0.85	-7.28	-4.48	3.14	1.49	0.69	5.59	22.09	1.01	20.44	23.74	0.54	0.54
0.20	7	-6.10	0.84	-7.47	-4.73	2.93	1.36	0.70	5.16	21.86	1.11	20.04	23.69	0.38	0.92
R 0.30	7	-6.19	0.79	-7.48	-4.89	2.80	1.41	0.49	5.11	21.74	1.10	19.92	23.57	0.20	1.12
E 0.40	7	-6.43	0.91	-7.92	-4.93	2.46	1.29	0.34	4.58	21.50	1.30	19.44	23.68	0.45	1.57
O 0.50	7	-6.56	1.03	-8.24	-4.88	2.19	1.09	0.40	3.99	21.49	1.27	19.40	23.58	0.30	1.88
U 0.60	7	-6.65	1.03	-8.34	-4.81	1.87	1.06	0.13	3.60	21.56	1.20	19.58	23.53	0.35	2.22
R 0.70	7	-6.52	1.06	-8.27	-4.78	1.64	1.05	-0.08	3.37	21.49	1.20	19.53	23.46	0.26	2.49
N 0.80	7	-6.59	1.08	-8.36	-4.81	1.28	1.17	-0.65	3.20	21.44	1.24	19.41	23.47	0.38	2.86
O 0.90	7	-6.50	0.99	-8.12	-4.89	1.05	1.20	-0.91	3.01	21.39	1.25	19.35	23.43	0.24	3.11
1.00	7	-6.61	1.10	-8.42	-4.80	0.66	1.42	-1.66	2.99	21.33	1.31	19.19	23.47	0.41	3.52

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----) SE	(-----Y - CO-ORDINATE-----) SE	(-----Z - CO-ORDINATE-----) SE	5 PCT	95 PCT	MEAN	5 PCT	95 PCT	MEAN	5 PCT	95 PCT	MEAN	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-2.76	1.61	-5.40	-0.12	1.01	1.08	-0.76	2.78	20.85	0.90	19.38	22.32	0.0	0.0	0.0	0.0
0.10	7	-3.12	1.98	-6.36	0.12	1.42	1.14	-0.45	3.28	20.94	0.96	19.40	22.56	0.56	0.56	0.56	0.56
F 0.20	7	-3.22	1.95	-6.41	-0.02	1.63	1.15	-0.25	3.51	21.52	1.01	19.36	22.68	0.23	0.79	0.79	0.79
O 0.30	7	-3.17	1.94	-6.35	0.01	1.75	1.03	0.06	3.44	20.94	0.94	19.40	22.48	0.15	0.94	0.94	0.94
R 0.40	7	-3.29	1.89	-6.38	-0.19	2.08	1.01	0.42	3.74	21.01	0.91	19.52	22.49	0.36	1.30	1.30	1.30
W 0.50	7	-3.07	1.46	-5.46	-0.68	2.19	0.55	0.64	3.74	21.18	0.77	19.92	22.43	0.30	1.60	1.60	1.60
A 0.60	7	-2.72	1.32	-4.88	-0.55	2.50	0.88	1.06	3.94	21.37	0.89	19.91	22.82	0.51	2.11	2.11	2.11
R 0.70	7	-2.46	1.00	-4.11	-0.82	2.84	0.88	1.39	4.28	21.60	0.88	20.16	23.04	0.48	2.59	2.59	2.59
D 0.80	7	-2.31	0.89	-3.77	-0.86	3.27	0.93	1.75	4.79	21.76	0.81	20.43	23.07	0.49	3.07	3.07	3.07
O 0.90	7	-2.20	0.90	-3.68	-0.73	3.68	1.09	1.09	5.47	21.96	0.66	20.87	23.05	0.47	3.55	3.55	3.55
1.00	7	-2.24	1.03	-3.92	-0.56	3.69	1.12	1.85	5.53	22.12	0.72	20.94	23.30	0.16	3.71	3.71	3.71
0.0	7	-2.24	1.03	-3.92	-0.56	3.69	1.12	1.85	5.53	22.12	0.72	20.94	23.30	0.0	0.0	0.0	0.0
0.10	7	-2.31	1.24	-4.35	-0.28	3.30	1.36	1.07	5.53	22.03	0.49	21.23	22.84	0.41	0.41	0.41	0.41
0.20	7	-2.49	1.37	-4.73	-0.24	3.25	1.28	1.14	5.35	21.65	0.65	20.59	22.71	0.42	0.83	0.83	0.83
R 0.30	7	-3.28	3.27	-8.65	2.09	2.37	2.59	-1.88	6.61	21.38	0.51	20.55	22.22	1.21	2.04	2.04	2.04
E 0.40	7	-9.40	18.45	-39.65	20.86	-4.07	17.77	-33.21	25.07	20.79	1.14	18.93	22.65	8.90	10.94	10.94	10.94
T 0.50	7	-6.99	11.90	-26.50	12.52	-1.85	11.14	-20.12	16.42	20.85	0.88	19.40	22.29	3.27	14.22	14.22	14.22
U 0.60	7	-2.82	1.58	-5.41	-0.24	2.06	0.93	0.53	3.59	21.09	0.85	19.70	22.48	5.72	19.94	19.94	19.94
R 0.70	7	-2.94	1.45	-5.32	-0.56	1.66	0.98	0.05	3.26	21.13	1.02	19.46	22.81	0.42	20.36	20.36	20.36
N 0.80	7	-2.80	1.54	-5.32	-0.27	1.35	1.08	-0.42	3.11	21.01	0.98	19.40	22.61	0.36	20.72	20.72	20.72
O 0.90	7	-2.78	1.53	-5.29	-0.27	1.16	1.09	-0.63	2.94	20.87	0.92	19.36	22.37	0.24	20.96	20.96	20.96
1.00	7	-2.76	1.61	-5.40	-0.12	1.01	1.08	-0.76	2.78	20.85	0.90	19.38	22.32	0.15	21.10	21.10	21.10

LANDMARK - RT ACROMION (4)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----) SE	(-----Y - CO-ORDINATE-----) SE	(-----Z - CO-ORDINATE-----) SE	5 PCT	95 PCT	MEAN	5 PCT	95 PCT	MEAN	5 PCT	95 PCT	MEAN	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-5.24	1.24	-7.27	-3.21	-8.02	1.00	-9.65	-6.33	19.51	1.24	17.48	21.55	0.0	0.0	0.0	0.0
0.10	7	-5.64	1.16	-7.55	-3.73	-7.67	0.84	-9.05	-6.30	19.86	1.28	17.76	21.97	0.63	0.63	0.63	0.63
F 0.20	7	-5.67	1.20	-7.64	-3.70	-7.50	0.80	-8.81	-6.19	20.12	1.28	18.03	22.22	0.31	0.95	0.95	0.95
O 0.30	7	-5.43	1.29	-7.54	-3.32	-7.29	0.76	-8.53	-6.05	20.39	1.26	18.32	22.46	0.42	1.36	1.36	1.36
R 0.40	7	-5.04	1.33	-7.22	-2.86	-7.17	0.95	-8.74	-5.61	20.75	1.30	18.62	22.88	0.54	1.91	1.91	1.91
W 0.50	7	-4.58	1.59	-7.20	-1.97	-7.17	1.45	-9.56	-4.79	21.25	1.38	19.00	23.51	0.68	2.59	2.59	2.59
A 0.60	7	-3.48	1.09	-5.27	-1.69	-6.24	1.15	-8.12	-4.36	21.90	1.29	19.79	24.02	1.59	4.17	4.17	4.17
R 0.70	7	-2.41	0.86	-3.83	-1.00	-5.34	1.06	-7.03	-3.59	22.54	1.13	20.69	24.38	1.54	5.71	5.71	5.71
D 0.80	7	-1.64	0.75	-2.87	-0.41	-4.27	1.33	-6.45	-2.69	23.33	0.96	21.45	24.60	1.40	7.11	7.11	7.11
O 0.90	7	-1.36	0.77	-2.62	-0.09	-3.58	1.42	-5.91	-1.26	23.34	0.86	21.92	24.76	0.81	7.92	7.92	7.92
1.00	7	-1.57	1.09	-3.36	0.22	-3.52	1.19	-5.47	-1.57	23.30	0.84	22.02	24.78	0.23	8.15	8.15	8.15
0.0	7	-1.57	1.09	-3.36	0.22	-3.52	1.19	-5.47	-1.57	23.30	0.84	22.02	24.78	0.0	0.0	0.0	0.0
0.10	7	-2.27	1.28	-4.37	-0.17	-3.95	1.78	-6.88	-1.03	23.04	0.90	21.57	24.51	0.90	0.90	0.90	0.90
0.20	7	-2.93	1.21	-4.91	-0.95	-4.46	1.67	-7.19	-1.73	22.51	0.96	20.83	23.98	1.04	1.94	1.94	1.94
R 0.30	7	-3.62	1.05	-5.34	-1.89	-4.98	1.58	-7.57	-2.39	21.55	0.99	20.23	23.47	1.03	2.97	2.97	2.97
E 0.40	7	-4.50	1.52	-6.99	-2.02	-5.83	1.45	-8.20	-3.45	21.33	1.08	19.57	23.10	1.33	4.30	4.30	4.30
T 0.50	7	-5.08	1.36	-7.31	-2.85	-6.28	1.27	-8.37	-4.20	20.94	1.04	19.23	22.66	0.83	5.14	5.14	5.14
U 0.60	7	-5.32	1.13	-7.17	-3.46	-6.74	1.33	-8.93	-4.55	20.57	0.97	19.08	22.26	0.58	5.72	5.72	5.72
R 0.70	7	-5.40	1.09	-7.18	-3.61	-7.17	1.20	-9.13	-5.21	20.32	1.07	18.56	22.08	0.56	6.28	6.28	6.28
N 0.80	7	-5.30	1.13	-7.16	-3.44	-7.45	1.07	-9.20	-5.70	19.90	1.08	18.19	21.72	0.47	6.75	6.75	6.75
O 0.90	7	-5.26	1.06	-7.01	-3.52	-7.75	1.08	-9.52	-5.98	19.77	1.08	18.01	21.54	0.35	7.10	7.10	7.10
1.00	7	-5.24	1.24	-7.27	-3.21	-8.02	1.00	-9.65	-6.33	19.51	1.24	17.48	21.55	0.38	7.47	7.47	7.47

[illegible]

TIME Y	SAMPLE SIZE,N	LANDMARK - RT TROCHANTER										(18)									
		-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					-----DISTANCE-----				
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED CUM						
0.0	7	3.57	1.02	1.90	5.24	-7.43	0.85	-8.82	-6.05	3.58	0.69	2.44	4.72	0.0	0.0						
0.10	7	3.35	0.68	2.23	4.47	-7.20	0.83	-8.56	-5.84	3.50	0.64	2.61	4.70	0.33	0.33						
0.20	7	3.41	0.69	2.29	4.54	-7.19	0.98	-8.80	-5.59	3.74	0.64	2.70	4.79	0.11	0.43						
0.30	7	3.47	0.81	2.15	4.80	-7.24	0.99	-8.87	-5.62	3.83	0.68	2.71	4.94	0.12	0.55						
0.40	7	3.50	0.84	2.12	4.87	-7.19	1.07	-8.94	-5.44	2.40	3.65	-3.58	8.38	1.43	1.98						
0.50	7	3.38	0.88	1.94	4.83	-7.32	0.97	-8.91	-5.72	0.31	9.08	-14.57	15.20	2.09	4.07						
0.60	7	3.19	0.85	1.80	4.58	-7.23	0.90	-8.71	-5.76	2.38	3.63	-3.57	8.33	2.08	6.15						
0.70	7	3.22	0.68	2.10	4.34	-7.08	0.90	-8.56	-5.63	3.80	0.68	2.68	4.93	1.43	7.58						
0.80	7	3.33	0.72	2.15	4.51	-6.87	1.01	-8.52	-5.22	3.93	0.70	2.78	5.07	0.27	7.85						
0.90	7	3.27	0.73	2.07	4.47	-6.97	0.90	-8.45	-5.49	4.20	0.64	2.95	5.05	0.14	7.98						
1.00	7	3.00	0.67	1.90	4.10	-7.34	0.67	-8.44	-6.24	3.93	0.61	2.94	4.93	0.46	8.44						
0.0	7	3.00	0.67	1.90	4.10	-7.34	0.67	-8.44	-6.24	3.93	0.61	2.94	4.93	0.0	0.0						
0.10	7	3.33	0.66	2.25	4.42	-7.21	0.82	-8.56	-5.85	3.90	0.54	3.07	4.86	0.36	0.36						
0.20	7	3.38	0.70	2.24	4.52	-7.16	0.81	-8.65	-5.77	3.92	0.55	3.01	4.83	0.08	0.44						
0.30	7	3.29	0.73	2.09	4.49	-7.19	0.91	-8.69	-5.69	3.84	0.60	2.84	4.80	0.14	0.58						
0.40	7	3.17	0.78	1.90	4.45	-7.16	1.05	-8.87	-5.44	3.84	0.59	2.86	4.81	0.12	0.70						
0.50	7	3.09	0.84	1.72	4.47	-7.38	0.96	-8.95	-5.81	3.79	0.62	2.77	4.80	0.24	0.94						
0.60	7	3.09	0.75	1.87	4.32	-7.42	0.85	-8.82	-5.62	3.75	0.66	2.67	4.83	0.06	1.00						
0.70	7	3.28	0.91	1.79	4.77	-7.38	0.88	-8.82	-5.94	3.54	0.61	2.64	4.63	0.22	1.22						
0.80	7	3.29	0.86	1.88	4.70	-7.16	1.08	-8.93	-5.38	3.62	0.63	2.58	4.65	0.23	1.45						
0.90	7	3.33	0.71	2.17	4.50	-7.15	0.98	-8.77	-5.54	3.58	0.66	2.58	4.74	0.06	1.51						
1.00	7	3.57	1.02	1.90	4.24	-7.43	0.85	-8.82	-6.05	3.58	0.69	2.44	4.72	0.37	1.68						

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE SIZE	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT			
0.0	7	18.93	0.45	18.20	19.66	-5.38	1.36	-7.61	-3.14	11.30	13.04	1.06	9.57	13.04	0.0	0.0		
0.10	7	18.91	0.50	18.09	19.72	-5.43	1.34	-7.63	-3.23	11.26	13.04	1.02	9.59	12.93	0.07	0.07		
0.20	7	18.88	0.53	18.01	19.76	-5.38	1.25	-7.43	-3.33	11.25	12.83	0.96	9.68	12.83	0.05	0.12		
0.30	7	18.81	0.50	17.98	19.64	-5.36	1.18	-7.30	-3.42	11.27	12.83	0.95	9.71	12.82	0.08	0.20		
0.40	7	18.81	0.55	17.92	19.71	-5.42	1.09	-7.21	-3.63	11.32	12.99	1.01	9.66	12.99	0.08	0.28		
0.50	7	18.93	0.50	18.12	19.75	-5.47	1.08	-7.24	-3.70	11.32	12.95	1.00	9.69	12.95	0.13	0.41		
0.60	7	18.95	0.46	18.19	19.70	-5.51	1.03	-7.20	-3.81	11.28	12.89	0.98	9.66	12.89	0.06	0.46		
0.70	7	18.83	0.69	17.69	19.97	-5.46	1.00	-7.11	-3.82	11.28	12.88	0.98	9.68	12.88	0.13	0.59		
0.80	7	18.83	0.54	17.94	19.71	-5.36	1.10	-7.17	-3.55	11.29	12.90	0.98	9.69	12.90	0.10	0.70		
0.90	7	18.88	0.45	18.14	19.61	-5.32	1.17	-7.24	-3.40	11.34	12.96	0.99	9.72	12.96	0.08	0.77		
1.00	7	18.85	0.54	17.96	19.74	-5.24	1.08	-7.02	-3.46	11.37	13.00	0.99	9.74	13.00	0.09	0.87		
0.0	7	18.85	0.54	17.96	19.74	-5.24	1.08	-7.02	-3.46	11.37	13.00	0.99	9.74	13.00	0.0	0.0		
0.10	7	18.94	0.43	18.23	19.65	-5.06	0.87	-6.49	-3.63	11.36	13.09	1.04	9.68	13.09	0.20	0.20		
0.20	7	18.88	0.63	17.90	19.86	-5.04	0.80	-6.35	-3.73	11.37	12.99	0.99	9.76	12.99	0.07	0.27		
0.30	7	18.79	0.77	17.53	20.05	-5.10	0.79	-6.40	-3.80	11.35	12.97	0.99	9.73	12.97	0.11	0.38		
0.40	7	18.86	0.50	18.05	19.68	-5.06	0.99	-6.68	-3.44	11.34	13.01	1.02	9.66	13.01	0.08	0.46		
0.50	7	18.95	0.58	18.00	19.91	-5.20	1.09	-6.98	-3.41	11.29	13.01	1.03	9.60	12.98	0.17	0.63		
0.60	7	18.85	0.57	17.92	19.78	-5.28	0.95	-6.84	-3.72	11.33	13.07	1.06	9.58	13.07	0.14	0.77		
0.70	7	18.69	0.59	17.72	19.65	-5.40	1.22	-7.40	-3.40	11.30	13.10	1.10	9.49	13.10	0.21	0.97		
0.80	7	18.84	0.54	17.95	19.74	-5.36	1.24	-7.39	-3.33	11.38	13.12	1.06	9.64	13.12	0.18	1.16		
0.90	7	18.89	0.47	18.12	19.66	-5.41	1.35	-7.62	-3.19	11.30	13.20	1.12	9.52	13.20	0.07	1.23		
1.00	7	18.93	0.45	18.20	19.66	-5.38	1.36	-7.61	-3.14	11.30	13.04	1.06	9.57	13.04	0.08	1.31		

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE SIZE	-----X - CO-ORDINATE-----					-----Y - CO-ORD INATE-----					-----Z - CO-ORDINATE-----					DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT					
0.0	7	-3.41	1.07	-5.17	-1.65	-7.43	0.69	-8.55	-6.30	17.85	0.94	16.30	19.39	0.0	0.0			
0.10	7	-4.02	1.19	-5.97	-2.06	-7.36	0.81	-8.69	-5.03	18.12	1.02	16.45	19.79	0.67	0.67			
0.20	7	-4.07	1.16	-5.97	-2.17	-7.22	0.77	-8.48	-5.96	18.31	1.02	16.64	19.97	0.24	0.90			
0.30	7	-3.70	1.19	-5.65	-1.75	-7.06	0.64	-8.11	-5.83	18.44	0.96	16.87	20.01	0.42	1.33			
0.40	7	-2.90	1.24	-4.92	-0.87	-6.88	0.64	-7.93	-5.83	18.86	1.00	17.23	20.49	0.93	2.25			
0.50	7	-2.08	1.28	-4.19	0.02	-6.52	0.61	-7.52	-5.52	19.42	1.00	17.23	20.49	0.93	3.18			
0.60	7	-1.50	0.82	-2.84	-0.16	-5.80	0.82	-7.14	-4.45	20.19	1.06	18.46	21.19	1.05	4.23			
0.70	7	-1.03	0.76	-2.28	0.23	-5.25	0.86	-6.66	-3.83	20.84	0.87	19.41	22.28	0.98	5.21			
0.80	7	-0.54	0.75	-1.77	0.70	-4.63	0.84	-6.01	-3.26	21.38	0.73	20.18	22.58	0.95	6.16			
0.90	7	-0.41	0.79	-1.70	0.88	-4.12	0.92	-5.63	-2.60	21.56	0.66	20.61	22.76	0.61	7.04			
1.00	7	-0.67	0.80	-1.98	0.63	-3.94	0.90	-5.42	-2.47	21.72	0.65	20.66	22.79	0.32	7.36			
0.0	7	-0.67	0.80	-1.98	0.63	-3.94	0.90	-5.42	-2.47	21.72	0.65	20.66	22.79	0.0	0.0			
0.10	7	-0.99	1.29	-3.10	1.13	-4.03	1.37	-6.27	-1.79	21.35	0.73	20.15	22.55	0.09	0.49			
0.20	7	-1.42	1.31	-3.56	0.72	-4.65	1.22	-6.65	-2.65	20.63	0.74	19.42	21.84	1.05	1.54			
0.30	7	-2.14	1.18	-4.08	-0.20	-5.31	0.95	-6.87	-3.76	20.00	0.83	18.65	21.36	1.16	2.70			
0.40	7	-2.90	1.12	-4.74	1.06	-5.76	1.17	-7.69	-3.84	19.53	0.75	18.30	20.77	1.00	3.70			
0.50	7	-3.50	0.88	-4.94	-2.06	-6.39	0.86	-7.80	-4.98	19.10	0.75	17.88	20.33	0.97	4.67			
0.60	7	-3.83	0.84	-5.21	-2.45	-6.86	0.81	-8.19	-5.54	18.80	0.80	17.48	20.11	0.65	5.32			
0.70	7	-4.06	0.90	-5.53	-2.59	-6.94	0.84	-8.32	-5.57	18.55	0.93	17.02	20.07	0.35	5.67			
0.80	7	-4.01	0.96	-5.59	-2.44	-7.29	0.74	-8.51	-6.07	18.24	0.89	16.78	19.70	0.46	6.14			
0.90	7	-3.74	1.03	-5.43	-2.04	-7.47	0.66	-8.56	-6.39	18.00	0.87	16.56	19.43	0.41	6.55			
1.00	7	-3.41	1.07	-5.17	-1.65	-7.43	0.69	-8.55	-6.30	17.85	0.94	16.30	19.39	0.36	6.91			

(24)

LANDMARK - RT WRIST CENTER (26)

HMVT NO. 12140/30

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO PANEL CONTROLLER AT +23.0, +10.0, +23.0 AND RETURNS. RIGHT HAND REMAINS AT STICK CONTROLLER AT +20.0, 0.0, +15.0.

MOTION NUMBER - 21240
BACK ANGLE - 30

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
LEFT FWD	0.54	0.15	0.40 TO 0.80 SECS.
LEFT REV	0.53	0.15	0.30 TO 0.70 SECS.

LANDMARK - NASION (1)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	INCR
0.0	7	-0.03	0.79	1.23	24.96	0.0
0.10	7	-0.07	0.86	1.35	24.96	0.0
0.20	7	-0.04	1.00	1.63	25.31	0.28
0.30	7	-0.04	0.84	1.59	25.31	0.38
0.40	7	-0.07	0.66	1.33	25.31	0.46
0.50	7	-0.03	0.55	1.00	24.98	0.55
0.60	7	-0.00	0.50	0.82	24.89	0.66
0.70	7	0.01	0.44	0.82	24.79	0.69
0.80	7	0.10	0.43	0.80	24.76	0.76
0.90	7	0.13	0.46	0.80	24.76	0.87
1.00	7	0.16	0.53	0.88	24.77	0.96
0.0	7	0.16	0.53	0.88	24.77	1.01
0.10	7	0.14	0.54	0.88	24.77	0.0
0.20	7	0.07	0.65	1.02	24.84	0.10
0.30	7	0.03	0.75	1.14	24.92	0.22
0.40	7	0.02	0.88	1.23	25.05	0.33
0.50	7	-0.05	1.01	1.26	25.09	0.39
0.60	7	-0.07	0.97	1.38	25.10	0.49
0.70	7	-0.04	0.88	1.34	25.07	0.58
0.80	7	-0.09	0.81	1.29	25.04	0.70
0.90	7	-0.09	0.79	1.22	25.03	0.82
1.00	7	-0.03	0.79	1.19	25.00	0.94

LANDMARK - CERVICAL

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	INCR
0.0	7	-7.26	1.50	-0.43	19.57	0.0
0.10	7	-6.89	1.25	-0.87	19.51	0.0
0.20	7	-6.77	1.25	-0.95	19.40	0.57
0.30	7	-6.75	1.34	-0.92	19.53	0.74
0.40	7	-6.73	1.34	-0.99	19.53	0.80
0.50	7	-6.64	1.30	-1.08	19.59	0.89
0.60	7	-6.56	1.30	-1.12	19.57	1.02
0.70	7	-6.52	1.29	-1.12	19.70	1.18
0.80	7	-6.49	1.35	-1.09	19.80	1.29
0.90	7	-6.40	1.42	-0.95	19.90	1.44
1.00	7	-6.10	1.47	-0.93	19.91	1.53
0.0	7	-6.10	1.47	-1.16	19.79	1.92
0.10	7	-6.19	1.46	-1.16	19.79	0.0
0.20	7	-6.28	1.49	-1.31	19.57	0.16
0.30	7	-6.32	1.61	-1.24	19.33	0.34
0.40	7	-6.31	1.55	-1.40	19.29	0.52
0.50	7	-6.58	1.73	-1.50	19.41	0.60
0.60	7	-6.85	1.76	-1.32	19.51	0.94
0.70	7	-6.99	1.79	-0.91	19.78	1.43
0.80	7	-6.99	1.78	-0.65	19.84	1.75
0.90	7	-7.11	1.66	-0.62	19.82	1.78
1.00	7	-7.26	1.50	-0.56	19.73	1.92
0.0	7	-7.26	1.50	-0.43	19.57	2.12

MMT NO. 21243/30

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0		7		-3.07	0.89	-4.52	-1.61	-0.07	1.13	-1.92	1.78	20.72	18.85	1.14	1.07	19.05	22.60	0.0	0.0
0.10		7		-3.08	0.72	-4.26	-1.89	-0.28	0.94	-1.83	1.27	20.81	19.05	1.07	1.04	19.13	22.56	0.23	0.23
0.20	F	7		-3.09	0.88	-4.53	-1.65	-0.35	1.32	-2.52	1.82	20.85	19.14	1.04	1.00	19.14	22.43	0.18	0.31
0.30	O	7		-2.96	0.84	-4.33	-1.58	-0.25	1.36	-2.48	1.58	20.79	19.09	0.97	1.00	19.09	22.28	0.13	0.62
0.40	R	7		-2.89	0.91	-4.38	-1.39	-0.19	1.34	-2.38	2.00	20.69	19.09	1.01	1.01	19.09	22.41	0.12	0.74
0.50	W	7		-2.85	0.84	-4.23	-1.47	-0.29	1.31	-2.43	1.86	20.75	19.16	1.10	1.10	19.16	22.77	0.27	1.01
0.60	A	7		-2.84	0.83	-4.20	-1.49	-0.45	1.23	-2.47	1.57	20.97	19.15	1.10	1.10	19.15	22.76	0.07	1.08
0.70	R	7		-2.86	0.91	-4.35	-1.36	-0.39	1.32	-2.56	1.79	20.93	19.09	1.13	1.13	19.09	22.79	0.15	1.24
0.80	D	7		-2.76	0.94	-4.31	-1.21	-0.27	1.43	-2.61	2.07	21.01	19.17	1.12	1.12	19.17	22.85	0.09	1.33
0.90		7		-2.76	0.82	-4.10	-1.42	-0.20	1.37	-2.44	2.04	21.01	19.17	1.12	1.12	19.17	22.85	0.09	1.33
1.00		7		-2.91	0.79	-4.21	-1.60	-0.44	1.38	-2.70	1.82	21.15	19.25	1.16	1.16	19.25	23.04	0.31	1.65
0.0		7		-2.91	0.79	-4.21	-1.60	-0.44	1.38	-2.70	1.82	21.15	19.25	1.16	1.16	19.25	23.04	0.0	0.0
0.10		7		-2.99	0.69	-4.12	-1.86	-0.51	1.34	-2.70	1.68	21.15	19.13	1.23	1.23	19.13	23.16	0.11	0.11
0.20		7		-3.13	0.66	-4.22	-2.04	-0.62	1.35	-2.83	1.59	21.03	19.04	1.21	1.21	19.04	23.02	0.22	0.32
0.30	R	7		-3.28	0.69	-4.41	-2.14	-0.78	1.28	-2.87	1.32	20.98	19.19	1.09	1.09	19.19	22.76	0.22	0.54
0.40	E	7		-3.42	0.77	-4.68	-2.17	-0.93	1.21	-2.91	1.05	21.00	19.16	1.12	1.12	19.16	22.85	0.22	0.75
0.50	T	7		-3.41	0.88	-4.85	-1.96	-0.85	0.84	-2.22	0.53	20.97	19.12	1.13	1.13	19.12	22.81	0.09	0.85
0.60	U	7		-3.34	1.02	-5.01	-1.67	-0.61	0.74	-1.83	0.61	20.95	19.13	1.11	1.11	19.13	22.78	0.25	1.09
0.70	R	7		-3.35	0.95	-4.93	-1.77	-0.53	0.75	-1.76	0.69	20.95	19.12	1.12	1.12	19.12	22.79	0.08	1.17
0.80	N	7		-3.20	0.74	-4.42	-1.99	-0.32	0.88	-1.76	1.12	20.90	19.10	1.10	1.10	19.10	22.70	0.26	1.43
0.90		7		-3.10	0.80	-4.41	-1.79	-0.17	1.06	-1.91	1.58	20.82	18.98	1.12	1.12	18.98	22.66	0.20	1.64
1.00		7		-3.07	0.89	-4.52	-1.61	-0.07	1.13	-1.92	1.78	20.72	18.85	1.14	1.14	18.85	22.60	0.14	1.78

LANDMARK - LT ACRONIUM (5)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0		7		-5.67	1.02	-7.34	-4.00	7.70	0.82	6.36	9.05	20.59	18.60	1.22	1.22	18.60	22.58	0.0	0.0
0.10		7		-5.83	1.00	-7.47	-4.19	7.57	0.79	6.28	8.87	20.51	18.51	1.22	1.22	18.51	22.52	0.22	0.22
0.20	F	7		-5.97	1.03	-7.65	-4.28	7.56	0.90	6.09	9.03	20.41	18.29	1.29	1.29	18.29	22.53	0.17	0.39
0.30	O	7		-5.95	1.05	-7.67	-4.23	7.59	0.99	5.96	9.22	20.55	18.33	1.29	1.29	18.33	22.57	0.05	0.44
0.40	R	7		-5.83	1.09	-7.61	-4.05	7.65	1.06	5.91	9.40	20.55	18.39	1.32	1.32	18.39	22.71	0.17	0.61
0.50	W	7		-5.61	1.05	-7.33	-3.89	7.67	1.04	5.96	9.39	20.54	18.42	1.35	1.35	18.42	22.85	0.23	0.84
0.60	A	7		-5.42	0.97	-7.02	-3.83	7.50	0.96	5.93	9.07	20.74	18.48	1.38	1.38	18.48	23.00	0.28	1.12
0.70	R	7		-5.30	0.92	-6.80	-3.79	7.39	0.94	5.85	8.94	20.87	18.60	1.38	1.38	18.60	23.13	0.21	1.33
0.80	D	7		-5.06	0.94	-6.60	-3.51	7.40	0.95	5.85	8.96	20.97	18.74	1.36	1.36	18.74	23.20	0.26	1.59
0.90		7		-4.85	0.96	-6.43	-3.28	7.53	0.95	5.96	9.10	21.01	18.80	1.35	1.35	18.80	23.22	0.24	1.83
1.00		7		-4.68	0.97	-6.27	-3.09	7.64	0.99	6.02	9.27	21.07	18.84	1.36	1.36	18.84	23.29	0.22	2.05
0.0		7		-4.68	0.97	-6.27	-3.09	7.64	0.99	6.02	9.27	21.07	18.84	1.36	1.36	18.84	23.29	0.0	0.0
0.10		7		-5.13	1.01	-6.52	-3.20	7.49	0.92	5.99	9.00	21.04	18.84	1.36	1.36	18.84	23.24	0.23	0.23
0.20		7		-5.38	1.08	-6.89	-3.36	7.35	0.91	5.86	8.85	21.00	18.81	1.33	1.33	18.81	23.18	0.31	0.54
0.30	R	7		-5.38	1.17	-7.31	-3.45	7.34	0.68	5.90	8.78	20.94	18.75	1.33	1.33	18.75	23.12	0.26	0.80
0.40	E	7		-5.56	1.31	-7.70	-3.41	7.34	0.85	5.96	8.73	20.83	18.72	1.29	1.29	18.72	22.95	0.21	1.01
0.50	T	7		-5.63	1.45	-8.02	-3.25	7.32	0.80	6.00	8.63	20.83	18.75	1.27	1.27	18.75	22.91	0.08	1.09
0.60	U	7		-5.60	1.40	-7.89	-3.30	7.42	0.76	6.17	8.67	20.84	18.79	1.25	1.25	18.79	22.90	0.11	1.20
0.70	R	7		-5.45	1.38	-7.71	-3.18	7.41	0.71	6.23	8.58	20.80	18.78	1.23	1.23	18.78	22.83	0.16	1.36
0.80	N	7		-5.46	1.28	-7.57	-3.35	7.41	0.68	6.31	8.52	20.73	18.81	1.18	1.18	18.81	22.66	0.07	1.43
0.90		7		-5.57	1.14	-7.44	-3.69	7.54	0.71	6.38	8.69	20.65	18.73	1.22	1.22	18.73	22.58	0.18	1.61
1.00		7		-5.67	1.02	-7.34	-4.00	7.70	0.82	6.36	9.05	20.59	18.60	1.22	1.22	18.60	22.58	0.21	1.82

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE			MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	0.0	
0.0	6	19.09	0.61	18.09	20.10	6.07	1.55	3.54	8.61	11.59	1.21	9.59	13.58	11.59	1.21	9.59	13.58	0.0	0.0	0.0
0.10	6	19.13	0.97	17.53	20.72	5.93	1.42	3.61	8.25	11.58	1.17	9.67	13.50	11.58	1.17	9.67	13.50	0.15	0.15	0.15
F 0.20	7	18.99	0.95	17.43	20.54	5.80	1.21	3.82	7.79	11.36	1.21	9.37	13.35	11.36	1.21	9.37	13.35	0.29	0.44	0.44
O 0.30	7	18.99	0.84	17.60	20.37	5.88	1.39	3.60	8.16	11.38	1.22	9.37	13.38	11.38	1.22	9.37	13.38	0.07	0.52	0.52
R 0.40	7	18.97	0.85	17.57	20.37	5.87	1.46	3.48	8.27	11.37	1.24	9.34	13.41	11.37	1.24	9.34	13.41	0.02	0.53	0.53
W 0.50	7	18.98	0.78	17.69	20.26	5.89	1.39	3.61	8.17	11.35	1.26	9.28	13.41	11.35	1.26	9.28	13.41	0.03	0.57	0.57
A 0.60	7	18.93	0.76	17.68	20.19	5.78	1.44	3.43	8.14	11.33	1.25	9.27	13.38	11.33	1.25	9.27	13.38	0.12	0.69	0.69
R 0.70	7	18.86	0.86	17.45	20.28	5.71	1.51	3.24	8.19	11.36	1.17	9.44	13.28	11.36	1.17	9.44	13.28	0.10	0.79	0.79
D 0.80	7	18.88	0.89	17.42	20.34	5.80	1.57	3.24	8.37	11.41	1.16	9.50	13.31	11.41	1.16	9.50	13.31	0.10	0.89	0.89
O 0.90	7	18.91	0.85	17.52	20.30	5.84	1.56	3.27	8.40	11.40	1.16	9.50	13.30	11.40	1.16	9.50	13.30	0.04	0.94	0.94
1.00	7	18.95	0.94	17.40	20.49	5.75	1.53	3.23	8.26	11.42	1.17	9.50	13.34	11.42	1.17	9.50	13.34	0.10	1.03	1.03
0.0	7	18.95	0.94	17.40	20.49	5.75	1.53	3.23	8.26	11.42	1.17	9.50	13.34	11.42	1.17	9.50	13.34	0.0	0.0	0.0
0.10	6	19.07	0.96	17.50	20.64	5.91	1.46	3.52	8.31	11.54	1.03	9.95	13.33	11.54	1.03	9.95	13.33	0.31	0.31	0.31
0.20	6	19.08	0.96	17.51	20.65	5.96	1.35	3.75	8.17	11.64	1.05	9.91	13.36	11.64	1.05	9.91	13.36	0.05	0.35	0.35
R 0.30	6	19.06	0.92	17.56	20.56	6.03	1.41	3.72	8.34	11.49	0.96	9.92	13.07	11.49	0.96	9.92	13.07	0.16	0.51	0.51
E 0.40	6	18.80	0.84	17.42	20.18	6.10	1.35	3.88	8.51	10.71	2.03	7.39	14.04	10.71	2.03	7.39	14.04	0.82	1.34	1.34
T 0.50	6	18.78	1.02	17.10	20.45	5.96	1.24	3.93	8.00	11.33	1.33	8.85	13.22	11.33	1.33	8.85	13.22	0.35	1.69	1.69
U 0.60	6	18.88	1.13	17.03	20.74	5.92	1.47	3.51	8.34	11.58	1.05	9.86	13.30	11.58	1.05	9.86	13.30	0.56	2.25	2.25
R 0.70	6	18.82	0.97	17.23	20.42	5.85	1.55	3.31	8.38	11.52	1.05	9.89	13.34	11.52	1.05	9.89	13.34	0.10	2.35	2.35
N 0.80	6	18.85	0.87	17.42	20.27	5.80	1.55	3.26	8.34	11.54	1.03	9.85	13.22	11.54	1.03	9.85	13.22	0.10	2.44	2.44
O 0.90	6	18.97	0.82	17.63	20.32	5.89	1.54	3.36	8.43	11.53	1.10	9.72	13.33	11.53	1.10	9.72	13.33	0.16	2.60	2.60
1.00	6	19.09	0.61	18.09	20.10	6.07	1.55	3.54	8.61	11.59	1.21	9.59	13.58	11.59	1.21	9.59	13.58	0.23	2.83	2.83

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE			MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	0.0	
0.0	7	-3.66	0.89	-5.11	-2.20	8.20	1.33	6.01	10.39	18.58	1.08	16.81	20.36	18.58	1.08	16.81	20.36	0.0	0.0	0.0
0.10	7	-3.88	0.75	-5.12	-2.65	7.92	1.20	5.95	9.86	18.73	1.03	17.04	20.41	18.73	1.03	17.04	20.41	0.39	0.39	0.39
F 0.20	7	-4.02	0.66	-5.11	-2.93	7.82	1.34	5.62	10.02	18.79	1.17	16.88	20.71	18.79	1.17	16.88	20.71	0.18	0.57	0.57
O 0.30	7	-3.96	0.62	-4.98	-2.94	7.91	1.40	5.62	10.21	18.91	1.13	17.06	20.76	18.91	1.13	17.06	20.76	0.16	0.73	0.73
R 0.40	7	-3.84	0.60	-4.83	-2.86	7.96	1.19	6.01	9.91	19.04	1.12	17.21	20.88	19.04	1.12	17.21	20.88	0.19	0.92	0.92
M 0.50	7	-3.74	0.53	-4.69	-2.79	8.05	1.11	6.22	9.87	19.20	1.14	17.33	21.06	19.20	1.14	17.33	21.06	0.20	1.12	1.12
A 0.60	7	-3.62	0.57	-4.55	-2.69	7.90	1.09	6.12	9.69	19.38	1.11	17.56	21.19	19.38	1.11	17.56	21.19	0.26	1.38	1.38
R 0.70	7	-3.37	0.58	-4.33	-2.42	7.95	1.20	5.99	9.92	19.49	1.11	17.68	21.31	19.49	1.11	17.68	21.31	0.28	1.65	1.65
D 0.80	7	-3.12	0.59	-4.09	-2.16	7.99	1.27	5.91	10.06	19.54	1.14	17.78	21.51	19.54	1.14	17.78	21.51	0.29	1.95	1.95
O 0.90	7	-2.90	0.64	-3.94	-1.86	7.97	1.28	5.87	10.06	19.73	1.10	17.92	21.53	19.73	1.10	17.92	21.53	0.24	2.19	2.19
1.00	7	-2.69	0.75	-3.93	-1.45	7.99	1.33	5.81	10.17	19.73	1.02	18.06	21.40	19.73	1.02	18.06	21.40	0.21	2.40	2.40
0.0	7	-2.69	0.75	-3.93	-1.45	7.99	1.33	5.81	10.17	19.73	1.02	18.06	21.40	19.73	1.02	18.06	21.40	0.0	0.0	0.0
0.10	7	-2.85	0.59	-3.83	-1.88	8.06	1.21	5.81	10.17	19.73	1.02	18.06	21.40	19.73	1.02	18.06	21.40	0.21	0.21	0.21
0.20	7	-3.20	0.69	-4.32	-2.07	8.14	1.20	6.16	10.11	19.53	1.05	17.80	21.26	19.53	1.05	17.80	21.26	0.37	0.57	0.57
R 0.30	7	-3.45	0.93	-4.97	-1.92	8.11	1.21	6.12	10.09	19.36	1.03	17.68	21.05	19.36	1.03	17.68	21.05	0.30	0.87	0.87
E 0.40	7	-3.53	1.12	-5.36	-1.69	8.03	1.28	5.94	10.13	19.21	1.00	17.58	20.84	19.21	1.00	17.58	20.84	0.19	1.06	1.06
U 0.50	7	-3.57	1.26	-5.64	-1.50	7.88	1.21	5.89	9.87	19.34	0.95	17.53	20.64	19.34	0.95	17.53	20.64	0.21	1.27	1.27
R 0.60	7	-3.59	1.24	-5.62	-1.56	7.94	1.11	6.12	9.76	18.96	0.88	17.52	20.40	18.96	0.88	17.52	20.40	0.14	1.40	1.40
R 0.70	7	-3.53	1.12	-5.37	-1.69	8.10	1.14	6.24	9.96	18.86	0.93	17.33	20.39	18.86	0.93	17.33	20.39	0.20	1.60	1.60
N 0.80	7	-3.50	0.85	-4.89	-2.10	8.18	1.11	6.36	10.00	18.78	1.04	17.09	20.48	18.78	1.04	17.09	20.48	0.11	1.71	1.71
O 0.90	7	-3.56	0.79	-4.86	-2.26	8.16	1.17	6.23	10.08	18.68	1.09	16.89	20.47	18.68	1.09	16.89	20.47	0.12	1.84	1.84
1.00	7	-3.66	0.89	-5.11	-2.20	8.20	1.33	6.01	10.39	18.58	1.08	16.81	20.36	18.58	1.08	16.81	20.36	0.14	1.98	1.98

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	MOVED	
0.0	7	3.67	0.43	2.97	4.37	12.47	1.12	10.64	14.30	12.93	0.82	11.58	14.27	0.0	0.0	0.0	
0.10	7	3.75	0.42	3.06	4.44	12.24	0.82	10.90	13.59	13.05	0.96	11.46	14.63	0.27	0.27	0.27	
F 0.20	7	3.80	0.46	2.75	4.86	12.11	0.65	11.04	13.16	13.31	1.11	11.49	15.13	0.30	0.56	0.56	
O 0.30	7	4.33	0.46	3.57	5.09	12.17	0.78	10.89	13.45	14.16	0.98	12.55	16.72	1.00	1.57	1.57	
R 0.40	7	4.98	0.38	4.35	5.61	12.22	0.51	10.73	13.71	15.45	0.96	13.57	16.72	1.19	2.76	2.76	
W 0.50	7	5.48	0.34	4.91	6.04	12.16	0.85	10.78	11.55	16.21	0.91	14.71	17.70	1.17	3.92	3.92	
A 0.60	7	6.07	0.44	5.35	6.78	11.84	0.85	10.44	13.24	17.23	0.80	15.91	18.55	1.22	5.15	5.15	
R 0.70	7	6.52	0.47	5.75	7.29	11.51	0.53	9.98	13.04	17.97	0.83	16.62	19.33	0.93	6.08	6.08	
D 0.80	7	6.91	0.41	6.24	7.58	11.28	1.01	9.61	12.94	18.53	0.76	17.29	19.78	0.72	6.80	6.80	
O 0.90	7	7.22	0.49	6.41	8.03	11.11	1.02	9.43	12.79	18.74	0.77	17.48	20.00	0.40	7.21	7.21	
1.00	7	7.46	0.59	6.49	8.43	10.85	1.01	9.19	12.51	18.90	0.83	17.54	20.25	0.39	7.60	7.60	
0.0	7	7.46	0.59	6.49	8.43	10.85	1.01	9.19	12.51	18.90	0.83	17.54	20.25	0.0	0.0	0.0	
0.10	7	6.70	0.54	5.82	7.59	11.53	0.93	9.99	13.05	17.75	1.00	16.10	19.39	1.54	1.54	1.54	
0.20	7	5.86	0.76	4.61	7.12	12.12	0.91	10.63	13.61	16.44	1.31	16.28	18.59	1.67	3.20	3.20	
R 0.30	7	5.16	0.83	3.80	6.52	12.45	0.90	10.97	13.94	15.27	1.24	13.24	17.30	1.40	4.61	4.61	
E 0.40	7	4.55	0.94	3.01	6.10	12.69	0.97	11.09	14.28	14.43	1.25	12.38	16.49	1.06	5.66	5.66	
T 0.50	7	4.13	0.80	2.82	5.44	12.60	0.96	11.03	14.17	14.01	1.12	12.16	15.85	0.60	6.26	6.26	
U 0.60	7	3.79	0.64	2.75	4.84	12.55	0.96	10.97	14.14	13.74	0.98	12.12	15.36	0.44	6.70	6.70	
R 0.70	7	3.51	0.99	1.89	5.13	12.54	0.53	11.01	14.07	13.51	0.92	12.00	15.02	0.37	7.07	7.07	
N 0.80	7	3.67	0.44	2.94	4.40	12.61	1.00	10.96	14.25	13.34	0.82	12.00	14.68	0.24	7.31	7.31	
O 0.90	7	3.56	0.54	2.67	4.45	12.54	1.06	10.81	14.27	13.07	0.80	11.76	14.37	0.30	7.61	7.61	
1.00	7	3.67	0.43	2.97	4.37	12.47	1.12	10.64	14.30	12.93	0.82	11.58	14.27	0.20	7.81	7.81	

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	MOVED	
0.0	5	13.47	0.97	11.88	15.07	11.09	0.46	10.33	11.84	12.75	0.60	11.77	13.73	0.0	0.0	0.0	
0.10	5	13.47	1.01	11.81	15.13	10.63	0.52	9.78	11.48	14.04	1.28	11.95	16.14	1.38	1.38	1.38	
F 0.20	6	13.18	1.36	10.96	15.40	10.49	0.54	9.61	11.38	15.19	0.90	13.72	16.66	1.19	2.57	2.57	
D 0.30	6	13.75	1.33	11.57	15.94	10.23	1.04	8.53	11.94	17.30	2.02	13.98	20.62	2.21	4.77	4.77	
R 0.40	6	14.27	1.33	12.09	16.46	10.28	0.94	8.74	11.83	18.10	0.50	17.28	18.92	0.95	5.73	5.73	
W 0.50	7	15.02	0.96	13.44	16.59	10.43	0.59	9.46	11.40	19.25	1.02	17.57	20.92	1.37	7.10	7.10	
A 0.60	6	15.78	1.03	14.09	17.47	10.44	0.42	9.75	11.14	20.45	0.47	17.68	21.23	1.43	8.53	8.53	
T 0.70	6	16.27	1.08	14.49	18.05	10.56	0.31	10.05	11.56	21.01	0.36	20.41	21.60	0.75	9.28	9.28	
D 0.80	6	16.66	1.06	14.93	18.40	10.76	0.42	10.07	11.45	21.46	0.58	20.51	22.41	0.63	9.91	9.91	
O 0.90	6	16.94	1.01	15.28	18.61	10.83	0.51	9.99	11.67	21.53	1.04	19.93	23.33	0.33	10.24	10.24	
1.00	6	17.09	0.91	15.59	18.58	10.94	0.57	10.01	11.87	21.25	0.69	20.12	22.38	0.42	10.66	10.66	
0.0	6	17.09	0.91	15.59	18.58	10.94	0.57	10.01	11.87	21.25	0.69	20.12	22.38	0.0	0.0	0.0	
0.10	5	16.49	0.80	15.16	17.80	11.02	0.59	10.05	12.00	21.17	0.81	18.84	21.50	1.23	1.23	1.23	
0.20	5	15.90	0.78	14.63	17.17	10.87	0.56	9.95	11.79	19.26	0.75	18.03	20.50	1.10	2.33	2.33	
R 0.30	5	14.78	1.11	12.95	16.61	10.65	0.62	9.64	11.67	17.64	1.24	15.60	19.68	1.98	4.31	4.31	
E 0.40	5	14.10	1.35	11.88	16.32	10.81	0.97	9.22	12.41	15.96	2.86	11.27	20.65	1.82	6.13	6.13	
T 0.50	5	13.35	1.03	11.65	15.04	10.74	0.94	9.19	12.28	14.47	2.50	10.37	18.57	1.67	7.80	7.80	
U 0.60	5	13.37	1.10	11.57	15.17	10.71	0.78	9.44	11.99	14.78	0.76	13.53	16.04	0.31	8.11	8.11	
R 0.70	5	13.44	1.23	11.43	15.45	10.68	0.43	9.43	11.93	14.78	1.05	13.05	16.51	0.08	8.19	8.19	
W 0.80	5	13.29	1.00	11.65	14.94	10.81	0.97	9.22	12.40	13.59	0.70	12.44	14.73	1.21	9.40	9.40	
N 0.90	5	13.38	0.94	11.84	14.92	10.95	0.74	9.74	12.16	13.13	0.71	11.97	14.29	0.49	9.88	9.88	
1.00	5	13.47	0.97	11.88	15.07	11.09	0.46	10.33	11.84	12.75	0.60	11.77	13.73	0.42	10.30	10.30	

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO PANEL CONTROLLER AT +23.0, +10.0, +23.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +13.0, -13.0, +4.8.

MOTICN NUMBER - 22240
 BACK ANGLE - 30

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.46	0.14	0.30 TO 0.60 SECS.
LEFT REV	0.39	0.13	0.20 TO 0.60 SECS.

(1)

TIME	SAMPLE	(- - - - - X - CO-ORDINATE - - - - -)				(- - - - - Y - CO-ORDINATE - - - - -)				(- - - - - Z - CO-ORDINATE - - - - -)				DISTANCE		MOVES
T	SIZE:IN	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	CUM
0.0	7	-0.16	1.05	-1.89	1.57	0.12	1.09	1.66	1.91	27.56	1.32	25.43	29.74	0.0	0.0	0.0
0.10	7	-0.10	1.34	-2.30	2.10*	-0.06	0.65	-1.12	1.01	27.72	1.16	25.82	29.74	0.24	0.24	0.24
0.20	7	-0.16	1.54	-2.68	2.36	-0.20	0.92	-1.60	1.43	27.83	1.09	26.04	29.76	0.12	0.36	0.36
0.30	7	-0.38	1.22	-2.39	1.62	-0.20	0.76	-1.05	1.44	27.84	1.17	25.91	29.76	0.36	0.72	0.72
0.40	7	-0.27	1.13	-2.13	1.58	0.33	0.88	-1.12	1.78	27.76	1.25	25.73	29.83	0.18	0.90	0.90
0.50	7	-0.05	1.07	-1.80	1.70	0.37	0.93	-1.15	1.90	27.70	1.31	25.64	29.83	0.18	1.15	1.15
0.60	7	-0.15	0.98	-1.75	1.45	0.36	0.91	-1.12	1.85	27.70	1.26	25.64	29.77	0.10	1.25	1.25
0.70	7	-0.25	0.95	-1.81	1.31	0.34	0.93	-1.18	1.86	27.72	1.23	25.70	29.74	0.11	1.36	1.36
0.80	7	-0.32	1.03	-2.02	1.37	0.35	0.96	-1.22	1.92	27.76	1.26	25.70	29.82	0.08	1.44	1.44
0.90	7	-0.32	1.04	-2.03	1.39	0.41	0.97	-1.17	2.00	27.75	1.28	25.66	29.85	0.06	1.50	1.50
1.00	7	-0.30	1.02	-1.97	1.36	0.47	0.99	-1.15	2.10	27.72	1.30	25.59	29.86	0.07	1.57	1.57
0.0	7	-0.30	1.02	-1.97	1.36	0.47	0.99	-1.15	2.10	27.72	1.30	25.59	29.86	0.0	0.0	0.0
0.10	7	-0.22	1.09	-2.00	1.57	0.24	1.07	-1.51	2.00	27.71	1.24	25.68	29.74	0.25	0.25	0.25
0.20	7	-0.14	1.18	-2.07	1.80	0.06	1.16	-1.85	1.97	27.68	1.21	25.69	29.67	0.20	0.45	0.45
0.30	7	-0.16	1.18	-2.09	1.77	-0.04	1.14	-1.91	1.84	27.55	1.26	25.58	29.72	0.11	0.56	0.56
0.40	7	-0.17	1.16	-2.07	1.73	-0.15	1.14	-2.03	1.73	27.55	1.23	25.64	29.66	0.11	0.67	0.67
0.50	7	-0.14	1.19	-2.09	1.80	-0.23	1.12	-2.07	1.61	27.64	1.14	25.77	29.50	0.08	0.75	0.75
0.60	7	-0.13	1.22	-2.13	1.86	-0.19	1.07	-1.94	1.57	27.63	1.15	25.75	29.52	0.04	0.79	0.79
0.70	7	-0.15	1.18	-2.08	1.79	-0.13	1.05	-1.85	1.59	27.57	1.18	25.73	29.61	0.07	0.86	0.86
0.80	7	-0.15	1.11	-1.96	1.67	-0.05	1.07	-1.81	1.71	27.70	1.21	25.72	29.68	0.08	0.95	0.95
0.90	7	-0.15	1.07	-1.90	1.60	0.04	1.08	-1.73	1.80	27.75	1.25	25.60	29.69	0.10	1.05	1.05
1.00	7	-0.16	1.05	-1.89	1.57	0.12	1.09	-1.66	1.91	27.58	1.32	25.43	29.74	0.11	1.15	1.15

LANDMARK - CERVICAL

TIME T	SAMPLE SIZE, N	-----X-----				-----Y-----				-----Z-----				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	-6.80	1.49	-9.25	-4.35	-1.24	1.32	-3.40	0.92	21.26	1.23	19.24	23.28	0.0	0.0	
0.10	7	-6.84	1.46	-9.23	-4.45	-1.15	1.35	-3.37	0.97	21.23	1.29	19.11	23.34	0.10	0.10	
0.20	7	-6.92	1.43	-9.26	-4.58	-1.10	1.38	-3.36	1.05	21.23	1.31	19.07	23.38	0.20	0.20	
0.30	7	-7.08	1.46	-9.47	-4.69	-1.13	1.33	-3.32	1.05	21.23	1.26	19.22	23.35	0.30	0.37	
0.40	7	-7.07	1.42	-9.39	-4.75	-1.05	1.31	-3.20	1.09	21.28	1.28	19.17	23.38	0.40	0.45	
0.50	7	-6.99	1.31	-9.14	-4.84	-0.92	1.31	-3.06	1.23	21.24	1.34	19.04	23.43	0.50	0.61	
0.60	7	-6.91	1.34	-9.11	-4.71	-0.90	1.25	-2.95	1.14	21.26	1.35	19.04	23.48	0.60	0.70	
0.70	7	-6.79	1.36	-9.03	-4.56	-0.95	1.21	-2.93	1.04	21.27	1.36	19.04	23.49	0.70	0.82	
0.80	7	-6.64	1.34	-8.83	-4.44	-1.04	1.24	-3.07	0.99	21.24	1.35	19.03	23.45	0.80	1.00	
0.90	7	-6.57	1.28	-8.67	-4.48	-0.93	1.24	-2.97	1.10	21.24	1.33	19.05	23.43	0.90	1.13	
1.00	7	-6.54	1.21	-8.53	-4.55	-0.76	1.23	-2.78	1.26	21.25	1.31	19.09	23.41	1.00	1.30	
0.0	7	-6.54	1.21	-8.53	-4.55	-0.76	1.23	-2.78	1.26	21.25	1.31	19.09	23.41	0.0	0.0	
0.10	7	-6.56	1.24	-8.60	-4.52	-0.92	1.17	-2.84	0.99	21.35	1.29	19.19	23.43	0.10	0.17	
0.20	7	-6.58	1.28	-8.68	-4.48	-1.06	1.16	-2.96	0.85	21.31	1.31	19.20	23.50	0.20	0.31	
0.30	7	-6.61	1.31	-8.76	-4.45	-1.14	1.26	-3.21	0.92	21.34	1.32	19.15	23.47	0.30	0.41	
0.40	7	-6.66	1.31	-8.80	-4.51	-1.19	1.26	-3.26	0.89	21.26	1.29	19.14	23.38	0.40	0.49	
0.50	7	-6.71	1.28	-8.82	-4.61	-1.21	1.22	-3.21	0.80	21.22	1.27	19.14	23.29	0.50	0.57	
0.60	7	-6.77	1.36	-9.00	-4.55	-1.16	1.18	-3.11	0.78	21.20	1.27	19.12	23.29	0.60	0.64	
0.70	7	-6.78	1.37	-9.03	-4.54	-1.15	1.17	-3.07	0.78	21.23	1.28	19.13	23.33	0.70	0.68	
0.80	7	-6.69	1.24	-8.73	-4.66	-1.17	1.22	-3.17	0.82	21.30	1.23	19.29	23.31	0.80	0.79	
0.90	7	-6.73	1.31	-8.88	-4.57	-1.20	1.27	-3.28	0.87	21.29	1.21	19.31	23.27	0.90	0.83	
1.00	7	-6.80	1.49	-9.25	-4.35	-1.24	1.32	-3.40	0.92	21.26	1.23	19.24	23.28	1.00	0.92	

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	Moved
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	7	-3.37	1.15	-5.25	-1.49	-1.06	1.27	-3.14	1.02	20.70	0.90	19.22	22.18	0.0	0.0
0.10	7	-3.20	1.14	-5.06	-1.33	-0.92	1.35	-2.92	1.09	20.63	0.85	19.24	22.02	0.23	0.23
F 0.20	7	-3.13	1.28	-5.13	-1.03	-0.81	1.42	-3.13	1.59	20.58	0.84	19.20	21.96	0.14	0.37
O 0.30	7	-3.22	1.30	-5.35	-1.09	-0.77	1.44	-3.13	1.59	20.56	0.84	19.18	21.94	0.10	0.47
R 0.40	7	-3.17	1.26	-5.23	-1.11	-0.70	1.40	-3.00	1.61	20.56	0.87	19.14	21.98	0.09	0.56
M 0.50	7	-3.08	1.19	-5.02	-1.13	-0.61	1.36	-2.84	1.53	20.56	0.91	19.07	22.05	0.13	0.69
A 0.60	7	-3.01	1.11	-4.82	-1.19	-0.49	1.35	-2.69	1.72	20.66	0.88	19.23	22.10	0.17	0.86
R 0.70	7	-3.00	1.03	-4.70	-1.31	-0.44	1.35	-2.66	1.78	20.77	0.86	19.35	22.18	0.12	0.98
D 0.80	7	-3.18	1.10	-4.99	-1.37	-0.52	1.39	-2.80	1.77	20.86	0.85	19.47	22.25	0.21	1.19
O 0.90	7	-3.16	1.10	-4.97	-1.35	-0.43	1.43	-2.79	1.92	20.91	0.84	19.52	22.29	0.10	1.29
1.00	7	-3.03	1.08	-4.80	-1.26	-0.27	1.48	-2.69	2.15	20.95	0.85	19.55	22.35	0.21	1.50
0.0	7	-3.03	1.08	-4.80	-1.26	-0.27	1.48	-2.69	2.15	20.95	0.85	19.55	22.35	0.0	0.0
0.10	7	-3.10	1.16	-5.00	-1.20	-0.51	1.33	-2.68	1.66	20.94	0.78	19.66	22.22	0.25	0.25
0.20	7	-3.16	1.25	-5.21	-1.12	-0.72	1.23	-2.74	1.30	20.90	0.78	19.62	22.19	0.22	0.47
R 0.30	7	-3.16	1.32	-5.33	-0.99	-0.84	1.24	-2.87	1.19	20.82	0.93	19.30	22.33	0.15	0.62
E 0.40	7	-3.07	1.39	-5.35	-0.78	-0.87	1.30	-3.01	1.26	20.74	0.97	19.15	22.33	0.12	0.74
T 0.50	7	-2.97	1.42	-5.31	-0.64	-0.85	1.40	-3.14	1.45	20.67	0.96	19.09	22.25	0.12	0.86
U 0.60	7	-3.13	1.39	-5.40	-0.86	-0.91	1.36	-3.15	1.33	20.61	0.99	19.00	22.23	0.18	1.03
R 0.70	7	-3.28	1.32	-5.44	-1.11	-0.97	1.33	-3.16	1.22	20.61	1.00	18.96	22.25	0.16	1.20
N 0.80	7	-3.32	1.21	-5.31	-1.33	-0.96	1.35	-3.17	1.24	20.55	0.96	19.09	22.24	0.07	1.27
O 0.90	7	-3.33	1.16	-5.24	-1.42	-1.00	1.32	-3.16	1.16	20.69	0.92	19.17	22.20	0.04	1.31
1.00	7	-3.37	1.15	-5.25	-1.49	-1.06	1.27	-3.14	1.02	20.70	0.90	19.22	22.18	0.08	1.39

LANDMARK - LT ACRMIOM (5)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	Moved
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM
0.0	6	-5.60	1.30	-7.74	-3.46	7.38	0.73	6.18	8.57	20.25	1.31	18.10	22.40	0.0	0.0
0.10	6	-5.72	1.05	-7.44	-3.99	7.35	0.67	6.26	8.45	20.28	1.24	18.26	22.30	0.12	0.12
F 0.20	6	-5.89	0.93	-7.41	-4.37	7.34	0.68	6.22	8.45	20.29	1.18	18.35	22.24	0.17	0.29
O 0.30	6	-6.09	1.06	-7.83	-4.36	7.35	0.75	6.13	8.57	20.26	1.20	18.29	22.24	0.20	0.50
R 0.40	6	-5.96	1.11	-7.78	-4.14	7.39	0.74	6.18	8.60	20.30	1.26	18.23	22.36	0.14	0.64
W 0.50	6	-5.71	1.08	-7.48	-3.94	7.44	0.67	6.33	8.54	20.36	1.35	18.13	22.58	0.26	0.90
A 0.60	6	-5.33	0.96	-6.90	-3.76	7.21	0.73	6.02	8.40	20.48	1.26	18.42	22.54	0.45	1.36
R 0.70	6	-5.38	1.03	-6.77	-3.39	7.12	0.77	5.85	8.39	20.60	1.21	18.61	22.58	0.29	1.65
D 0.80	6	-5.07	1.11	-6.89	-3.25	7.32	0.44	6.61	8.04	20.59	1.23	18.67	22.71	0.23	1.88
O 0.90	6	-4.94	1.20	-6.91	-2.96	7.48	0.44	6.76	8.20	20.73	1.25	18.68	22.77	0.21	2.09
1.00	6	-4.74	1.24	-6.77	-2.72	7.59	0.52	6.74	8.44	20.72	1.27	18.63	22.81	0.22	2.31
0.0	6	-4.74	1.24	-6.77	-2.72	7.59	0.52	6.74	8.44	20.72	1.27	18.63	22.81	0.0	0.0
0.10	6	-4.36	1.19	-6.81	-2.91	7.49	0.47	6.72	8.26	20.59	1.19	18.75	22.64	0.16	0.16
0.20	6	-5.00	1.18	-6.94	-3.06	7.41	0.43	6.71	8.12	20.65	1.15	18.76	22.53	0.17	0.32
R 0.30	6	-5.17	1.29	-7.28	-3.07	7.38	0.36	6.79	7.97	20.56	1.22	18.56	22.56	0.19	0.52
E 0.40	6	-5.26	1.33	-7.44	-3.09	7.31	0.35	6.73	7.89	20.48	1.28	18.58	22.58	0.14	0.66
U 0.50	6	-5.38	1.22	-7.38	-3.37	7.23	0.40	6.57	7.89	20.41	1.34	18.21	22.60	0.16	0.82
T 0.60	6	-5.52	1.18	-7.46	-3.57	7.24	0.43	6.53	7.94	20.38	1.37	18.14	22.62	0.14	0.96
R 0.70	6	-5.56	1.20	-7.53	-3.59	7.28	0.46	6.52	8.04	20.35	1.36	18.11	22.58	0.07	1.03
N 0.80	6	-5.53	1.15	-7.41	-3.64	7.40	0.52	6.56	8.25	20.33	1.34	18.14	22.53	0.13	1.16
O 0.90	6	-5.52	1.20	-7.52	-3.58	7.41	0.61	6.41	8.41	20.29	1.32	18.13	22.46	0.04	1.20
1.00	6	-5.60	1.30	-7.74	-3.46	7.38	0.73	6.18	8.57	20.25	1.31	18.10	22.40	0.08	1.28

LANDMARK - LT GRIP CENTER

(17)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	T	7	16.83	0.70	15.69	17.98	9.81	0.43	9.10	10.52	12.39	13.47	0.29	12.50	13.47	0.0	0.0	0.0	0.0
0.10	T	7	16.76	0.63	15.73	17.80	9.85	0.44	9.13	10.58	14.46	15.50	0.63	13.42	15.50	1.47	1.47	1.47	1.47
0.20	F	7	16.67	0.78	15.39	17.96	9.79	0.42	9.10	10.47	16.18	17.64	0.89	14.72	17.64	1.73	1.73	1.73	1.73
0.30	O	7	16.60	0.91	15.10	18.09	9.49	0.35	8.92	10.06	18.33	19.76	0.88	16.89	19.76	2.17	2.17	2.17	2.17
0.40	O	7	16.93	0.86	15.51	18.34	9.36	0.33	8.82	9.93	19.96	21.39	1.13	18.11	21.39	1.67	1.67	1.67	1.67
0.50	W	7	17.43	0.81	16.10	18.75	9.32	0.31	8.82	9.93	21.39	22.82	1.33	19.20	22.82	1.51	1.51	1.51	1.51
0.60	A	7	18.06	0.95	16.51	19.61	9.43	0.29	8.96	9.90	22.14	24.10	1.19	20.18	24.10	0.99	0.99	0.99	0.99
0.70	R	7	18.69	1.10	16.89	20.50	9.55	0.34	8.99	10.10	22.59	24.40	1.04	20.97	24.40	0.84	0.84	0.84	0.84
0.80	D	7	19.31	1.17	17.39	21.24	9.73	0.39	9.09	10.36	22.75	24.07	0.81	21.42	24.07	0.85	0.85	0.85	0.85
0.90	T	7	19.83	1.12	17.99	21.67	9.95	0.43	9.24	10.66	22.54	23.69	0.64	21.60	23.69	0.57	0.57	0.57	0.57
1.00	T	7	20.29	1.02	18.63	21.96	10.18	0.50	9.36	11.00	22.49	23.47	0.60	21.50	23.47	0.54	0.54	0.54	0.54
0.0	T	7	20.29	1.02	18.63	21.96	10.18	0.50	9.36	11.00	22.49	23.47	0.60	21.50	23.47	0.0	0.0	0.0	0.0
0.10	T	7	19.48	0.94	17.94	21.02	9.90	0.56	8.99	10.82	21.95	23.51	0.95	20.39	23.51	1.02	1.02	1.02	1.02
0.20	T	7	18.65	1.01	16.99	20.30	9.63	0.75	8.41	10.86	21.27	23.74	1.50	18.81	23.74	1.11	1.11	1.11	1.11
0.30	R	7	17.82	1.12	15.98	19.66	9.42	0.86	8.01	10.83	20.06	22.65	1.58	17.47	22.65	1.68	1.68	1.68	1.68
0.40	E	7	17.37	0.99	15.74	19.00	9.27	0.91	7.79	10.76	18.56	21.18	1.60	15.94	21.18	1.58	1.58	1.58	1.58
0.50	T	7	17.20	0.88	15.76	18.65	9.30	0.67	8.20	10.43	16.94	19.46	1.56	14.35	19.46	1.66	1.66	1.66	1.66
0.60	U	7	17.06	0.99	15.44	18.68	9.47	0.55	8.56	10.37	15.77	17.97	1.10	13.97	17.97	1.15	1.15	1.15	1.15
0.70	R	7	16.97	1.04	15.26	18.67	9.67	0.49	8.87	10.47	14.79	16.07	0.78	13.51	16.07	1.01	1.01	1.01	1.01
0.80	N	7	16.97	0.91	15.47	18.46	9.87	0.48	9.08	10.66	14.07	15.06	0.60	13.08	15.06	0.75	0.75	0.75	0.75
0.90	T	7	16.91	0.76	15.66	18.15	9.85	0.45	9.11	10.60	13.53	14.25	0.44	12.82	14.25	0.54	0.54	0.54	0.54
1.00	T	7	16.83	0.70	15.69	17.98	9.81	0.43	9.10	10.52	12.99	13.47	0.29	12.50	13.47	0.55	0.55	0.55	0.55

LANDMARK - LT TROCHANTER

(19)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	T	7	3.28	0.90	1.82	4.75	6.44	0.63	5.41	7.46	3.60	4.62	0.62	2.58	4.62	0.0	0.0	0.0	0.0
0.10	T	7	3.38	0.82	2.03	4.73	6.49	0.61	5.49	7.48	3.63	4.59	0.58	2.68	4.59	0.11	0.11	0.11	0.11
0.20	F	7	3.40	0.80	2.09	4.71	6.51	0.66	5.43	7.59	3.65	4.56	0.56	2.73	4.56	0.03	0.03	0.03	0.03
0.30	O	7	3.29	0.87	1.87	4.72	6.51	0.73	5.31	7.70	3.51	4.49	0.54	2.73	4.49	0.11	0.11	0.11	0.11
0.40	R	7	3.32	0.93	1.80	4.85	6.59	0.73	5.39	7.78	3.59	4.39	0.49	2.80	4.39	0.09	0.09	0.09	0.09
0.50	W	7	3.40	0.97	1.82	4.99	6.69	0.70	5.54	7.84	3.58	4.44	0.44	2.86	4.44	0.13	0.13	0.13	0.13
0.60	A	7	3.40	0.94	1.85	4.94	6.69	0.66	5.60	7.78	3.58	4.27	0.42	2.89	4.27	0.01	0.01	0.01	0.01
0.70	R	7	3.39	0.92	1.88	4.89	6.66	0.64	5.62	7.71	3.59	4.25	0.40	2.93	4.25	0.03	0.03	0.03	0.03
0.80	D	7	3.37	0.91	1.87	4.86	6.59	0.63	5.56	7.63	3.62	4.24	0.38	3.00	4.24	0.08	0.08	0.08	0.08
0.90	T	7	3.39	0.89	1.92	4.86	6.60	0.65	5.52	7.67	3.47	4.41	0.57	2.53	4.41	0.15	0.15	0.15	0.15
1.00	T	7	3.42	0.87	2.00	4.84	6.63	0.70	5.48	7.79	3.25	4.98	1.06	1.51	4.98	0.23	0.23	0.23	0.23
0.0	T	7	3.42	0.87	2.00	4.84	6.63	0.70	5.48	7.79	3.25	4.98	1.06	1.51	4.98	0.0	0.0	0.0	0.0
0.10	T	7	3.45	0.87	2.03	4.87	6.66	0.71	5.49	7.83	3.37	4.67	0.80	2.06	4.67	0.12	0.12	0.12	0.12
0.20	T	7	3.45	0.87	2.02	4.88	6.70	0.74	5.49	7.83	3.37	4.43	0.58	2.52	4.43	0.11	0.11	0.11	0.11
0.30	R	7	3.44	0.86	2.04	4.85	6.66	0.76	5.41	7.92	3.57	4.37	0.49	2.77	4.37	0.10	0.10	0.10	0.10
0.40	E	7	3.46	0.84	2.07	4.84	6.54	0.81	5.22	7.87	3.62	4.42	0.49	2.82	4.42	0.13	0.13	0.13	0.13
0.50	T	7	3.45	0.85	2.05	4.85	6.43	0.88	4.99	7.86	3.63	4.43	0.49	2.83	4.43	0.12	0.12	0.12	0.12
0.60	U	7	3.34	0.89	1.88	4.80	6.51	0.77	5.25	7.77	3.63	4.40	0.47	2.85	4.40	0.14	0.14	0.14	0.14
0.70	R	7	3.27	0.91	1.77	4.77	6.58	0.66	5.50	7.66	3.64	4.40	0.46	2.88	4.40	0.10	0.10	0.10	0.10
0.80	N	7	3.31	0.90	1.84	4.78	6.61	0.57	5.67	7.54	3.56	4.43	0.47	2.89	4.43	0.05	0.05	0.05	0.05
0.90	T	7	3.31	0.89	1.85	4.77	6.53	0.56	5.61	7.45	3.64	4.52	0.54	2.76	4.52	0.08	0.08	0.08	0.08
1.00	T	7	3.28	0.90	1.82	4.75	6.44	0.63	5.41	7.46	3.50	4.62	0.62	2.58	4.62	0.11	0.11	0.11	0.11

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE: N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	5 PCT	95 PCT	Moved
0.0	4	19.36	1.08	17.60	21.12	5.38	0.33	4.84	5.92	11.08	1.02	9.40	12.75	0.0	0.0	0.0	0.0
0.10	4	19.66	0.95	18.10	21.22	5.49	0.34	4.93	6.05	11.07	1.01	9.41	12.73	0.32	0.32	0.32	0.32
F 0.20	4	19.83	0.90	18.36	21.31	5.53	0.37	4.92	6.15	11.09	1.01	9.43	12.75	0.18	0.18	0.18	0.50
O 0.30	4	19.74	0.92	18.23	21.25	5.47	0.24	5.07	5.86	11.15	1.04	9.45	12.85	0.13	0.13	0.13	0.63
R 0.40	5	19.74	0.86	18.33	21.16	5.63	0.59	4.66	6.60	11.58	1.28	9.49	13.68	0.46	1.09	1.09	1.09
W 0.50	5	19.74	0.82	18.41	21.08	5.61	0.56	4.69	6.53	11.58	1.28	9.49	13.67	0.03	1.12	1.12	1.12
A 0.60	5	19.73	0.77	18.47	20.99	5.63	0.53	4.76	6.50	11.54	1.33	9.36	13.71	0.05	1.17	1.17	1.17
R 0.70	5	19.72	0.77	18.46	20.99	5.65	0.55	4.74	6.55	11.50	1.35	9.29	13.70	0.05	1.22	1.22	1.22
D 0.80	5	19.70	0.72	18.52	20.88	5.67	0.59	4.70	6.54	11.45	1.30	9.32	13.59	0.05	1.27	1.27	1.27
O 0.90	5	19.64	0.69	18.50	20.78	5.69	0.50	4.88	6.51	11.40	1.27	9.30	13.51	0.08	1.35	1.35	1.35
1.00	5	19.57	0.74	18.37	20.78	5.71	0.41	5.04	6.39	11.36	1.27	9.28	13.44	0.08	1.44	1.44	1.44
0.0	5	19.57	0.74	18.37	20.78	5.71	0.41	5.04	6.39	11.36	1.27	9.28	13.44	0.0	0.0	0.0	0.0
0.10	5	19.68	0.60	18.70	20.67	5.72	0.45	4.99	6.46	11.42	1.24	9.38	13.46	0.13	0.13	0.13	0.13
0.20	5	19.78	0.49	18.98	20.58	5.75	0.51	4.91	6.59	11.46	1.24	9.42	13.49	0.11	0.23	0.23	0.23
R 0.30	5	19.76	0.53	18.88	20.63	5.76	0.67	4.66	6.85	11.45	1.28	9.36	13.54	0.02	0.26	0.26	0.26
E 0.40	4	19.63	0.71	18.47	20.80	5.39	0.50	4.57	6.22	11.07	1.07	9.32	12.82	0.54	0.80	0.80	0.80
T 0.50	4	19.54	0.78	18.26	20.82	5.27	0.39	4.64	5.91	11.09	1.08	9.31	12.87	0.15	0.95	0.95	0.95
U 0.60	4	19.41	0.93	17.87	20.94	5.24	0.84	4.84	5.65	11.07	1.12	9.24	12.91	0.14	1.09	1.09	1.09
R 0.70	4	19.42	0.94	17.88	20.96	5.29	0.22	4.93	5.65	11.08	1.12	9.24	12.91	0.05	1.14	1.14	1.14
N 0.80	4	19.62	0.76	18.37	20.86	5.47	0.36	4.89	6.06	11.10	1.07	9.35	12.85	0.27	1.41	1.41	1.41
O 0.90	4	19.54	0.86	18.13	20.95	5.46	0.31	4.95	5.97	11.10	1.04	9.40	12.80	0.07	1.48	1.48	1.48
1.00	4	19.36	1.08	17.60	21.12	5.38	0.33	4.84	5.92	11.08	1.02	9.40	12.75	0.20	1.68	1.68	1.68

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE: N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	5 PCT	95 PCT	Moved
0.0	7	-3.64	1.02	-5.31	-1.97	7.72	0.73	6.52	8.92	18.64	0.85	17.25	20.04	0.0	0.0	0.0	0.0
0.10	7	-3.68	0.90	-5.16	-2.19	7.76	0.74	6.54	8.98	18.64	0.85	17.25	20.02	0.06	0.06	0.06	0.06
F 0.20	7	-3.78	0.87	-5.21	-2.35	7.82	0.81	6.49	9.15	18.65	0.88	17.21	20.10	0.12	0.12	0.12	0.12
O 0.30	7	-3.93	0.89	-5.39	-2.47	7.90	0.83	6.54	9.25	18.76	0.96	17.19	20.34	0.20	0.38	0.38	0.38
R 0.40	7	-3.81	0.99	-5.43	-2.19	7.92	0.76	6.67	9.17	18.90	0.98	17.30	20.51	0.19	0.57	0.57	0.57
W 0.50	7	-3.60	1.08	-5.36	-1.83	7.93	0.66	6.84	9.02	19.34	0.99	17.42	20.66	0.25	0.82	0.82	0.82
A 0.60	7	-3.43	1.11	-5.25	-1.61	7.87	0.53	7.01	8.74	19.22	0.98	17.61	20.83	0.25	1.07	1.07	1.07
R 0.70	7	-3.25	1.13	-5.10	-1.40	7.85	0.45	7.12	8.59	19.37	1.03	17.69	21.06	0.24	1.31	1.31	1.31
D 0.80	7	-3.02	1.13	-4.88	-1.16	7.91	0.57	6.97	8.85	19.47	1.11	17.65	21.30	0.26	1.57	1.57	1.57
O 0.90	7	-2.79	1.16	-4.69	-0.90	7.99	0.68	6.88	9.10	19.52	1.15	17.63	21.40	0.24	1.81	1.81	1.81
1.00	7	-2.59	1.21	-4.58	-0.59	8.08	0.74	6.87	9.28	19.53	1.17	17.61	21.46	0.23	2.03	2.03	2.03
0.0	7	-2.59	1.21	-4.58	-0.59	8.08	0.74	6.87	9.28	19.53	1.17	17.61	21.46	0.0	0.0	0.0	0.0
0.10	7	-2.67	1.11	-4.49	-0.85	8.00	0.64	6.95	9.06	19.43	1.06	17.69	21.17	0.15	0.15	0.15	0.15
0.20	7	-2.80	1.09	-4.58	-1.02	7.94	0.57	7.00	8.88	19.31	1.01	17.65	20.96	0.19	0.34	0.34	0.34
R 0.30	7	-3.10	1.08	-4.87	-1.34	7.90	0.55	7.00	8.88	19.15	1.03	17.46	20.84	0.35	0.69	0.69	0.69
E 0.40	7	-3.29	1.06	-5.03	-1.55	7.83	0.61	6.84	8.82	19.03	1.00	17.39	20.88	0.23	0.92	0.92	0.92
T 0.50	7	-3.39	1.06	-5.14	-1.65	7.78	0.70	6.63	8.94	18.93	0.96	17.36	20.50	0.16	1.07	1.07	1.07
U 0.60	7	-3.49	1.14	-5.36	-1.61	7.78	0.76	6.53	9.03	18.85	0.97	17.26	20.44	0.12	1.19	1.19	1.19
R 0.70	7	-3.54	1.22	-5.54	-1.53	7.80	0.82	6.45	9.14	18.80	0.98	17.19	20.41	0.07	1.27	1.27	1.27
N 0.80	7	-3.53	1.17	-5.44	-1.61	7.88	0.88	6.43	9.32	18.78	0.94	17.24	20.32	0.08	1.35	1.35	1.35
O 0.90	7	-3.57	1.07	-5.32	-1.81	7.82	0.82	6.48	9.16	18.71	0.88	17.26	20.16	0.10	1.45	1.45	1.45
1.00	7	-3.64	1.02	-5.31	-1.97	7.72	0.73	6.52	8.92	18.64	0.85	17.25	20.04	0.14	1.59	1.59	1.59

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	6	3.71	0.61	2.71	4.71	12.70	0.60	11.71	13.69	12.94	1.36	10.71	15.17	0.0	0.0		
0.10	6	3.98	0.70	2.84	5.13	12.50	0.43	11.79	13.61	13.30	1.33	11.11	15.48	0.49	0.49		
F 0.20	6	4.15	0.73	2.96	5.35	12.38	0.50	11.56	13.19	13.76	1.25	11.71	15.81	0.51	1.00		
O 0.30	6	4.20	0.64	3.15	5.24	12.42	0.43	11.72	13.12	14.55	1.11	12.73	16.38	0.79	1.80		
R 0.40	6	4.75	0.71	3.59	5.90	12.36	0.39	11.72	12.99	15.53	1.01	13.87	17.19	1.13	2.92		
W 0.50	6	5.51	0.82	4.16	6.86	12.22	0.43	11.52	12.93	16.55	0.93	15.03	18.08	1.28	4.20		
A 0.60	6	6.04	0.94	4.50	7.58	12.03	0.48	11.24	12.82	17.45	0.85	16.06	18.85	1.06	5.27		
R 0.70	6	6.49	0.96	4.91	8.07	11.80	0.55	10.90	12.69	18.24	0.87	16.79	19.64	0.91	6.18		
D 0.80	6	6.76	0.86	5.36	8.17	11.51	0.58	10.56	12.47	18.82	0.95	17.06	20.17	0.56	6.74		
O 0.90	6	7.10	0.79	5.80	8.40	11.28	0.65	10.21	12.35	18.82	0.92	17.32	20.32	0.46	7.20		
1.00	6	7.48	0.75	6.25	8.71	11.07	0.76	9.82	12.32	18.96	0.88	17.52	20.40	0.46	7.66		
0.0	6	7.48	0.75	6.25	8.71	11.07	0.76	9.82	12.32	18.96	0.88	17.52	20.40	0.0	0.0		
0.10	6	6.78	0.75	5.54	8.01	11.64	0.68	10.53	12.75	17.36	0.75	16.74	19.18	1.35	1.35		
0.20	6	6.06	0.84	4.69	7.44	12.19	0.70	11.05	13.34	16.93	0.72	15.74	18.11	1.37	2.73		
R 0.30	6	5.46	0.94	3.92	7.00	12.55	0.67	11.46	13.65	15.95	0.87	14.53	17.37	1.20	3.93		
E 0.40	6	4.99	0.91	3.49	6.49	12.75	0.67	11.65	13.85	15.24	0.98	13.63	16.84	0.88	4.80		
T 0.50	6	4.52	0.82	3.17	5.86	12.86	0.69	11.73	14.00	14.60	1.07	12.86	16.35	0.80	5.60		
U 0.60	6	4.18	0.75	2.95	5.41	12.84	0.62	11.83	13.85	14.17	1.07	12.42	15.92	0.55	6.15		
R 0.70	6	4.00	0.75	2.76	5.23	12.82	0.55	11.92	13.73	13.76	1.06	12.01	15.51	0.45	6.60		
N 0.80	6	3.98	0.61	2.98	4.97	12.87	0.54	11.97	13.76	13.44	1.07	11.69	15.19	0.33	6.93		
O 0.90	6	3.86	0.54	2.97	4.74	12.79	0.49	11.98	13.59	13.19	1.21	11.21	15.17	0.29	7.21		
1.00	6	3.71	0.61	2.71	4.71	12.70	0.60	11.71	13.69	12.94	1.36	10.71	15.17	0.30	7.52		

307

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	3	13.00	0.81	11.66	14.34	10.72	0.61	9.72	11.72	12.69	0.77	12.57	12.81	0.0	0.0		
0.10	3	13.27	0.95	11.72	14.82	10.88	0.55	9.99	11.78	14.09	0.27	13.64	14.53	1.43	1.43		
F 0.20	4	13.55	0.99	11.92	15.18	10.60	0.82	9.25	11.96	14.92	1.28	12.82	17.01	0.92	2.35		
O 0.30	4	13.73	1.13	11.87	15.59	10.31	1.01	8.65	11.97	16.67	0.94	15.13	18.20	1.79	4.14		
R 0.40	4	14.33	1.10	12.52	16.13	10.15	0.56	8.58	11.73	18.30	0.67	17.20	19.41	1.75	5.88		
W 0.50	4	15.08	1.06	13.35	16.82	10.09	0.86	8.67	11.50	19.86	0.46	19.11	20.61	1.74	7.62		
A 0.60	4	15.69	1.15	13.80	17.59	10.32	0.75	9.09	11.55	20.54	0.50	19.73	21.36	0.94	8.56		
R 0.70	3	15.87	1.28	13.77	17.98	10.68	0.66	9.59	11.77	21.27	0.48	20.49	22.06	0.83	9.40		
D 0.80	3	16.43	1.37	14.19	18.67	10.77	0.59	9.81	11.73	21.52	0.53	20.81	22.83	0.61	10.01		
O 0.90	3	16.97	1.11	15.15	18.78	10.85	0.68	9.74	11.96	21.49	0.42	20.80	22.18	0.54	10.55		
1.00	3	17.44	0.74	16.22	18.66	10.96	0.81	9.63	12.29	21.36	0.42	20.68	22.04	0.51	11.06		
0.0	3	17.44	0.74	16.22	18.66	10.96	0.81	9.63	12.29	21.36	0.42	20.68	22.04	0.0	0.0		
0.10	3	16.46	1.15	14.58	18.34	10.87	0.77	9.62	12.13	20.53	1.03	18.95	22.31	1.23	1.23		
0.20	3	15.46	1.59	12.85	18.07	10.77	0.79	9.48	12.06	19.72	1.70	16.94	22.51	1.35	2.58		
R 0.30	3	14.54	1.69	11.76	17.31	10.66	0.82	9.31	12.01	18.45	1.75	15.59	21.32	1.58	4.15		
E 0.40	3	13.96	1.56	11.39	16.52	10.56	0.92	9.05	12.06	17.29	1.61	14.65	19.93	1.31	5.46		
T 0.50	3	13.58	1.67	10.85	16.32	10.65	0.73	9.46	11.85	16.03	1.42	13.70	18.37	1.31	6.77		
U 0.60	3	13.38	1.64	10.68	16.07	10.83	0.66	9.76	11.91	15.09	1.04	13.38	16.80	0.99	7.76		
R 0.70	3	13.20	1.47	10.78	15.62	11.04	0.55	10.14	11.94	14.27	0.73	13.06	15.47	0.87	8.62		
N 0.80	3	13.15	1.09	11.36	14.94	11.20	0.49	10.39	12.01	13.84	0.42	13.11	14.16	0.65	9.28		
O 0.90	3	13.09	0.92	11.58	14.60	10.98	0.59	10.01	11.55	13.16	0.16	12.91	13.42	0.52	9.80		
1.00	3	13.00	0.81	11.66	14.34	10.72	0.61	9.72	11.72	12.69	0.07	12.57	12.81	0.55	10.35		

MOVEMENT: RIGHT HAND MOVES FROM STICK CONTROLLER AT +20.0, 0.0, +15.0 TO HATCH RELEASE CONTROLLER AT +11.0, -13.0, +23.0 AND RETURNS. THIS MOVEMENT IS PRECEDED BY LEFT HAND MOVING FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO STICK CONTROLLER AND IS FOLLOWED BY LEFT HAND RETURNING BACK TO STICK CONTROLLER.

MOTION NUMBER - 11160
BACK ANGLE - 30

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.83	0.15	0.60 TO 1.00 SECS.
RIGHT REV	0.86	0.21	0.70 TO 1.20 SECS.

LANDMARK - NASION (1)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	0.80	1.37	-1.45	3.04	-0.21	0.62	-1.23	0.80	27.63	1.35	25.41	29.84	0.0	0.0	0.0	
0.10	7	0.14	1.37	-2.11	2.39	-1.22	0.88	-2.65	0.22	27.92	1.30	25.79	30.05	1.23	1.23	1.23	
F 0.20	7	0.21	1.36	-2.01	2.43	-1.41	0.83	-2.78	-0.05	27.90	1.33	25.72	30.07	0.21	1.44	1.44	
O 0.30	7	0.17	1.53	-2.33	2.68	-1.51	0.76	-2.75	-0.27	27.94	1.22	25.91	29.90	0.10	1.55	1.55	
R 0.40	7	0.15	1.36	-2.07	2.37	-1.65	0.69	-2.77	-0.32	27.94	1.22	25.90	29.91	0.14	1.69	1.69	
W 0.50	7	0.12	1.45	-2.26	2.50	-1.55	0.62	-2.77	-0.34	27.88	1.08	26.11	29.66	0.10	1.78	1.78	
A 0.60	7	-0.02	1.47	-2.44	2.40	-1.41	0.74	-2.62	-0.19	27.85	1.07	26.11	29.60	0.21	1.99	1.99	
K 0.70	7	-0.01	1.58	-2.61	2.59	-1.28	0.89	-2.74	0.13	27.84	1.07	26.08	29.60	0.13	2.12	2.12	
D 0.80	7	-0.11	1.53	-2.61	2.39	-1.16	0.97	-2.75	0.43	27.87	1.06	26.14	29.61	0.16	2.28	2.28	
O 0.90	7	-0.14	1.57	-2.71	2.43	-1.06	0.89	-2.52	0.40	27.88	1.02	26.20	29.55	0.10	2.38	2.38	
1.00	7	-0.12	1.54	-2.65	2.40	-1.00	0.95	-2.56	0.56	27.93	1.09	26.14	29.72	0.08	2.47	2.47	
0.0	7	-0.12	1.54	-2.65	2.40	-1.00	0.95	-2.56	0.56	27.93	1.09	26.14	29.72	0.0	0.0	0.0	
0.10	7	0.05	1.64	-2.65	2.74	-0.20	0.93	-1.72	1.33	27.83	1.21	25.83	29.80	0.83	0.83	0.83	
0.20	7	0.28	1.52	-2.21	2.78	-0.02	0.68	-1.14	1.10	27.80	1.18	25.85	29.74	0.30	1.13	1.13	
R 0.30	7	0.42	1.46	-1.97	2.81	0.03	0.75	-1.21	1.26	27.79	1.16	25.90	29.69	0.14	1.27	1.27	
E 0.40	7	0.46	1.48	-1.98	2.89	0.09	0.79	-1.20	1.38	27.79	1.11	25.96	29.61	0.07	1.34	1.34	
T 0.50	7	0.51	1.39	-1.77	2.79	0.15	0.87	-1.27	1.38	27.81	1.15	25.93	29.70	0.09	1.43	1.43	
U 0.60	7	0.56	1.32	-1.61	2.73	0.11	0.84	-1.27	1.50	27.86	1.06	26.12	29.59	0.08	1.51	1.51	
R 0.70	7	0.59	1.27	-1.50	2.67	0.06	0.82	-1.28	1.40	27.77	1.19	25.82	29.71	0.10	1.62	1.62	
N 0.80	7	0.71	1.20	-1.26	2.68	-0.02	0.72	-1.20	1.16	27.68	1.24	25.65	29.72	0.17	1.74	1.74	
0.90	7	0.80	1.26	-1.27	2.86	-0.11	0.61	-1.11	0.90	27.67	1.24	25.64	29.69	0.12	1.91	1.91	
1.00	7	0.80	1.37	-1.45	3.04	-0.21	0.62	-1.23	0.80	27.53	1.35	25.41	29.84	0.11	2.02	2.02	

LANDMARK - CERVICALE (2)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	-6.51	0.78	-7.79	-5.22	0.55	1.25	-1.50	2.59	21.57	1.51	19.10	24.04	0.0	0.0	0.0	
0.10	7	-7.31	1.17	-9.23	-5.40	0.39	0.54	-0.50	1.28	21.54	1.41	19.19	23.83	0.83	0.83	0.83	
F 0.20	7	-7.19	1.19	-9.13	-5.24	0.47	0.59	-0.49	1.44	21.54	1.41	19.24	23.85	0.15	0.98	0.98	
O 0.30	7	-7.27	1.22	-9.26	-5.27	0.51	0.62	-0.51	1.54	21.59	1.46	19.20	23.99	0.10	1.08	1.08	
R 0.40	7	-7.87	0.95	-8.72	-5.61	0.65	0.75	-0.59	1.88	21.48	1.39	19.21	23.75	0.20	1.28	1.28	
W 0.50	7	-7.14	0.93	-8.67	-5.61	0.82	0.91	-0.67	2.30	21.35	1.36	19.13	23.57	0.21	1.49	1.49	
A 0.60	7	-7.19	0.95	-8.75	-5.64	0.96	0.75	-0.27	2.20	21.40	1.39	19.18	23.74	0.19	1.69	1.69	
R 0.70	7	-7.03	0.91	-8.51	-5.55	1.27	0.97	-0.32	2.86	21.48	1.42	19.15	23.80	0.35	2.04	2.04	
D 0.80	7	-6.99	0.93	-8.52	-5.46	1.29	1.02	-0.38	2.96	21.54	1.45	19.16	23.91	0.08	2.11	2.11	
0.90	7	-6.95	0.97	-8.54	-5.36	1.25	1.16	-0.65	3.15	21.48	1.46	19.08	23.87	0.08	2.19	2.19	
1.00	7	-7.05	0.96	-8.62	-5.48	1.19	1.26	-0.88	3.26	21.48	1.47	19.07	23.89	0.12	2.31	2.31	
0.0	7	-7.05	0.96	-8.62	-5.48	1.19	1.26	-0.88	3.26	21.48	1.47	19.07	23.89	0.0	0.0	0.0	
0.10	7	-6.99	0.98	-8.59	-5.40	1.22	1.23	-0.80	3.23	21.48	1.42	19.15	23.82	0.06	0.06	0.06	
0.20	7	-6.86	0.89	-8.31	-5.40	1.20	1.15	-0.70	3.09	21.52	1.46	19.11	23.92	0.14	0.21	0.21	
R 0.30	7	-6.85	0.84	-8.24	-5.47	1.10	1.10	-0.71	2.91	21.57	1.51	19.10	24.05	0.11	0.32	0.32	
E 0.40	7	-6.85	0.85	-8.25	-5.45	0.95	0.99	-0.67	2.57	21.54	1.47	19.13	23.94	0.07	0.47	0.47	
T 0.50	7	-6.79	0.83	-8.15	-5.45	0.91	0.98	-0.70	2.52	21.54	1.42	19.21	23.87	0.07	0.54	0.54	
U 0.60	7	-6.72	0.71	-7.88	-5.55	0.91	1.12	-0.93	2.75	21.59	1.38	19.33	23.85	0.09	0.63	0.63	
R 0.70	7	-6.61	0.73	-7.80	-5.41	0.97	1.48	-1.45	3.39	21.53	1.41	19.21	23.85	0.14	0.77	0.77	
N 0.80	7	-6.62	0.71	-7.78	-5.45	0.74	1.27	-1.35	2.82	21.51	1.41	19.19	23.83	0.23	1.00	1.00	
0.90	7	-6.67	0.82	-7.82	-5.32	0.49	1.18	-1.44	2.43	21.54	1.47	19.10	23.94	0.25	1.25	1.25	
1.00	7	-6.51	0.78	-7.79	-5.22	0.55	1.25	-1.50	2.59	21.57	1.51	19.10	24.04	0.18	1.43	1.43	

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	T	7	-2.05	1.47	-4.46	0.37	0.66	1.13	-1.20	1.13	20.75	1.04	19.06	22.45	0.0	0.0
0.10	F	7	-2.34	1.14	-4.21	0.47	0.29	0.91	-1.21	1.79	20.64	0.96	19.05	22.19	0.49	0.49
0.20	R	7	-2.30	1.11	-4.13	0.48	0.21	0.78	-1.07	1.49	20.57	1.00	18.94	22.21	0.10	0.59
0.30	U	7	-2.32	1.14	-4.18	0.46	0.14	0.79	-1.16	1.43	20.58	1.00	18.95	22.22	0.08	0.66
0.40	T	7	-2.31	1.12	-4.15	0.47	0.21	0.81	-1.12	1.54	20.54	1.00	18.88	22.20	0.08	0.75
0.50	W	7	-2.46	1.42	-4.79	0.13	0.35	0.89	-1.11	1.82	20.48	0.99	18.86	22.11	0.22	0.97
0.60	A	7	-2.78	1.61	-5.42	0.14	0.42	1.17	-1.50	2.34	20.58	1.08	18.81	22.35	0.34	1.30
0.70	R	7	-2.73	1.45	-5.11	0.35	0.62	1.38	-1.64	2.88	20.52	1.05	18.90	22.34	0.21	1.52
0.80	D	7	-2.86	1.44	-5.22	0.50	0.71	1.44	-1.64	3.07	20.56	0.99	18.96	22.37	0.17	1.68
0.90	T	7	-2.89	1.45	-5.26	0.51	0.82	1.46	-1.57	3.22	20.65	0.99	19.03	22.27	0.11	1.80
1.00	U	7	-2.69	1.46	-5.09	0.29	0.90	1.53	-1.61	3.41	20.71	1.06	18.98	22.45	0.22	2.02
0.0	T	7	-2.69	1.46	-5.09	0.29	0.90	1.53	-1.61	3.41	20.71	1.06	18.98	22.45	0.0	0.0
0.10	U	7	-2.72	1.42	-5.04	0.39	0.85	1.28	-1.20	3.01	20.51	1.05	18.89	22.33	0.11	0.11
0.20	R	7	-2.61	1.51	-5.09	0.14	0.85	1.24	-1.19	2.88	20.59	1.03	19.00	22.38	0.14	0.25
0.30	E	7	-2.55	1.52	-5.05	0.06	0.86	1.25	-1.19	2.90	20.72	1.04	19.02	22.43	0.07	0.32
0.40	T	7	-2.48	1.53	-4.99	0.03	0.73	1.18	-1.21	2.67	20.56	1.05	18.95	22.38	0.16	0.47
0.50	U	7	-2.41	1.50	-4.87	0.04	0.73	1.23	-1.28	2.75	20.70	1.03	19.01	22.39	0.08	0.55
0.60	U	7	-2.30	1.44	-4.66	0.06	0.79	1.30	-1.34	2.92	20.71	1.09	18.93	22.49	0.13	0.68
0.70	N	7	-2.22	1.24	-4.26	0.18	0.92	1.50	-1.53	3.38	20.69	1.06	18.95	22.43	0.15	0.83
0.80	T	7	-2.26	1.42	-4.58	0.06	0.76	1.17	-1.16	2.67	20.58	0.99	18.06	22.30	0.17	1.00
0.90	U	7	-2.22	1.58	-4.81	0.38	0.62	1.00	-1.03	2.26	20.72	1.10	18.92	22.51	0.15	1.15
1.00	T	7	-2.05	1.47	-4.46	0.37	0.66	1.13	-1.20	2.51	20.75	1.04	19.06	22.45	0.18	1.33

LANDMARK - RT ACROMION (4)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	T	7	-3.99	1.03	-5.69	0.37	0.84	0.62	-8.86	0.81	19.92	1.17	18.00	21.83	0.0	0.0
0.10	F	7	-5.14	0.81	-6.47	0.38	0.78	0.70	-8.94	0.63	20.32	1.20	18.05	22.00	1.15	1.15
0.20	R	7	-5.26	0.71	-6.42	0.40	0.73	0.58	-8.69	0.78	20.38	1.25	18.02	22.14	0.14	1.30
0.30	U	7	-5.51	0.68	-6.62	0.39	0.78	0.69	-8.71	0.66	20.11	1.21	18.13	22.10	0.29	1.59
0.40	R	7	-5.75	0.80	-7.06	0.43	0.75	0.77	-8.79	0.66	20.16	1.26	18.09	22.22	0.25	1.84
0.50	W	7	-6.15	0.82	-7.49	0.48	0.75	0.51	-8.43	0.75	20.22	1.18	18.28	22.17	0.41	2.25
0.60	A	7	-6.52	1.01	-8.17	0.46	0.75	0.66	-8.26	0.74	20.25	1.22	18.26	22.25	0.38	2.63
0.70	R	7	-6.87	1.03	-8.56	0.51	0.72	0.55	-8.15	0.74	20.31	1.28	18.21	22.41	0.44	3.07
0.80	D	7	-6.87	1.00	-8.52	0.52	0.73	0.46	-8.05	0.74	20.39	1.21	18.40	22.38	0.10	3.18
0.90	T	7	-6.77	1.02	-8.44	0.50	0.73	0.50	-8.16	0.74	20.39	1.19	18.45	22.33	0.11	3.28
1.00	U	7	-6.80	0.94	-8.34	0.52	0.73	0.68	-8.47	0.74	20.45	1.20	18.48	22.41	0.07	3.35
0.0	T	7	-6.80	0.94	-8.34	0.52	0.73	0.68	-8.47	0.74	20.45	1.20	18.48	22.41	0.0	0.0
0.10	R	7	-6.61	1.06	-8.34	0.47	0.75	0.58	-8.45	0.74	20.31	1.24	18.29	22.35	0.28	0.28
0.20	T	7	-6.17	1.00	-7.80	0.54	0.73	0.56	-8.55	0.74	20.22	1.25	18.18	22.26	0.7	0.75
0.30	E	7	-5.76	0.89	-7.23	0.49	0.76	0.62	-8.58	0.74	20.18	1.18	18.25	22.11	0.41	1.16
0.40	U	7	-5.32	0.97	-6.90	0.37	0.76	0.62	-8.66	0.70	20.15	1.07	18.40	21.90	0.44	1.61
0.50	T	7	-4.89	0.95	-6.44	0.34	0.73	0.68	-8.75	0.62	20.13	1.04	18.43	21.86	0.43	2.03
0.60	U	7	-4.53	1.05	-6.25	0.28	0.76	0.64	-8.74	0.63	20.13	1.03	18.45	21.81	0.36	2.39
0.70	R	7	-4.38	1.12	-6.22	0.53	0.76	0.64	-8.75	0.63	20.13	1.03	18.23	21.82	0.19	2.59
0.80	N	7	-4.09	1.02	-5.87	0.24	0.76	0.62	-8.77	0.63	19.99	1.08	18.22	21.76	0.19	2.77
0.90	T	7	-4.09	1.01	-5.76	0.24	0.78	0.66	-8.96	0.61	19.97	1.16	18.06	21.88	0.16	2.94
1.00	U	7	-3.99	1.03	-5.69	0.37	0.78	0.62	-8.86	0.61	19.92	1.17	18.00	21.83	0.13	3.06

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE SIZE	N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE	
			MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED CUM
0.0	T	7	19.07	0.57	18.14	20.00	-5.40	0.96	-3.82	9.81	13.05	11.47	0.99	9.81	13.05	0.0
0.10	F	7	18.97	0.68	17.86	20.09	-5.53	1.13	-7.38	-3.67	11.42	11.47	0.99	9.80	13.04	0.16
0.20	U	7	19.06	0.59	18.10	20.03	-5.55	1.12	-7.38	-3.72	11.43	11.43	1.04	9.72	13.14	0.10
0.30	D	7	19.09	0.62	18.08	20.11	-5.54	1.14	-7.44	-3.66	11.43	11.43	0.99	9.81	13.06	0.26
0.40	R	7	19.15	0.57	18.21	20.09	-5.50	1.05	-7.22	-3.77	11.39	11.39	1.06	9.66	13.13	0.29
0.50	W	7	19.13	0.59	18.16	20.11	-5.64	1.10	-7.44	-3.84	11.42	11.42	1.03	9.73	13.10	0.37
0.60	A	7	19.12	0.57	18.18	20.05	-5.62	1.14	-7.49	-3.75	11.38	11.38	0.97	9.73	13.10	0.52
0.70	R	7	19.15	0.50	18.32	19.98	-5.59	1.06	-7.33	-3.85	11.41	11.41	0.94	9.86	13.08	0.56
0.80	D	7	19.21	0.52	18.37	20.06	-5.59	1.16	-7.49	-3.69	11.38	11.38	0.96	9.80	12.95	0.62
0.90	N	7	19.18	0.68	18.06	20.30	-5.62	1.25	-7.67	-3.57	11.36	11.36	0.96	9.80	12.96	0.68
1.00		7	19.14	0.72	17.95	20.32	-5.49	1.10	-7.29	-3.68	11.44	11.44	1.02	9.77	13.12	0.73
0.0	T	7	19.14	0.72	17.95	20.32	-5.49	1.10	-7.29	-3.68	11.44	11.44	1.02	9.77	13.12	0.0
0.10	F	7	19.11	0.50	18.19	20.03	-5.54	1.18	-7.48	-3.60	11.41	11.41	1.00	9.77	13.06	0.0
0.20	R	7	19.13	0.49	18.32	19.94	-5.56	1.13	-7.40	-3.71	11.43	11.43	1.00	9.79	13.07	0.07
0.30	E	7	19.10	0.45	18.36	19.84	-5.48	1.15	-7.38	-3.59	11.46	11.46	0.98	9.85	13.07	0.10
0.40	U	7	19.12	0.53	18.24	19.99	-5.36	0.98	-6.97	-3.75	11.46	11.46	0.99	9.84	13.08	0.18
0.50	W	7	19.19	0.54	18.30	20.08	-5.34	0.74	-6.56	-4.11	11.45	11.45	1.01	9.80	13.10	0.30
0.60	R	7	19.21	0.48	18.42	19.99	-5.40	0.84	-6.78	-4.03	11.44	11.44	0.98	9.83	13.05	0.38
0.70	N	7	19.06	0.58	18.11	20.01	-5.36	0.91	-6.85	-3.87	11.45	11.45	1.00	9.81	13.09	0.45
0.80	D	7	19.16	0.58	18.20	20.12	-5.37	0.95	-6.92	-3.82	11.43	11.43	0.98	9.82	13.04	0.60
0.90	N	7	19.12	0.50	18.31	19.94	-5.42	0.91	-6.91	-3.93	11.44	11.44	0.97	9.85	13.02	0.70
1.00		7	19.07	0.57	18.14	20.00	-5.40	0.96	-6.98	-3.82	11.47	11.47	0.96	9.89	13.05	0.82

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	SIZE	N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVED
				MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	
0.0	T	7		-1.99	0.80	-3.30	-0.68	-7.21	0.68	-8.31	-6.10	-6.44	17.92	1.15	16.04	19.81	0.0	0.0
0.10	F	7		-3.09	0.95	-4.65	-1.54	-7.38	0.57	-8.32	-6.44	-6.55	17.82	1.15	15.93	19.71	1.12	1.12
0.20	D	7		-3.14	0.82	-4.48	-1.79	-7.44	0.55	-8.34	-6.55	-6.55	17.80	1.18	15.87	19.74	0.08	1.20
0.30	R	7		-3.44	0.77	-4.70	-2.18	-7.44	0.63	-8.47	-6.41	-6.55	17.88	1.19	15.94	19.83	0.32	1.52
0.40	W	7		-3.84	0.74	-5.05	-2.63	-7.46	0.56	-8.38	-6.55	-6.55	17.95	1.25	15.83	20.01	0.40	1.92
0.50	A	7		-4.24	0.85	-5.64	-2.84	-7.47	0.42	-8.16	-6.77	-6.81	18.11	1.13	16.26	19.97	0.44	2.35
0.60	R	7		-4.67	0.83	-6.04	-3.31	-7.46	0.40	-8.11	-6.81	-6.81	18.40	1.18	16.47	20.33	0.52	2.87
0.70	N	7		-4.71	0.74	-5.93	-3.50	-7.38	0.47	-8.15	-6.62	-6.62	18.57	1.22	16.57	20.56	0.19	3.06
0.80	D	7		-4.66	0.72	-5.84	-3.48	-7.37	0.45	-8.10	-6.64	-6.64	18.56	1.22	16.66	20.65	0.11	3.17
0.90	N	7		-4.72	0.88	-6.16	-3.27	-7.51	0.37	-8.11	-6.91	-6.91	18.58	1.20	16.71	20.64	0.15	3.32
1.00		7		-4.78	0.93	-6.30	-3.25	-7.46	0.60	-8.44	-6.48	-6.48	18.75	1.26	16.68	20.83	0.11	3.43
0.0	T	7		-4.78	0.93	-6.30	-3.25	-7.46	0.60	-8.44	-6.48	-6.48	18.75	1.26	16.68	20.83	0.0	0.0
0.10	F	7		-4.58	0.83	-5.93	-3.22	-7.46	0.53	-8.33	-6.58	-6.58	18.53	1.29	16.42	20.64	0.30	0.30
0.20	R	7		-4.18	0.86	-5.59	-2.77	-7.34	0.42	-8.03	-6.65	-6.65	18.35	1.24	16.31	20.39	0.45	0.75
0.30	E	7		-3.82	0.83	-5.18	-2.45	-7.16	0.48	-7.94	-6.38	-6.38	18.25	1.18	16.30	20.19	0.42	1.17
0.40	U	7		-3.54	1.07	-5.30	-1.79	-7.36	0.53	-8.23	-6.50	-6.50	18.18	1.18	16.25	20.11	0.35	1.52
0.50	W	7		-2.99	1.07	-4.74	-1.24	-7.33	0.59	-8.30	-6.37	-6.37	18.17	1.02	16.50	19.84	0.56	2.08
0.60	R	7		-2.47	0.95	-4.02	-0.92	-7.17	0.66	-8.24	-6.09	-6.09	18.08	1.08	16.31	19.85	0.55	2.63
0.70	N	7		-2.18	1.08	-3.95	-0.42	-7.14	0.73	-8.34	-5.94	-5.94	18.11	1.16	16.11	19.92	0.29	2.92
0.80	D	7		-2.14	0.64	-3.19	-1.08	-7.20	0.53	-8.07	-6.32	-6.32	18.91	1.08	16.24	19.79	0.08	3.00
0.90	N	7		-2.12	0.67	-3.22	-1.02	-7.31	0.51	-8.15	-6.47	-6.47	17.96	1.06	16.21	19.70	0.12	3.12
1.00		7		-1.99	0.80	-3.30	-0.68	-7.21	0.68	-8.31	-6.10	-6.10	17.92	1.15	16.04	19.81	0.17	3.29

4VMT NO. 11160/30

LANDMARK - RT GRIP CENTER (16)														
TIME T	SAMPLE SIZE,N	-----X-----			-----Y-----			-----Z-----			-----CO-ORDINATE-----			DISTANCE INCR
		MEAN	SE	95 PCT	MEAN	SE	95 PCT	MEAN	SE	95 PCT	SE	5 PCT	95 PCT	
0.0	7	18.45	0.74	17.23	-1.82	0.54	-2.70	-0.94	0.18	13.90	0.18	13.61	14.20	0.0
0.10	7	16.93	1.19	14.98	-2.90	0.52	-3.76	-2.04	0.88	13.82	0.88	12.38	15.26	1.87
F 0.20	7	16.27	1.64	13.57	-3.46	0.57	-4.39	-2.55	1.27	12.17	1.27	12.03	16.34	0.97
O 0.30	7	14.78	1.98	11.52	-4.14	1.06	-5.89	-2.40	1.99	12.03	1.99	12.03	18.55	1.94
R 0.40	7	12.55	2.28	8.82	-5.38	1.39	-7.67	-3.09	2.59	12.85	2.59	12.85	21.34	3.12
W 0.50	7	10.18	2.12	6.71	-7.00	1.72	-9.83	-4.17	2.12	15.86	2.12	15.86	22.81	7.89
A 0.60	7	7.89	0.72	6.71	-9.62	1.25	-11.66	-7.57	1.11	19.34	1.11	19.34	22.99	3.65
R 0.70	7	7.82	0.90	6.35	-11.97	0.92	-13.47	-10.46	0.61	21.17	0.61	20.99	22.99	3.93
D 0.80	7	9.31	0.85	7.92	-13.47	0.73	-14.67	-12.27	0.42	21.94	0.42	21.25	22.63	2.49
O 0.90	7	10.44	0.24	10.04	-13.84	0.61	-14.85	-12.84	0.31	21.82	0.31	21.32	22.33	17.96
1.00	7	10.66	0.53	9.79	-13.66	0.27	-14.10	-13.22	0.37	22.01	0.37	21.41	22.62	2.127
0.0	7	10.66	0.53	9.79	-13.66	0.27	-14.10	-13.22	0.37	22.01	0.37	21.41	22.62	0.34
0.10	7	9.15	0.85	7.75	-12.38	0.68	-13.49	-11.27	0.56	21.88	0.56	20.95	22.80	0.0
0.20	7	9.00	0.75	7.77	-10.12	1.68	-12.88	-7.37	0.64	21.44	0.64	20.39	22.49	1.98
R 0.30	7	10.53	2.18	6.94	-10.12	2.14	-11.35	-4.32	1.24	18.30	1.24	18.30	22.35	2.30
E 0.40	7	13.44	2.51	9.32	-5.59	1.75	-8.46	-2.73	1.92	15.03	1.92	15.03	21.35	2.97
U 0.50	7	15.97	2.08	12.56	-3.77	1.61	-6.41	-1.14	1.66	13.52	1.66	13.52	18.95	7.25
U 0.60	7	16.72	1.63	14.06	-3.31	1.29	-5.43	-1.20	1.42	13.16	1.42	13.16	17.84	4.25
R 0.70	7	17.69	0.83	16.33	-2.49	0.62	-3.51	-1.47	0.77	13.36	0.77	13.36	15.88	3.68
N 0.80	7	18.10	0.71	16.94	-2.07	0.39	-2.70	-1.43	0.37	13.98	0.37	13.71	14.82	1.15
O 0.90	7	18.31	0.74	17.09	-1.93	0.43	-2.63	-1.23	0.16	13.98	0.16	13.71	14.24	1.54
1.00	7	18.45	0.74	17.23	-1.82	0.54	-2.70	-0.94	0.18	13.90	0.18	13.61	14.20	0.73

LANDMARK - RT TROCHANTER (18)														
TIME T	SAMPLE SIZE,N	-----X-----			-----Y-----			-----Z-----			-----CO-ORDINATE-----			DISTANCE INCR
		MEAN	SE	95 PCT	MEAN	SE	95 PCT	MEAN	SE	95 PCT	SE	5 PCT	95 PCT	
0.0	7	3.50	0.93	1.97	-7.40	0.93	-8.92	-5.88	0.59	2.67	0.59	2.67	4.63	0.0
0.10	7	3.36	1.03	1.67	-7.34	0.91	-8.82	-5.85	0.65	2.50	0.65	2.50	4.64	0.0
F 0.20	7	3.48	0.73	2.17	-7.25	0.86	-8.67	-5.84	0.62	2.64	0.62	2.64	4.66	0.17
O 0.30	7	3.44	0.72	2.25	-7.22	0.94	-8.77	-5.68	0.64	2.56	0.64	2.56	4.66	0.16
R 0.40	7	3.40	0.81	2.08	-7.20	0.87	-8.62	-5.77	0.67	2.51	0.67	2.51	4.70	0.07
W 0.50	7	3.44	0.81	2.11	-7.31	0.75	-8.54	-6.08	0.65	2.58	0.65	2.58	4.72	0.43
A 0.60	7	3.39	0.85	2.00	-7.35	0.89	-8.80	-5.89	0.67	2.54	0.67	2.54	4.72	0.56
R 0.70	7	3.28	0.88	1.83	-7.39	0.84	-8.76	-6.01	0.64	2.55	0.64	2.55	4.64	0.62
U 0.80	7	3.20	0.79	1.91	-7.48	0.56	-8.40	-6.56	0.66	2.49	0.66	2.49	4.66	0.13
O 0.90	7	3.50	0.76	2.25	-7.28	0.78	-8.57	-5.99	0.68	2.47	0.68	2.47	4.70	0.87
1.00	7	3.42	0.93	1.90	-7.24	0.74	-8.46	-6.03	0.69	2.43	0.69	2.43	4.69	1.23
0.0	7	3.42	0.93	1.90	-7.24	0.74	-8.46	-6.03	0.69	2.43	0.69	2.43	4.69	0.09
0.10	7	3.25	1.16	1.35	-7.38	1.06	-9.12	-5.65	0.85	2.43	0.85	2.43	4.69	0.0
0.20	7	3.40	1.05	1.67	-7.34	0.99	-8.97	-5.71	0.71	2.34	0.71	2.34	4.73	0.31
R 0.30	7	3.50	0.99	1.87	-7.30	0.86	-8.71	-5.89	0.69	2.47	0.69	2.47	4.73	0.52
E 0.40	7	3.50	1.05	1.78	-7.31	0.77	-8.58	-6.04	0.67	2.53	0.67	2.53	4.71	0.67
O 0.50	7	3.46	0.95	1.90	-7.28	0.88	-8.72	-5.84	0.59	2.68	0.59	2.68	4.60	0.02
U 0.60	7	3.45	0.77	2.19	-7.30	0.85	-8.70	-5.91	0.55	2.74	0.55	2.74	4.56	0.05
R 0.70	7	3.33	0.77	2.06	-7.37	0.86	-8.77	-5.96	0.61	2.63	0.61	2.63	4.62	0.77
N 0.80	7	3.45	0.89	1.98	-7.34	0.99	-8.96	-5.73	0.64	2.58	0.64	2.58	4.68	0.91
O 0.90	7	3.47	0.94	1.92	-7.29	1.00	-8.93	-5.65	0.67	2.56	0.67	2.56	4.76	1.03
1.00	7	3.50	0.93	1.97	-7.40	0.93	-8.92	-5.83	0.59	2.67	0.59	2.67	4.63	0.06

LANDMARK - RT ELBOW CENTER (24)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVES
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DECR	
0.0	7	6.19	0.85	4.81	7.58	-6.05	0.55	-6.95	-5.14	11.87	1.01	10.21	13.53	0.0	0.0	0.0
0.10	7	4.79	0.88	3.35	6.24	-7.24	0.85	-8.64	-5.89	11.51	1.47	9.20	14.01	1.86	1.86	0.0
0.20	7	4.48	1.17	2.57	6.39	-7.54	0.93	-9.07	-6.01	11.34	1.59	8.73	13.95	0.50	2.36	0.0
0.30	7	3.71	1.27	1.63	5.80	-8.08	1.02	-9.76	-6.40	10.90	1.60	8.27	13.52	1.04	3.41	0.0
0.40	7	2.41	1.23	0.39	4.43	-8.95	0.97	-10.54	-7.35	10.36	1.53	7.85	12.87	1.65	5.00	0.0
0.50	7	1.33	1.62	-1.34	3.99	-9.87	0.92	-11.38	-8.36	10.24	1.46	7.84	12.63	1.43	6.49	0.0
0.60	7	1.34	1.01	-0.31	2.99	-10.42	0.67	-11.53	-9.32	10.63	1.28	8.54	12.73	0.68	7.17	0.0
0.70	7	1.65	0.77	0.38	2.91	-11.02	0.62	-12.05	-10.00	11.46	1.03	9.77	13.14	1.06	8.23	0.0
0.80	7	2.00	0.56	1.09	2.92	-11.69	0.83	-13.05	-10.33	12.27	0.85	10.88	13.66	1.11	9.34	0.0
0.90	6	2.17	0.44	1.45	2.89	-11.75	0.56	-12.68	-10.83	12.55	0.90	11.06	14.03	0.33	9.67	0.0
1.00	6	2.23	0.58	1.27	3.18	-11.75	0.61	-12.75	-10.75	12.58	0.92	11.07	14.09	0.07	9.73	0.0
0.0	6	2.23	0.58	1.27	3.18	-11.75	0.61	-12.75	-10.75	12.58	0.92	11.07	14.09	0.0	0.0	0.0
0.10	6	2.06	0.69	0.92	3.20	-10.91	0.50	-11.74	-10.09	11.90	1.12	10.05	13.74	1.09	1.09	0.0
0.20	7	2.47	1.12	0.64	4.30	-10.09	0.58	-11.05	-9.14	11.14	1.06	9.40	12.89	1.18	2.28	0.0
0.30	7	2.95	1.31	0.81	5.10	-9.32	0.57	-10.57	-8.08	10.87	0.89	9.41	12.33	0.95	3.23	0.0
0.40	7	3.72	1.41	1.41	6.02	-8.46	0.96	-10.03	-6.88	10.76	0.86	9.55	12.36	1.16	4.38	0.0
0.50	7	4.61	1.41	2.31	6.92	-7.65	1.13	-9.50	-5.79	11.21	0.87	9.79	12.63	1.24	5.62	0.0
0.60	7	5.26	1.15	3.38	7.14	-7.10	1.12	-8.94	-5.25	11.44	0.90	9.96	12.92	0.88	6.50	0.0
0.70	7	5.68	0.88	4.24	7.11	-6.63	0.90	-8.10	-5.16	11.52	0.89	10.16	13.07	0.65	7.15	0.0
0.80	7	5.85	0.82	4.51	7.20	-6.26	0.62	-7.27	-5.25	11.74	0.85	10.34	13.14	0.43	7.58	0.0
0.90	7	6.02	0.89	4.56	7.47	-6.10	0.43	-6.81	-5.40	11.82	0.91	10.33	13.31	0.44	7.82	0.0
1.00	7	6.19	0.85	4.81	7.58	-6.05	0.55	-6.95	-5.14	11.87	1.01	10.21	13.53	0.19	8.01	0.0

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE	SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE		MOVED
T			MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	15.22	0.82	13.88	16.56	-3.54	0.51	-3.54	-1.85	13.47	0.34	12.62	13.73	0.0	0.0		
0.10	7	13.74	0.99	12.12	15.36	-3.72	0.40	-4.37	-3.07	13.35	1.01	11.69	15.01	1.81	1.81		
0.20	7	13.09	1.40	10.79	13.39	-4.17	0.53	-5.05	-3.30	13.58	1.22	11.58	15.58	0.83	2.64		
0.30	7	11.88	1.70	9.09	14.66	-4.70	0.98	-6.34	-3.09	14.23	1.50	11.77	16.68	1.47	4.10		
0.40	7	9.95	1.62	7.30	12.60	-5.71	1.12	-7.54	-3.87	15.40	1.77	12.50	18.31	2.47	6.54		
0.50	7	8.05	1.47	5.64	10.46	-7.41	1.43	-9.75	-5.06	16.88	1.58	14.29	19.47	2.95	9.52		
0.60	7	6.43	1.76	3.54	9.31	-9.74	1.85	-12.78	-6.70	18.54	1.36	16.28	20.74	3.28	12.80		
0.70	7	6.59	0.96	5.01	8.17	-11.16	0.62	-12.17	-10.14	19.38	0.71	17.91	20.25	1.53	14.33		
0.80	7	7.22	0.88	5.78	8.67	-12.47	0.77	-13.73	-11.20	19.39	0.61	18.38	20.39	1.49	15.83		
0.90	7	7.82	0.45	7.09	8.55	-12.94	0.70	-14.08	-11.80	19.54	0.55	18.73	20.55	0.80	16.63		
1.00	7	8.04	0.48	7.25	8.83	-13.11	0.72	-14.29	-11.93	19.83	0.50	19.00	20.65	0.33	16.96		
0.0	7	8.04	0.48	7.25	8.83	-13.11	0.72	-14.29	-11.93	19.83	0.50	19.00	20.65	0.0	0.0		
0.10	7	7.72	0.68	6.60	8.83	-11.16	1.15	-13.04	-9.28	18.27	0.49	18.46	20.08	2.06	2.06		
0.20	7	8.09	1.14	6.22	5.96	-8.87	2.35	-12.72	-5.02	18.57	0.57	17.64	19.50	2.42	4.48		
0.30	7	9.23	1.84	6.22	12.24	-7.55	1.65	-10.26	-4.84	17.64	0.84	16.27	19.01	1.98	6.45		
0.40	7	11.17	2.08	7.77	14.58	-5.70	1.28	-7.79	-3.61	16.12	1.30	14.00	18.25	3.08	9.54		
0.50	7	13.03	1.73	10.19	13.87	-4.27	1.49	-6.72	-1.83	14.79	1.23	12.77	16.82	2.69	12.23		
0.60	7	13.83	1.32	11.63	15.97	-3.91	0.93	-5.44	-2.38	14.44	0.92	12.91	15.91	0.93	13.16		
0.70	7	14.52	0.90	13.05	15.99	-3.34	0.61	-4.35	-2.33	13.85	0.56	12.93	14.77	1.08	14.24		
0.80	7	14.93	0.72	13.75	16.10	-2.99	0.41	-3.66	-2.32	13.54	0.39	12.89	14.18	0.62	14.86		
0.90	7	15.14	0.75	13.91	16.36	-2.80	0.42	-3.49	-2.12	13.35	0.28	12.89	13.81	0.34	15.20		
1.00	7	15.22	0.82	13.88	16.56	-2.70	0.51	-3.54	-1.85	13.17	0.34	12.62	13.73	0.22	15.42		

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +13.0, -13.0, +4.8 TO HATCH RELEASE CONTROLLER AT +11.0, -13.0, +23.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +18.0, +10.0, +12.4.

MOTION NUMBER - 12160
 BACK ANGLE - 30

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RGHT FWD	0.61	0.12	0.40 TO 0.80 SECS.
RGHT REV	0.69	0.16	0.50 TO 0.90 SECS.

LANDMARK - NASION

(1)

TIME	SAMPLE	SIZE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	T	7	-0.14	1.54	-2.39	2.68	-1.90	0.85	-3.29	-0.51	27.09	1.43	24.75	29.43	0.0	0.0
0.10		7	-0.16	1.56	-2.71	2.40	-1.55	0.96	-3.13	0.03	27.45	1.30	25.31	29.58	0.59	0.59
0.20	F	7	-0.31	1.69	-3.08	2.46	-1.37	1.07	-3.12	0.38	27.65	1.21	25.65	29.64	0.30	0.89
0.30	O	7	-0.34	1.66	-3.06	2.39	-1.44	1.15	-3.32	0.44	27.64	1.19	25.69	29.58	0.08	0.97
0.40	R	7	-0.41	1.66	-3.13	2.32	-1.47	1.22	-3.47	0.54	27.66	1.17	25.75	29.58	0.08	1.05
0.50	M	7	-0.32	1.67	-3.06	2.42	-1.46	1.31	-3.61	0.69	27.57	1.20	25.71	29.63	0.09	1.13
0.60	A	7	-0.39	1.61	-3.03	2.26	-1.43	1.19	-3.38	0.53	27.62	1.25	25.57	29.66	0.09	1.22
0.70	R	7	-0.49	1.60	-3.12	2.13	-1.47	1.13	-3.32	0.39	27.58	1.31	25.44	29.72	0.12	1.34
0.80	D	7	-0.45	1.54	-2.99	2.08	-1.50	1.14	-3.37	0.37	27.57	1.35	25.36	29.79	0.05	1.39
0.90		7	-0.42	1.54	-2.95	2.11	-1.55	1.22	-3.55	0.45	27.56	1.39	25.29	29.84	0.06	1.46
1.00		7	-0.41	1.55	-2.96	2.14	-1.68	1.33	-3.86	0.51	27.55	1.44	25.19	29.92	0.13	1.58
0.0		7	-0.41	1.55	-2.96	2.14	-1.68	1.33	-3.86	0.51	27.55	1.44	25.19	29.92	0.0	0.0
0.10		7	-0.21	1.55	-2.75	2.33	-1.77	1.18	-3.70	0.16	27.24	1.44	24.88	29.60	0.38	0.38
0.20		7	-0.16	1.55	-2.70	2.38	-1.68	1.10	-3.49	0.12	27.12	1.46	24.72	29.52	0.16	0.53
0.30	R	7	-0.16	1.52	-2.65	2.34	-1.66	1.17	-3.58	0.26	27.16	1.48	24.73	29.59	0.04	0.58
0.40	E	7	-0.12	1.42	-2.45	2.20	-1.70	1.31	-3.85	0.45	27.17	1.47	24.76	29.59	0.05	0.63
0.50	T	7	-0.06	1.43	-2.41	2.29	-1.73	1.09	-3.51	0.06	27.19	1.41	24.88	29.50	0.07	0.70
0.60	U	7	0.01	1.44	-2.35	2.37	-1.77	0.94	-3.30	-0.23	27.20	1.39	24.91	29.48	0.08	0.78
0.70	R	7	0.14	1.49	-2.29	2.58	-1.84	0.55	-3.40	-0.29	27.01	1.44	24.78	29.51	0.16	0.95
0.80	N	7	0.21	1.50	-2.24	2.67	-1.99	0.97	-3.57	-0.40	27.01	1.45	24.62	29.39	0.21	1.16
0.90		7	0.16	1.52	-2.33	2.66	-2.00	0.95	-3.57	-0.44	27.00	1.48	24.58	29.42	0.05	1.21
1.00		7	0.14	1.54	-2.39	2.68	-1.90	0.85	-3.29	-0.51	27.09	1.43	24.75	29.43	0.14	1.35

LANDMARK - CERVICALE

(2)

TIME	SAMPLE	SIZE	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0		6	-6.61	0.86	-8.02	-5.19	-6.61	0.85	-8.02	-5.19	21.46	1.06	19.72	23.21	0.0	0.0
0.10		6	-6.98	1.02	-8.65	-5.31	-7.46	0.66	-9.18	-4.83	21.54	1.09	19.75	23.32	0.43	0.43
0.20	F	7	-7.46	1.23	-9.48	-5.44	-7.52	0.44	-9.56	-4.44	21.11	1.50	18.65	23.56	0.68	1.11
0.30	O	7	-7.52	1.25	-9.56	-5.47	-7.50	0.45	-9.60	-4.45	21.14	1.46	18.75	23.53	0.06	1.17
0.40	R	7	-7.50	1.27	-9.58	-5.43	-7.50	0.60	-9.60	-4.45	21.14	1.44	18.89	23.61	0.19	1.37
0.50	M	7	-7.42	1.27	-9.51	-5.33	-7.42	0.78	-9.57	-4.39	21.33	1.51	18.86	23.80	0.21	1.58
0.60	A	7	-7.50	1.36	-9.74	-5.26	-7.50	0.91	-9.74	-4.39	21.21	1.49	18.76	23.65	0.20	1.78
0.70	K	7	-7.46	1.30	-9.60	-5.33	-7.46	1.00	-9.60	-4.45	21.39	1.51	18.61	23.57	0.15	1.93
0.80	D	7	-7.46	1.32	-9.57	-5.23	-7.46	1.05	-9.57	-4.44	21.08	1.54	18.56	23.60	0.09	2.01
0.90		6	-7.42	1.36	-9.65	-5.19	-7.42	1.36	-9.65	-4.44	21.05	1.67	18.30	23.80	0.31	2.32
1.00		6	-7.31	1.29	-9.42	-5.20	-7.31	1.43	-9.42	-4.43	21.07	1.62	18.41	23.73	0.13	2.45
0.0		6	-7.31	1.29	-9.42	-5.20	-7.31	1.43	-9.42	-4.43	21.07	1.62	18.41	23.73	0.0	0.0
0.10		6	-7.24	1.34	-9.44	-5.05	-7.24	1.47	-9.44	-4.43	21.04	1.72	18.23	23.86	0.09	0.09
0.20		7	-7.16	1.30	-9.29	-5.03	-7.16	1.44	-9.29	-4.43	21.09	1.60	18.47	23.71	0.35	0.44
0.30	R	7	-7.25	1.14	-9.12	-5.37	-7.25	0.94	-9.12	-4.43	21.04	1.47	18.62	23.46	0.22	0.66
0.40	E	7	-7.19	1.04	-8.90	-5.48	-7.19	0.81	-9.04	-4.43	21.07	1.45	18.70	23.44	0.14	0.80
0.50	T	7	-7.08	1.19	-9.02	-5.13	-7.08	0.84	-9.02	-4.43	21.13	1.41	18.82	23.44	0.13	0.93
0.60	U	7	-7.08	1.18	-9.01	-5.14	-7.08	0.84	-9.01	-4.43	21.12	1.34	18.92	23.32	0.01	0.94
0.70	N	7	-7.03	1.20	-9.00	-5.06	-7.03	0.99	-9.00	-4.43	21.15	1.42	18.81	23.46	0.11	1.05
0.80		7	-6.97	1.23	-9.00	-4.95	-6.97	0.62	-8.99	-4.43	21.15	1.55	18.61	23.69	0.13	1.18
0.90		6	-6.74	0.94	-8.28	-5.19	-6.74	0.76	-8.28	-4.43	21.55	1.06	19.81	23.30	0.49	1.66
1.00		6	-6.61	0.86	-8.02	-5.19	-6.61	0.85	-8.02	-4.43	21.46	1.06	19.72	23.21	0.19	1.85

TIME T		SAMPLE SIZE,N		LANDMARK - RT GRIP CENTER (16)															
				-----X-----				-----Y-----				-----Z-----				-----CO-ORDINATE-----			
MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED CUM		
0.0	7	11.82	0.82	10.47	13.16	-13.38	0.61	-14.38	-12.39	4.38	0.57	3.44	5.31	0.0	0.0				
0.10	7	10.88	0.74	9.67	12.10	-14.11	1.19	-16.05	-12.16	6.23	1.99	4.27	9.28	2.03	2.03				
0.20	7	10.18	1.21	8.21	12.16	-15.05	1.93	-18.21	-11.90	8.71	2.74	4.21	13.19	2.92	4.93				
0.30	7	9.61	1.74	6.77	12.46	-15.92	2.18	-19.50	-12.34	12.58	2.59	8.34	16.82	4.01	8.97				
0.40	7	9.38	1.82	6.39	12.37	-15.86	1.88	-18.95	-12.77	15.95	2.08	12.55	19.36	3.38	12.35				
0.50	7	9.35	1.76	6.47	12.23	-15.44	1.36	-17.67	-13.21	18.89	1.41	16.57	21.21	2.97	15.32				
0.60	7	9.83	1.27	7.75	11.90	-14.83	0.85	-16.21	-13.44	20.38	0.91	18.89	21.87	1.68	17.00				
0.70	7	10.33	0.94	8.79	11.87	-14.38	0.48	-15.17	-13.60	21.39	0.64	20.33	22.44	1.21	18.21				
0.80	7	10.63	0.79	9.34	11.93	-14.15	0.45	-14.89	-13.41	21.71	0.61	20.71	22.71	0.50	18.71				
0.90	7	10.66	0.69	9.54	11.79	-14.09	0.47	-14.85	-13.33	21.70	0.57	20.77	22.63	0.07	18.78				
1.00	7	10.61	0.60	9.62	11.59	-14.00	0.46	-14.76	-13.25	21.55	0.63	20.52	22.58	0.18	18.96				
0.0	7	10.61	0.60	9.62	11.59	-14.00	0.46	-14.76	-13.25	21.55	0.63	20.52	22.58	0.0	0.0				
0.10	7	9.93	1.01	8.27	11.59	-14.72	0.88	-16.17	-13.28	19.84	1.27	17.75	21.92	1.97	1.97				
0.20	7	9.46	1.61	6.82	12.11	-15.52	1.65	-18.22	-12.81	17.48	2.44	13.48	21.48	2.53	4.51				
0.30	7	9.60	1.60	6.97	12.22	-15.71	1.39	-17.98	-13.43	15.27	2.35	11.41	19.13	2.22	6.73				
0.40	7	9.81	1.22	7.81	11.81	-15.71	1.64	-18.40	-13.01	12.30	2.83	7.66	16.93	2.98	9.71				
0.50	7	10.11	0.72	8.93	11.28	-15.15	1.64	-17.84	-12.47	9.13	3.22	3.85	14.42	3.22	12.93				
0.60	7	10.37	0.65	9.31	11.43	-14.62	1.37	-16.86	-12.36	6.97	2.82	2.82	11.60	2.24	15.18				
0.70	7	10.75	0.59	9.78	11.73	-14.26	1.28	-16.36	-12.16	5.80	2.13	2.31	9.29	1.28	16.46				
0.80	7	11.21	0.65	10.14	12.28	-14.09	1.12	-15.92	-12.27	5.03	1.31	9.21	7.17	0.91	17.37				
0.90	7	11.62	0.78	10.34	12.90	-13.74	0.82	-15.10	-12.39	4.72	0.83	3.37	6.08	0.62	17.99				
1.00	7	11.82	0.82	10.47	13.16	-13.38	0.61	-14.38	-12.39	4.38	0.57	3.44	5.31	0.54	18.53				

TIME T		SAMPLE SIZE,N	LANDMARK - RT TROCHANTER (18)															
			-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE			
MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	
3.59	0.96	2.01	5.18	-7.20	1.20	-9.18	-5.23	3.74	0.66	2.65	4.82	0.0	0.0					
3.50	0.90	2.03	4.97	-7.43	0.98	-9.03	-5.82	3.73	0.83	2.74	4.76	0.24	0.24					
3.31	0.92	1.81	4.82	-7.63	0.99	-9.25	-6.00	3.75	0.62	2.74	4.77	0.28	0.52					
3.13	1.18	1.20	5.06	-7.77	1.18	-9.70	-5.84	3.73	0.65	2.67	4.80	0.23	0.75					
3.46	0.99	1.85	5.08	-7.53	0.97	-9.12	-5.93	3.74	0.65	2.67	4.80	0.23	0.75					
3.53	1.09	1.74	5.32	-7.43	1.09	-9.21	-5.64	3.73	0.63	2.67	4.80	0.1	1.16					
3.53	1.14	1.65	5.41	-7.33	1.01	-8.99	-5.67	3.70	0.64	2.65	4.75	0.10	1.29					
3.44	1.12	1.60	5.27	-7.36	0.97	-8.95	-5.77	3.70	0.66	2.61	4.79	0.10	1.39					
3.52	1.24	1.49	5.55	-7.32	0.95	-8.88	-5.75	3.72	0.71	2.56	4.88	0.10	1.59					
3.57	1.31	1.42	5.72	-7.34	0.97	-8.92	-5.76	3.73	0.74	2.51	4.94	0.05	1.64					
3.49	1.27	1.41	5.56	-7.43	1.03	-9.12	-5.73	3.72	0.77	2.45	4.99	0.12	1.76					
3.49	1.27	1.41	5.56	-7.43	1.03	-9.12	-5.73	3.72	0.77	2.45	4.99	0.0	0.0					
3.49	1.02	1.81	5.16	-7.38	1.01	-9.04	-5.72	3.72	0.72	2.54	4.90	0.04	0.04					
3.45	0.87	2.02	4.88	-7.29	1.00	-8.94	-5.65	3.76	0.69	2.63	4.89	0.10	0.15					
3.58	0.98	1.97	5.19	-7.31	0.97	-8.91	-5.72	3.71	0.70	2.57	4.86	0.14	0.29					
3.61	1.08	1.84	5.37	-7.40	0.99	-9.03	-5.78	3.67	0.69	2.53	4.81	0.11	0.40					
3.38	1.00	1.74	5.03	-7.41	1.06	-9.05	-5.67	3.70	0.64	2.65	4.75	0.23	0.62					
3.46	0.57	2.52	4.40	-7.31	1.06	-9.04	-5.58	3.70	0.69	2.57	4.84	0.13	0.75					
3.53	0.56	2.61	4.45	-7.26	0.90	-8.73	-5.78	3.72	0.73	2.51	4.92	0.09	0.84					
3.53	0.74	2.32	4.74	-7.13	0.94	-8.60	-5.60	3.71	0.69	2.58	4.83	0.12	0.96					
3.77	0.75	2.55	4.99	-7.05	1.37	-9.30	-4.79	3.70	0.66	2.62	4.79	0.25	1.22					
3.59	0.96	2.01	5.18	-7.20	1.20	-9.18	-5.23	3.74	0.66	2.65	4.82	0.24	1.45					

(20)

TIME T	SAMPLE SIZE, N	(- - - - - X - CO-ORDINATE - - - - -)				(- - - - - Y - CO-ORDINATE - - - - -)				(- - - - - Z - CO-ORDINATE - - - - -)				DISTANCE		MOVEMENT
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DECR	
0.0	7	20.51	4.12	13.76	27.27	-4.20	3.54	-10.66	2.25	11.46	1.14	9.61	13.35	0.0	0.0	0.0
0.10	7	19.50	1.83	16.50	22.49	-5.13	2.00	-8.41	1.86	11.43	1.06	9.70	13.16	1.38	0.0	1.38
0.20	7	18.92	0.51	18.08	19.75	-5.76	1.25	-7.81	-3.71	11.39	0.99	9.77	13.01	0.86	2.24	2.24
0.30	7	19.00	0.48	18.22	19.79	-5.77	1.32	-7.95	-3.60	11.35	1.02	9.68	13.02	0.10	2.33	2.33
0.40	7	18.39	1.51	15.91	20.87	-6.23	1.79	-9.16	-3.29	11.46	0.99	9.73	12.98	0.76	3.10	3.10
0.50	7	17.54	3.90	11.14	23.94	-7.00	3.65	-12.98	-1.02	11.33	0.94	9.76	12.84	1.15	4.24	4.24
0.60	7	18.43	1.54	15.89	22.96	-6.15	1.83	-9.14	-3.15	11.33	0.95	9.76	12.84	1.23	5.47	5.47
0.70	7	18.93	0.53	18.07	19.80	-5.57	1.24	-7.61	-3.54	11.33	0.98	9.73	12.93	0.77	6.24	6.24
0.80	7	18.99	0.52	18.13	19.85	-5.57	1.29	-7.68	-3.16	11.32	0.99	9.69	12.95	0.06	6.30	6.30
0.90	7	18.99	0.48	18.19	19.78	-5.61	1.29	-7.72	-3.49	11.35	1.01	9.69	13.01	0.05	6.35	6.35
1.00	7	18.89	0.42	18.20	19.58	-5.63	1.27	-7.71	-3.54	11.40	1.02	9.74	13.07	0.12	6.46	6.46
0.0	7	18.89	0.42	18.20	19.58	-5.63	1.27	-7.71	-3.54	11.40	1.02	9.74	13.07	0.0	6.0	6.0
0.10	7	18.98	0.41	18.30	19.66	-5.59	1.32	-7.76	-3.42	11.44	1.04	9.74	13.14	0.11	0.11	0.11
0.20	7	19.03	0.45	18.30	19.76	-5.60	1.37	-7.85	-3.36	11.46	1.02	9.79	13.13	0.05	0.16	0.16
0.30	7	19.05	0.42	18.36	19.74	-5.68	1.31	-7.83	-3.54	11.44	1.01	9.78	13.09	0.09	0.25	0.25
0.40	7	19.02	0.46	18.27	19.77	-5.66	1.28	-7.76	-3.57	11.42	1.03	9.74	13.11	0.04	0.29	0.29
0.50	7	18.95	0.46	18.19	19.71	-5.60	1.30	-7.73	-3.48	11.50	0.98	9.76	12.99	0.10	0.40	0.40
0.60	7	19.02	0.43	18.32	19.72	-5.53	1.22	-7.54	-3.52	11.37	1.04	9.72	13.02	0.10	0.40	0.40
0.70	7	19.04	0.43	18.33	19.74	-5.50	1.21	-7.49	-3.52	11.38	1.04	9.67	13.09	0.03	0.53	0.53
0.80	7	19.02	0.51	18.18	19.85	-5.62	1.18	-7.55	-3.68	11.39	1.03	9.70	13.07	0.11	0.65	0.65
0.90	7	19.46	1.38	17.20	21.73	-5.26	1.72	-8.08	-2.44	11.43	1.06	9.69	13.16	0.57	1.22	1.22
1.00	7	20.51	4.12	13.76	27.27	-4.20	3.94	-10.66	2.25	11.44	1.14	9.61	13.35	1.49	2.71	2.71

122

TIME	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE	
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVES
0	7	-4.03	1.18	-5.97	-2.09	-7.58	0.83	-8.94	-6.22	17.44	0.66	16.36	18.51	0.0	0.0
0.10	7	-4.31	0.88	-5.76	-2.86	-7.72	0.76	-8.48	-6.48	17.44	0.70	16.30	18.59	0.31	0.31
0.20	7	-4.51	0.89	-5.97	-3.05	-7.79	0.71	-8.96	-6.62	17.47	0.89	16.01	18.92	0.21	0.52
0.30	7	-4.68	0.89	-6.14	-3.22	-7.78	0.65	-8.84	-6.72	17.61	0.84	16.24	18.98	0.22	0.74
0.40	7	-4.78	0.89	-6.23	-3.33	-7.79	0.65	-8.85	-6.73	17.77	0.81	16.44	19.11	0.20	0.94
0.50	7	-4.75	0.84	-6.13	-3.37	-7.77	0.75	-9.01	-6.54	17.69	0.87	16.57	19.42	0.22	1.16
0.60	7	-4.71	0.85	-6.10	-3.32	-7.79	0.71	-8.96	-6.62	18.11	0.94	16.61	19.70	0.17	1.33
0.70	7	-4.73	0.95	-6.29	-3.16	-7.77	0.68	-8.88	-6.66	18.21	0.94	16.67	19.75	0.06	1.39
0.80	7	-4.70	0.94	-6.25	-3.16	-7.70	0.55	-8.50	-6.70	18.28	0.94	16.74	19.82	0.19	1.58
0.90	7	-4.76	0.83	-6.12	-3.39	-7.56	0.51	-8.40	-6.72	18.37	0.90	16.89	19.85	0.12	1.69
1.00	7	-4.95	0.75	-6.17	-3.72	-7.57	0.57	-8.51	-6.63	18.44	0.90	16.97	19.91	0.20	1.89
0.0	7	-4.95	0.75	-6.17	-3.72	-7.57	0.57	-8.51	-6.63	18.44	0.90	16.97	19.91	0.0	0.0
0.10	7	-4.74	0.82	-6.08	-3.40	-7.69	0.76	-8.94	-6.44	18.20	0.85	16.81	19.59	0.34	0.34
0.20	7	-4.67	0.85	-6.06	-3.28	-7.62	0.81	-8.96	-6.29	18.30	0.78	16.76	19.33	0.18	0.52
0.30	7	-4.86	0.81	-6.19	-3.53	-7.61	0.80	-8.92	-6.30	17.91	0.82	16.57	19.25	0.23	0.75
0.40	7	-4.92	0.80	-6.24	-3.61	-7.59	0.72	-8.77	-6.41	17.78	0.88	16.33	19.23	0.15	0.90
0.50	7	-4.78	0.77	-6.05	-3.51	-7.58	0.68	-8.70	-6.47	17.66	0.74	16.45	18.87	0.19	1.09
0.60	7	-4.55	0.81	-5.89	-3.22	-7.55	0.66	-8.64	-6.47	17.52	0.72	16.34	18.71	0.27	1.35
0.70	7	-4.41	0.95	-5.96	-2.85	-7.57	0.64	-8.62	-6.53	17.52	0.81	16.18	18.85	0.15	1.50
0.80	7	-4.28	1.00	-5.80	-2.80	-7.74	0.72	-8.92	-6.56	17.50	0.84	16.12	18.88	0.21	1.71
0.90	7	-4.14	1.09	-5.92	-2.36	-7.76	0.81	-9.09	-6.43	17.44	0.75	16.21	18.68	0.15	1.87
1.00	7	-4.03	1.18	-5.97	-2.09	-7.58	0.83	-8.94	-6.22	17.44	0.66	16.36	18.51	0.21	2.07

LANDMARK - RT ELBOW CENTER (24)

TIME	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	-0.17	1.13	-2.01	1.68	-10.22	1.21	-12.20	-8.24	7.44	1.05	5.70	9.15	0.0	0.0	0.0	0.0
0.10	6	-0.63	1.35	-2.84	1.58	-10.64	0.89	-12.10	-9.18	7.89	0.90	6.42	9.36	0.78	0.78	0.78	0.78
0.20	6	-0.96	1.69	-3.74	1.82	-11.07	0.83	-12.43	-9.72	8.35	0.91	6.86	9.85	0.72	1.49	1.49	1.49
0.30	7	-0.65	1.58	-3.23	1.94	-11.19	0.90	-12.68	-9.71	8.80	0.82	7.46	10.13	0.56	2.05	2.05	2.05
0.40	7	-0.03	1.17	-1.96	1.89	-11.39	0.81	-12.71	-10.07	9.26	0.84	7.88	10.64	0.80	2.85	2.85	2.85
0.50	7	0.75	1.10	-1.06	2.56	-11.79	0.65	-12.85	-10.73	10.25	0.87	8.82	11.68	0.80	3.65	3.65	3.65
0.60	7	1.39	0.91	-0.10	2.87	-12.12	0.64	-13.17	-11.07	11.23	0.85	9.84	12.62	1.21	4.86	4.86	4.86
0.70	7	2.18	0.75	0.63	3.09	-12.33	0.56	-13.37	-11.29	11.94	0.69	10.80	13.08	0.88	5.74	5.74	5.74
0.80	7	2.00	0.74	0.96	3.40	-12.35	0.64	-13.27	-11.43	12.27	0.52	11.41	13.12	0.46	6.20	6.20	6.20
0.90	7	2.22	0.74	1.00	3.43	-12.34	0.55	-13.24	-11.45	12.31	0.56	11.39	13.24	0.06	6.26	6.26	6.26
1.00	7	2.05	0.64	1.00	3.11	-12.35	0.56	-13.27	-11.43	12.23	0.79	10.94	13.53	0.18	6.44	6.44	6.44
0.0	7	2.05	0.64	1.00	3.11	-12.35	0.56	-13.27	-11.43	12.23	0.79	10.94	13.53	0.0	0.0	0.0	0.0
0.10	7	1.46	0.76	0.21	2.71	-12.11	0.54	-13.00	-11.23	11.23	1.13	9.37	13.08	1.19	1.19	1.19	1.19
0.20	7	0.76	1.12	-1.07	2.60	-11.59	0.63	-12.63	-10.56	10.09	1.27	8.01	12.17	1.43	2.63	2.63	2.63
0.30	7	0.00	1.32	-2.16	2.16	-11.22	0.95	-12.77	-9.67	9.13	1.15	7.25	11.02	1.28	3.90	3.90	3.90
0.40	7	-0.72	1.34	-2.92	1.48	-10.90	1.27	-12.99	-8.81	8.49	0.90	7.00	9.97	1.02	4.92	4.92	4.92
0.50	7	-1.33	1.41	-3.64	0.97	-10.77	1.26	-12.84	-8.71	8.10	0.98	6.49	9.72	0.73	5.65	5.65	5.65
0.60	7	-1.25	1.18	-3.17	0.68	-10.59	1.28	-12.69	-8.48	7.92	0.95	6.36	9.48	0.27	5.93	5.93	5.93
0.70	7	-1.00	1.13	-2.86	0.85	-10.32	1.40	-12.62	-8.02	7.82	1.00	6.18	9.46	0.37	6.30	6.30	6.30
0.80	7	-0.74	1.00	-2.38	0.90	-10.28	1.31	-12.44	-8.13	7.72	1.07	5.97	9.47	0.28	6.59	6.59	6.59
0.90	6	-0.32	1.09	-2.11	1.46	-10.32	1.31	-12.47	-8.17	7.43	1.02	5.76	9.11	0.51	7.09	7.09	7.09
1.00	6	-0.17	1.13	-2.01	1.68	-10.22	1.21	-12.20	-8.24	7.42	1.05	5.70	9.15	0.18	7.28	7.28	7.28

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	8.36	0.62	7.34	9.39	-12.64	0.73	-13.83	-11.44	4.82	0.69	3.70	5.95	0.0	0.0	0.0	0.0
0.10	7	7.50	0.87	6.07	8.93	-13.24	1.08	-15.01	-11.48	6.88	1.68	4.13	9.63	2.31	2.31	2.31	2.31
0.20	7	6.92	1.52	4.42	9.42	-13.88	1.56	-16.44	-11.32	9.35	2.48	5.29	13.42	2.62	4.93	4.93	4.93
0.30	7	6.59	1.76	3.69	9.48	-14.40	1.81	-17.37	-11.43	12.14	2.55	7.95	16.33	2.85	7.78	7.78	7.78
0.40	7	6.48	1.74	3.63	9.33	-14.52	1.66	-17.24	-11.60	14.71	2.56	10.70	19.11	2.77	10.55	10.55	10.55
0.50	7	6.59	1.66	3.87	9.31	-14.35	1.31	-16.50	-12.50	16.50	1.22	14.59	18.60	1.70	12.26	12.26	12.26
0.60	7	7.10	1.35	4.88	9.31	-13.99	0.90	-15.47	-12.51	18.05	0.81	16.72	19.38	1.58	13.83	13.83	13.83
0.70	7	7.55	1.10	5.75	9.35	-13.73	0.65	-14.81	-12.66	19.09	0.48	18.30	20.21	1.16	15.00	15.00	15.00
0.80	7	7.84	0.89	6.38	9.30	-13.64	0.54	-14.53	-12.75	19.50	0.44	18.79	20.21	0.51	15.51	15.51	15.51
0.90	7	7.91	0.77	6.64	9.17	-13.57	0.42	-14.27	-12.83	19.55	0.48	18.76	20.33	0.11	15.62	15.62	15.62
1.00	7	7.88	0.81	6.55	9.21	-13.41	0.39	-14.06	-12.77	19.46	0.70	18.31	20.61	0.18	15.80	15.80	15.80
0.0	7	7.88	0.81	6.55	9.21	-13.41	0.39	-14.06	-12.77	19.46	0.70	18.31	20.61	0.0	0.0	0.0	0.0
0.10	7	7.44	1.10	5.63	9.25	-13.74	0.55	-14.64	-12.83	18.04	1.36	15.82	20.26	1.52	1.52	1.52	1.52
0.20	7	7.10	1.49	4.66	9.54	-14.06	0.84	-15.44	-12.69	15.94	1.92	12.80	19.08	2.15	3.67	3.67	3.67
0.30	7	7.08	1.40	4.79	9.38	-14.24	1.20	-16.22	-12.27	13.45	2.00	10.17	16.74	2.49	6.17	6.17	6.17
0.40	7	7.04	1.09	5.25	8.83	-14.22	1.41	-16.53	-11.91	10.99	2.22	7.35	14.62	2.47	8.64	8.64	8.64
0.50	7	6.92	0.86	5.51	8.33	-14.02	1.52	-16.52	-11.52	8.59	2.48	4.53	12.66	2.40	11.04	11.04	11.04
0.60	7	7.14	0.63	6.11	8.17	-13.69	1.40	-15.99	-11.38	6.94	2.20	3.24	10.44	1.80	12.83	12.83	12.83
0.70	7	7.43	0.49	6.63	8.24	-13.41	1.31	-15.56	-11.26	5.90	1.74	3.05	8.75	1.03	13.86	13.86	13.86
0.80	7	7.75	0.48	6.97	8.53	-13.25	1.07	-15.00	-11.50	5.30	1.14	3.43	7.18	0.69	14.55	14.55	14.55
0.90	7	8.12	0.59	7.16	9.08	-12.92	0.86	-14.33	-11.52	5.10	0.82	3.75	6.44	0.53	15.09	15.09	15.09
1.00	7	8.36	0.62	7.34	9.39	-12.64	0.73	-13.83	-11.44	4.82	0.69	3.70	5.95	0.47	15.55	15.55	15.55

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT
+18.0, +10.0, +12.4 TO HATCH RELEASE CONTROLLER
AT +11.0, -13.0, +23.0 AND RETURNS. RIGHT HAND
REMAINS AT STICK CONTROLLER AT +20.0, 0.0, +15.0.

MOTION NUMBER - 21260
BACK ANGLE - 30

SUB-MOVEMENT	-----TIME DATA-----		
	MEAN	STD DEV	RANGE
LEFT FWD	0.61	0.15	0.40 TO 0.80 SECS.
LEFT REV	0.67	0.14	0.50 TO 0.90 SECS.

(1)

LANDMARK - NASION

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	7	-0.32	1.27	-2.40	1.77	-0.41	1.24	-1.62	0.91	27.84	1.26	25.78	29.90	0.0	0.0		
0.10	7	-0.51	1.24	-2.55	1.53	-1.43	1.42	-3.76	0.91	28.23	1.23	26.22	30.24	1.89	1.89		
0.20	7	-0.75	1.22	-2.75	1.25	-2.50	1.43	-4.85	-0.15	28.55	1.42	26.22	30.87	1.14	3.03		
0.30	7	-0.88	1.28	-2.97	1.22	-2.68	1.54	-5.21	-0.16	28.55	1.40	26.26	30.86	0.23	3.26		
0.40	7	-0.84	1.32	-3.00	1.32	-2.82	1.55	-5.35	-0.28	28.55	1.33	26.38	30.74	0.14	3.39		
0.50	7	-0.87	1.40	-3.16	1.42	-2.95	1.52	-5.45	-0.45	28.55	1.37	26.42	30.91	0.17	3.57		
0.60	7	-0.95	1.33	-3.13	1.24	-3.15	1.57	-5.73	-0.58	28.77	1.40	26.46	31.07	0.24	3.80		
0.70	7	-1.03	1.27	-3.11	1.05	-3.37	1.68	-6.13	-0.61	28.77	1.42	26.44	31.09	0.23	4.04		
0.80	7	-1.03	1.35	-3.24	1.18	-3.48	1.80	-6.43	-0.53	28.55	1.39	26.38	30.92	0.16	4.20		
0.90	7	-1.02	1.47	-3.43	1.38	-3.64	1.76	-6.53	-0.75	28.52	1.39	26.34	30.90	0.16	4.36		
1.00	7	-1.05	1.52	-3.55	1.44	-3.83	1.71	-6.63	-1.03	28.65	1.42	26.31	30.98	0.19	4.55		
0.0	7	-1.05	1.52	-3.55	1.44	-3.83	1.71	-6.63	-1.03	28.65	1.42	26.31	30.98	0.0	0.0		
0.10	7	-0.81	1.44	-3.17	1.54	-2.08	1.15	-3.96	-0.20	28.32	1.39	26.04	30.60	1.79	1.79		
0.20	7	-0.71	1.48	-3.13	1.71	-0.96	1.43	-3.32	1.39	28.02	1.26	25.95	30.08	1.16	2.95		
0.30	7	-0.55	1.54	-3.07	1.96	-0.54	1.39	-2.82	1.74	27.86	1.14	25.99	29.74	0.48	3.43		
0.40	7	-0.45	1.58	-3.04	2.13	-0.48	1.41	-2.79	1.84	27.85	1.08	26.07	29.62	0.12	3.55		
0.50	7	-0.51	1.52	-3.00	1.98	-0.52	1.42	-2.85	1.82	27.86	1.04	26.16	29.57	0.07	3.62		
0.60	7	-0.51	1.67	-3.26	2.23	-0.45	1.30	-2.59	1.68	27.83	0.98	26.23	29.43	0.07	3.70		
0.70	7	-0.54	1.70	-3.32	2.25	-0.28	1.30	-2.41	1.84	27.88	1.02	26.20	29.55	0.18	3.87		
0.80	7	-0.39	1.32	-2.56	1.77	0.07	1.33	-2.12	2.26	27.87	1.13	26.03	29.72	0.38	4.26		
0.90	7	-0.38	1.23	-2.40	1.63	0.27	1.28	-1.83	2.37	27.85	1.16	25.96	29.75	0.20	4.46		
1.00	7	-0.32	1.27	-2.40	1.77	0.41	1.24	-1.62	2.44	27.84	1.26	25.78	29.90	0.16	4.61		

LANDMARK - CERVICALE

(2)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	7	-7.35	1.27	-9.44	-5.26	-0.81	0.75	-2.05	0.42	21.76	1.26	19.69	23.83	0.0	0.0		
0.10	7	-7.23	0.87	-8.65	-5.81	-0.71	0.73	-1.91	0.49	21.53	1.11	19.80	23.45	0.21	0.21		
0.20	7	-7.16	0.74	-8.38	-5.95	-0.56	1.17	-2.48	1.37	21.57	1.14	19.70	23.43	0.18	0.39		
0.30	7	-7.43	0.72	-8.58	-6.23	-0.63	0.98	-2.24	0.98	21.58	1.22	19.57	23.58	0.25	0.64		
0.40	7	-7.42	0.83	-8.78	-6.06	-0.95	0.85	-2.35	0.44	21.53	1.31	19.49	23.78	0.33	0.96		
0.50	7	-7.20	0.88	-8.54	-5.76	-1.21	1.16	-3.11	0.69	21.75	1.40	19.44	24.05	0.36	1.32		
0.60	7	-7.15	0.80	-8.46	-5.84	-1.23	1.27	-3.32	0.85	21.81	1.45	19.44	24.19	0.38	1.43		
0.70	7	-7.35	0.83	-8.49	-5.62	-1.35	1.32	-3.51	0.82	21.85	1.47	19.44	24.26	0.16	1.56		
0.80	7	-6.93	1.07	-8.68	-5.17	-1.52	1.35	-3.73	0.73	21.87	1.47	19.46	24.27	0.21	1.78		
0.90	7	-7.13	0.96	-8.71	-5.56	-1.43	1.25	-3.46	0.63	21.95	1.47	19.54	24.35	0.24	2.02		
1.00	7	-7.43	0.95	-8.99	-5.86	-1.27	1.29	-3.38	0.84	22.05	1.47	19.64	24.47	0.35	2.37		
0.0	7	-7.43	0.95	-8.99	-5.86	-1.27	1.29	-3.38	0.84	22.05	1.47	19.64	24.47	0.0	0.0		
0.10	7	-7.52	0.93	-9.05	-5.99	-1.35	1.25	-3.40	0.71	21.99	1.43	19.65	24.34	0.13	0.13		
0.20	7	-7.59	0.98	-9.19	-5.98	-1.40	1.27	-3.49	0.63	21.87	1.49	19.43	24.31	0.15	0.29		
0.30	7	-7.46	1.16	-9.37	-5.55	-1.49	1.14	-3.35	0.38	21.71	1.38	19.45	23.97	0.22	0.51		
0.40	7	-7.37	1.39	-9.64	-5.09	-1.58	1.07	-3.33	0.17	21.56	1.32	19.49	23.84	0.14	0.65		
0.50	7	-7.43	1.39	-9.70	-5.15	-1.61	1.06	-3.35	0.13	21.77	1.38	19.50	24.04	0.12	0.77		
0.60	7	-7.43	1.53	-9.93	-4.92	-1.52	1.15	-3.41	0.92	21.58	1.26	19.61	23.75	0.13	0.90		
0.70	7	-7.57	1.59	-10.18	-4.97	-1.30	1.08	-3.06	0.47	21.58	1.20	19.72	23.65	0.26	1.16		
0.80	7	-7.54	1.42	-9.87	-5.22	-1.13	0.91	-2.63	0.37	21.73	1.26	19.67	23.80	0.18	1.35		
0.90	7	-7.46	1.35	-9.67	-5.25	-1.04	0.83	-2.39	0.31	21.76	1.25	19.72	23.81	0.12	1.47		
1.00	7	-7.35	1.27	-9.44	-5.26	-0.81	0.75	-2.05	0.42	21.76	1.26	19.69	23.83	0.25	1.72		

MT NO. 21260/30

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	7		-2.49	0.81	-3.82	-1.16	-0.18	1.05	-0.87	1.54	20.89	0.97	19.30	22.48	0.0	0.0
0.10	7		-2.61	0.84	-3.99	-1.23	-0.22	0.40	-0.87	0.44	20.88	0.84	19.50	22.25	0.12	0.12
0.20	7		-2.75	1.15	-4.64	-0.86	-0.25	0.46	-1.01	0.51	20.89	0.85	19.50	22.27	0.15	0.27
0.30	7		-2.83	1.31	-4.98	-0.67	-0.21	0.75	-1.43	1.02	20.90	0.83	19.54	22.27	0.09	0.36
0.40	7		-2.79	1.31	-4.94	-0.65	-0.44	0.93	-1.95	1.08	20.35	0.84	19.57	22.34	0.24	0.60
0.50	7		-2.71	1.31	-4.86	-0.56	-0.77	1.30	-2.90	1.35	20.33	0.85	19.63	22.43	0.36	0.95
0.60	7		-2.68	1.07	-4.43	-0.92	-0.87	1.26	-2.94	1.19	21.17	0.94	19.63	22.71	0.18	1.13
0.70	7		-2.66	1.08	-4.42	-0.89	-1.05	1.24	-3.08	0.98	21.28	1.02	19.61	22.95	0.21	1.34
0.80	7		-2.57	1.27	-4.65	-0.50	-1.18	1.30	-3.31	0.94	21.35	1.05	19.63	23.07	0.17	1.51
0.90	7		-2.41	1.19	-4.36	-0.46	-1.05	1.16	-2.96	0.85	21.36	1.00	19.71	23.00	0.21	1.72
1.00	7		-2.22	1.04	-3.92	-0.51	-0.91	1.40	-3.20	1.39	21.31	1.01	19.65	22.96	0.25	1.96
0.0	7		-2.22	1.04	-3.92	-0.51	-0.91	1.40	-3.20	1.39	21.31	1.01	19.65	22.96	0.0	0.0
0.10	7		-2.03	1.06	-3.76	-0.29	-0.72	1.20	-2.70	1.25	21.19	1.00	19.55	22.83	0.29	0.29
0.20	7		-2.03	1.02	-3.70	-0.36	-0.67	1.18	-2.60	1.25	21.08	0.96	19.50	22.65	0.12	0.41
0.30	7		-2.32	0.98	-3.94	-0.71	-0.97	0.94	-2.51	0.56	20.98	0.91	19.50	22.47	0.43	0.84
0.40	7		-2.56	0.98	-4.18	-0.95	-1.06	1.01	-2.71	0.59	20.99	0.87	19.57	22.41	0.26	1.10
0.50	7		-2.60	0.90	-4.07	-1.12	-0.93	1.06	-2.67	0.81	21.07	0.94	19.53	22.61	0.15	1.25
0.60	7		-2.64	1.14	-4.51	-0.77	-0.84	1.08	-2.61	0.93	20.93	0.93	19.40	22.47	0.17	1.42
0.70	7		-2.72	1.11	-4.55	-0.90	-0.69	1.01	-2.34	0.96	20.90	0.96	19.33	22.47	0.17	1.59
0.80	7		-2.58	0.78	-3.86	-1.30	-0.46	0.94	-2.01	1.08	20.92	0.95	19.36	22.49	0.27	1.86
0.90	7		-2.56	0.81	-3.89	-1.24	-0.34	1.00	-1.97	1.29	20.91	0.95	19.35	22.46	0.13	1.99
1.00	7		-2.49	0.81	-3.82	-1.16	-0.18	1.05	-1.90	1.54	20.89	0.97	19.30	22.48	0.17	2.17

LANDMARK - LT ACROMION (5)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
0.0	7		-5.83	0.96	-7.40	-4.25	7.05	0.74	5.84	8.25	21.12	1.25	19.07	23.18	0.0	0.0
0.10	7		-5.92	0.94	-7.46	-4.37	7.19	0.71	6.03	8.34	20.37	0.88	19.43	22.31	0.30	0.30
0.20	7		-6.04	0.90	-7.51	-4.57	7.34	0.81	6.00	8.67	20.80	0.80	19.49	22.12	0.21	0.50
0.30	7		-5.88	0.89	-7.35	-4.42	7.34	1.13	5.49	9.19	21.00	0.83	19.64	22.35	0.24	0.75
0.40	7		-5.48	0.84	-6.86	-4.10	7.09	1.12	5.25	8.93	21.31	0.83	19.95	22.67	0.57	1.32
0.50	7		-4.97	0.87	-6.40	-3.54	6.71	1.12	4.87	8.56	21.59	0.84	20.31	23.06	0.74	2.06
0.60	7		-4.67	0.71	-5.84	-3.50	6.42	1.14	4.56	8.28	22.02	0.89	20.55	23.48	0.53	2.59
0.70	7		-4.41	0.68	-5.53	-3.29	6.09	1.20	4.12	8.05	22.37	0.95	20.81	23.92	0.55	3.14
0.80	7		-4.23	0.83	-5.59	-2.88	5.87	1.18	3.94	7.81	22.62	0.97	21.03	24.22	0.38	3.52
0.90	7		-4.14	0.98	-5.74	-2.54	5.67	1.12	3.83	7.53	22.80	0.96	21.23	24.37	0.29	3.81
1.00	7		-4.10	1.04	-5.80	-2.40	5.52	1.06	3.78	7.26	22.96	0.97	21.37	24.55	0.22	4.03
0.0	7		-4.10	1.04	-5.80	-2.40	5.52	1.06	3.78	7.26	22.96	0.97	21.37	24.55	0.0	0.0
0.10	7		-4.53	1.07	-6.28	-2.78	5.72	1.01	4.06	7.37	22.57	1.14	20.80	24.55	0.56	0.56
0.20	7		-4.95	1.16	-6.84	-3.05	5.81	1.01	4.15	7.47	22.39	1.06	20.66	24.13	0.51	1.07
0.30	7		-5.23	1.20	-7.21	-3.26	5.95	0.97	4.36	7.54	22.05	1.07	20.29	23.81	0.47	1.54
0.40	7		-5.55	1.20	-7.51	-3.58	6.11	0.95	4.55	7.67	21.51	1.13	19.96	23.65	0.42	1.86
0.50	7		-5.87	1.18	-7.79	-3.86	6.15	0.96	4.57	7.73	21.57	1.18	19.74	23.60	0.35	2.31
0.60	7		-6.06	1.34	-8.26	-3.94	6.29	0.85	4.89	7.69	21.49	1.11	19.67	23.31	0.30	2.61
0.70	7		-6.23	1.31	-8.38	-4.08	6.44	0.83	5.08	7.73	21.39	1.14	19.52	23.26	0.25	2.86
0.80	7		-6.10	0.91	-7.60	-4.60	6.60	0.78	5.32	7.88	21.32	1.22	19.32	23.31	0.22	3.08
0.90	7		-5.96	0.87	-7.38	-4.54	6.79	0.77	5.54	8.05	21.21	1.26	19.14	23.28	0.26	3.34
1.00	7		-5.83	0.96	-7.40	-4.25	7.05	0.74	5.84	8.25	21.12	1.25	19.07	23.18	0.30	3.64

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE SIZE	N	MEAN	SE	5 PCT	95 PCT	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	95 PCT	95 PCT	DISTANCE INCR	MOVEMENT CUM
0.0	5	16.60	0.63	15.56	17.64	10.59	0.44	11.32	12.92	0.49	12.12	13.72	0.0
0.10	5	15.47	0.79	14.18	16.76	7.49	1.61	4.84	10.14	15.53	14.79	16.27	4.20
0.20	6	14.96	1.83	11.95	17.96	17.38	4.64	3.02	9.60	15.69	19.93	3.68	7.89
0.30	7	13.99	2.07	10.60	17.38	1.24	3.66	-4.75	7.24	20.15	17.46	22.86	4.24
0.40	7	13.64	1.18	11.71	15.56	-1.07	2.25	-4.76	2.63	21.04	19.15	22.94	12.13
0.50	7	13.03	0.90	11.56	14.50	4.39	2.14	-7.90	-0.88	22.30	20.61	23.98	14.63
0.60	5	12.27	0.83	10.91	13.64	-7.16	2.29	-10.91	-3.40	22.30	22.16	23.98	18.24
0.70	5	11.73	1.06	10.00	13.47	-9.12	2.09	-12.55	-5.70	23.15	22.77	23.89	21.16
0.80	5	11.55	1.10	9.74	13.37	-10.37	1.81	-13.01	-7.74	23.33	0.36	24.77	23.22
0.90	4	11.30	1.11	9.49	13.11	-11.43	0.87	-12.85	-10.01	23.26	0.23	25.84	25.49
1.00	4	11.22	1.13	9.36	13.08	-11.69	1.24	-13.72	-9.65	23.26	0.25	26.85	25.85
0.0	4	11.22	1.13	9.36	13.08	-11.69	1.24	-13.72	-9.65	23.26	0.25	26.85	0.0
0.10	4	11.47	1.25	9.42	13.53	-10.41	1.02	-12.08	-8.73	23.22	0.06	27.32	1.31
0.20	4	11.73	1.73	8.89	14.57	-8.44	1.28	-10.55	-6.34	23.06	0.59	28.03	3.29
0.30	5	12.20	1.73	9.37	15.03	-4.89	1.65	-7.59	-2.13	22.57	1.15	29.17	6.90
0.40	7	13.27	1.91	10.13	16.41	-1.35	1.64	-4.03	1.34	21.50	1.30	30.47	10.75
0.50	7	14.06	1.99	10.80	17.33	1.99	2.12	-1.49	5.47	20.16	1.52	31.97	15.75
0.60	7	15.01	1.73	12.18	17.85	5.15	1.74	2.30	8.00	18.34	1.28	33.24	18.24
0.70	6	15.26	1.33	13.08	17.44	7.56	1.39	5.28	9.85	16.45	0.88	34.11	21.31
0.80	6	15.82	0.97	14.23	17.41	9.14	0.54	7.60	10.68	14.97	0.64	35.75	23.55
0.90	5	16.30	0.96	14.72	17.87	10.22	0.33	9.67	10.77	13.76	0.53	37.31	25.24
1.00	5	16.60	0.63	15.56	17.64	10.59	0.44	9.86	11.32	12.92	0.49	38.80	26.21

LANDMARK - LT TROCHANTER (19)

TIME	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORD INATE-----				-----Z - CO-ORDINATE-----				DISTANCE INCR	MOVES CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT		
0.0	7	3.31	0.71	2.14	4.47	6.79	0.73	5.59	8.07	3.59	2.73	4.46	0.0	0.0	
0.10	7	3.32	0.60	2.33	4.31	6.74	0.64	5.70	7.78	3.55	2.78	4.33	0.07	0.07	
0.20	7	3.28	0.63	2.24	4.32	6.82	0.64	5.77	7.87	3.54	2.76	4.25	0.10	0.17	
0.30	7	3.12	0.81	1.79	4.44	6.97	0.83	5.60	8.33	3.47	2.76	4.19	0.22	0.39	
0.40	7	3.14	0.83	1.79	4.50	6.86	0.83	5.51	8.22	3.49	2.79	4.19	0.11	0.50	
0.50	7	3.20	0.68	2.08	4.32	6.73	0.70	5.58	7.89	3.51	2.77	4.25	0.14	0.65	
0.60	7	3.13	0.71	1.98	4.29	6.59	0.53	5.06	8.11	3.50	2.79	4.41	0.18	0.83	
0.70	7	3.14	0.70	1.99	4.30	6.52	1.02	4.84	8.19	3.62	2.84	4.40	0.08	0.91	
0.80	7	3.18	0.68	2.06	4.30	6.54	0.94	5.01	8.08	3.51	2.91	4.30	0.05	0.95	
0.90	7	3.22	0.62	2.20	4.23	6.61	0.82	5.27	7.95	3.43	2.89	4.29	0.08	1.03	
1.00	7	3.25	0.56	2.33	4.17	6.64	0.82	5.30	7.98	3.58	2.82	4.34	0.05	1.08	
0.0	7	3.25	0.56	2.33	4.17	6.64	0.82	5.30	7.98	3.58	2.82	4.34	0.0	0.0	
0.10	7	3.24	0.57	2.30	4.19	6.64	0.68	5.53	7.75	3.58	2.81	4.36	0.01	0.01	
0.20	7	3.13	0.65	2.07	4.20	6.60	0.56	5.68	7.52	3.50	2.84	4.36	0.12	0.13	
0.30	7	3.10	0.74	1.88	4.31	6.68	0.55	5.77	7.59	3.57	2.81	4.35	0.09	0.22	
0.40	7	3.10	0.74	1.89	4.31	6.69	0.70	5.55	7.84	3.57	2.86	4.27	0.02	0.24	
0.50	7	3.09	0.71	1.93	4.25	6.57	0.93	4.95	8.18	3.50	2.83	4.30	0.03	0.37	
0.60	7	3.13	0.63	2.11	4.16	6.60	0.88	5.16	8.05	3.52	2.70	4.34	0.10	0.46	
0.70	7	3.09	0.75	1.85	4.32	6.65	0.79	5.35	7.95	3.52	2.61	4.43	0.07	0.53	
0.80	7	3.14	0.99	1.52	4.75	6.68	0.85	5.29	8.07	3.50	2.79	4.41	0.10	0.63	
0.90	7	3.20	0.81	1.87	4.52	6.71	0.78	5.42	8.00	3.54	2.81	4.41	0.07	0.73	
1.00	7	3.31	0.71	2.14	4.47	6.79	0.73	5.59	8.00	3.59	2.73	4.46	0.14	0.84	

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE,N	[-----X-----] CO-ORDINATE-----			[-----Y-----] CO-ORDINATE-----			[-----Z-----] CO-ORDINATE-----			DISTANCE			MOVED		
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	
0.0	5	19.26	0.52	18.40	20.12	5.52	0.69	4.39	6.65	11.87	1.14	10.00	13.74	0.0	0.0	
0.10	5	19.17	0.42	18.49	19.86	5.51	0.72	4.32	6.70	11.79	1.13	9.93	13.65	0.11	0.11	
F 0.20	6	19.11	0.24	18.72	19.50	5.56	0.90	4.07	7.04	11.56	1.12	9.72	13.40	0.24	0.36	
O 0.30	7	18.94	0.44	18.22	19.66	5.54	0.94	4.00	7.09	11.29	1.38	9.02	13.56	0.32	0.67	
R 0.40	7	19.03	0.43	18.31	19.74	5.48	0.92	3.97	6.99	11.31	1.39	9.03	13.59	0.11	0.78	
W 0.50	7	19.06	0.59	18.16	20.08	5.44	0.91	3.95	6.93	11.32	1.40	9.03	13.62	0.11	0.89	
A 0.60	7	19.06	0.45	18.32	19.80	5.28	1.05	3.56	7.03	11.34	1.39	9.06	13.62	0.17	1.06	
R 0.70	7	19.04	0.41	18.36	19.71	5.16	1.08	3.39	6.93	11.36	1.36	9.13	13.59	0.13	1.19	
D 0.80	7	19.07	0.49	18.27	19.88	5.21	1.02	3.54	6.89	11.36	1.35	9.16	13.57	0.07	1.25	
O 0.90	7	19.13	0.53	18.26	19.99	5.20	1.02	3.63	6.98	11.33	1.37	9.09	13.57	0.11	1.36	
1.00	7	19.23	0.53	18.36	20.10	5.36	1.05	3.64	7.08	11.29	1.40	9.00	13.58	0.13	1.49	
0.0	7	19.23	0.53	18.36	20.10	5.36	1.05	3.64	7.08	11.29	1.40	9.00	13.58	0.0	0.0	
0.10	7	19.19	0.55	18.28	20.10	5.46	0.91	3.96	6.95	11.32	1.39	9.04	13.60	0.11	0.11	
0.20	7	19.12	0.58	18.17	20.07	5.50	0.81	4.16	6.83	11.33	1.40	9.04	13.63	0.08	0.19	
R 0.30	6	19.23	0.52	18.38	20.08	5.51	0.84	4.13	6.88	11.68	1.16	9.78	13.59	0.37	0.56	
E 0.40	6	19.22	0.52	18.37	20.08	5.37	0.72	4.19	6.55	11.58	1.14	9.81	13.56	0.14	0.69	
T 0.50	6	19.14	0.61	18.14	20.13	5.21	0.67	4.12	6.31	11.58	1.12	9.84	13.52	0.18	0.88	
U 0.60	6	19.19	0.52	18.33	20.05	5.38	0.66	4.30	6.45	11.62	1.19	9.67	13.56	0.18	1.06	
R 0.70	5	19.24	0.66	18.15	20.32	5.42	0.68	4.30	6.55	11.81	1.20	9.84	13.77	0.20	1.26	
N 0.80	5	19.42	0.37	18.82	20.03	5.59	0.80	4.27	6.90	11.78	1.15	9.89	13.67	0.25	1.51	
O 0.90	5	19.35	0.45	18.61	20.09	5.57	0.73	4.37	6.77	11.81	1.12	9.97	13.65	0.08	1.59	
1.00	5	19.26	0.52	18.40	20.12	5.52	0.69	4.39	6.65	11.87	1.14	10.00	13.74	0.12	1.71	

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	[-----X-----] CO-ORDINATE-----			[-----Y-----] CO-ORDINATE-----			[-----Z-----] CO-ORDINATE-----			DISTANCE			MOVED		
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	
0.0	7	-3.97	0.69	-5.11	-2.84	7.45	1.09	5.66	9.24	19.24	1.21	17.22	21.19	0.0	0.0	
0.10	7	-4.03	0.67	-5.13	-2.94	7.49	0.99	5.87	9.11	19.34	0.88	17.60	20.48	0.18	0.18	
F 0.20	7	-4.00	0.66	-5.08	-2.91	7.52	0.96	5.95	9.09	18.97	0.73	17.78	20.16	0.08	0.27	
O 0.30	7	-3.75	0.62	-4.77	-2.73	7.41	0.98	5.79	9.02	19.20	0.72	18.02	20.38	0.35	0.62	
R 0.40	7	-3.39	0.72	-4.57	-2.21	7.12	1.01	5.46	8.78	19.52	0.76	18.28	20.76	0.56	1.18	
W 0.50	7	-2.88	0.92	-4.39	-1.57	6.70	1.19	4.75	8.65	19.85	0.78	18.57	21.13	0.74	1.92	
A 0.60	7	-2.79	0.70	-3.93	-1.64	6.48	1.14	4.60	8.35	20.28	0.82	18.94	21.61	0.49	2.41	
R 0.70	7	-2.76	0.70	-3.91	-1.61	6.16	1.17	4.24	8.08	20.62	0.90	19.14	22.10	0.47	2.88	
D 0.80	7	-2.65	0.91	-4.14	-1.16	5.92	1.27	3.83	8.01	20.85	0.96	19.28	22.42	0.35	3.23	
O 0.90	7	-2.52	0.99	-4.14	-0.90	5.69	1.33	3.50	7.87	20.98	0.95	19.42	22.54	0.30	3.52	
1.00	7	-2.41	1.14	-4.28	-0.54	5.43	1.33	3.25	7.62	21.08	0.97	19.50	22.67	0.30	3.82	
0.0	7	-2.41	1.14	-4.28	-0.54	5.43	1.33	3.25	7.62	21.08	0.97	19.50	22.67	0.0	0.0	
0.10	7	-2.70	1.03	-4.39	-1.01	5.59	1.16	3.69	7.50	20.86	0.97	19.27	22.45	0.40	0.40	
0.20	7	-2.99	1.07	-4.75	-1.23	5.83	1.08	4.07	7.60	20.60	0.95	19.04	22.16	0.46	0.86	
R 0.30	7	-3.22	1.06	-4.96	-1.49	6.15	1.03	4.46	7.84	20.24	1.10	18.43	22.05	0.53	1.39	
E 0.40	7	-3.57	1.09	-5.35	-1.78	6.26	1.13	4.40	8.12	19.99	1.22	17.99	21.99	0.44	1.83	
T 0.50	7	-4.02	1.08	-5.80	-2.24	6.31	1.37	4.07	8.55	19.87	1.29	17.75	21.99	0.47	2.30	
U 0.60	7	-4.18	1.14	-6.04	-2.51	6.55	1.13	4.69	8.40	19.50	1.22	17.60	21.60	0.39	2.69	
R 0.70	7	-4.38	1.04	-6.09	-2.67	6.81	1.05	5.09	8.54	19.41	1.14	17.54	21.28	0.39	3.08	
N 0.80	7	-4.28	0.78	-5.56	-3.00	7.11	1.12	5.27	8.95	19.33	1.14	17.46	21.21	0.32	3.40	
O 0.90	7	-4.12	0.70	-5.26	-2.97	7.27	1.13	5.43	9.12	19.22	1.22	17.21	21.22	0.25	3.66	
1.00	7	-3.97	0.69	-5.11	-2.84	7.45	1.09	5.66	9.24	19.24	1.21	17.22	21.19	0.23	3.89	

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	(- - - - - X - CO-ORDINATE - - - - -)				(- - - - - Y - CO-ORDINATE - - - - -)				(- - - - - Z - CO-ORDINATE - - - - -)				DISTANCE				MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	INCR	CUM	
0.0	7	3.57	0.62	2.55	4.59	11.73	0.82	10.39	13.08	13.75	1.10	11.94	15.56	0.0	0.0	0.0	0.0	
0.10	7	3.64	0.82	2.30	4.98	10.82	0.30	10.33	11.31	13.27	1.20	11.29	15.24	1.04	1.04	1.04	1.04	
F 0.20	7	3.37	1.11	2.05	5.70	9.84	0.62	8.82	10.86	13.27	1.33	11.09	15.46	1.01	2.04	1.01	2.04	
O 0.30	7	4.47	1.45	2.09	6.84	8.52	0.90	7.05	10.00	13.93	1.60	11.31	16.54	1.58	3.63	1.58	3.63	
R 0.40	7	5.40	1.25	3.34	7.45	6.89	1.32	4.72	9.05	14.87	1.82	11.89	17.86	2.11	5.73	2.11	5.73	
W 0.50	7	6.25	0.85	4.86	7.64	4.76	1.35	2.54	6.98	15.95	1.86	12.91	19.00	2.54	8.27	2.54	8.27	
A 0.60	7	6.47	0.65	5.41	7.54	3.05	0.63	5.47	6.84	16.84	1.73	14.01	19.68	1.94	10.21	1.94	10.21	
R 0.70	7	6.52	0.53	5.64	7.39	1.56	1.47	-0.84	3.97	17.51	1.63	14.94	20.28	1.67	11.88	1.67	11.88	
D 0.80	6	6.50	0.60	5.52	7.48	0.54	1.38	-1.73	2.80	17.98	1.56	15.41	20.54	1.09	12.97	1.09	12.97	
1.00	6	6.44	0.53	5.57	7.31	-0.40	1.25	-2.06	2.05	18.21	1.49	15.76	20.66	0.59	13.56	0.59	13.56	
	6	6.45	0.43	5.74	7.16	-0.40	1.07	-2.16	1.36	18.35	1.43	16.01	20.70	0.42	13.98	0.42	13.98	
0.0	6	6.45	0.43	5.74	7.16	-0.40	1.07	-2.16	1.36	18.35	1.43	16.01	20.70	0.0	0.0	0.0	0.0	
0.10	6	6.34	0.50	5.52	7.15	0.67	0.57	-0.27	1.61	18.29	1.38	16.03	20.56	1.08	1.08	1.08	1.08	
0.20	7	6.19	0.64	5.15	7.24	2.40	0.55	1.50	3.29	17.83	1.35	15.62	20.04	1.79	2.87	1.79	2.87	
R 0.30	7	5.93	1.04	4.28	7.68	4.66	0.82	3.31	6.02	16.71	1.51	14.24	19.19	2.53	5.41	2.53	5.41	
E 0.40	7	5.43	1.29	3.31	7.55	6.77	1.05	5.05	8.49	15.77	1.56	13.22	18.33	2.37	7.78	2.37	7.78	
U 0.50	7	4.67	1.34	2.47	6.87	8.60	1.26	6.53	10.68	15.01	1.68	12.25	17.77	2.12	9.90	2.12	9.90	
T 0.60	7	3.94	1.27	1.87	6.02	10.05	1.18	8.11	11.99	14.48	1.67	11.74	17.21	1.71	11.61	1.71	11.61	
R 0.70	7	3.46	1.06	1.72	5.19	11.02	1.07	9.27	12.77	14.31	1.60	11.68	16.94	1.09	12.70	1.09	12.70	
N 0.80	7	3.47	0.55	2.57	4.37	11.57	0.96	10.00	13.14	14.27	1.40	11.98	16.57	0.56	13.26	0.56	13.26	
0.90	7	3.53	0.34	2.97	4.09	11.79	0.81	10.46	13.12	14.12	1.21	12.14	16.10	0.27	13.53	0.27	13.53	
1.00	7	3.57	0.62	2.55	4.59	11.73	0.82	10.39	13.08	13.75	1.10	11.94	15.56	0.38	13.91	0.38	13.91	

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	(- - - - - X - CO-ORDINATE - - - - -)				(- - - - - Y - CO-ORDINATE - - - - -)				(- - - - - Z - CO-ORDINATE - - - - -)				DISTANCE				MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	INCR	CUM	
0.0	6	13.48	0.71	12.33	14.64	10.92	0.09	10.77	11.08	12.95	0.86	11.55	14.36	0.0	0.0	0.0	0.0	
0.10	6	12.68	1.19	10.72	14.64	8.62	1.28	6.51	10.72	14.71	0.83	13.36	16.06	3.01	3.01	3.01	3.01	
F 0.20	6	12.01	1.70	9.23	14.79	5.94	2.28	2.21	9.67	16.58	1.13	14.72	18.43	3.33	6.34	3.33	6.34	
O 0.30	7	11.52	2.13	8.03	15.01	2.84	2.93	-1.97	7.65	18.49	1.39	16.21	20.78	3.68	10.02	3.68	10.02	
R 0.40	6	11.68	1.36	9.45	13.91	-0.11	3.58	-5.99	5.77	19.78	1.47	17.37	22.19	3.23	13.24	3.23	13.24	
W 0.50	6	11.23	1.07	9.48	12.99	-2.46	2.08	-5.88	0.95	20.79	1.14	18.92	22.67	2.60	15.84	2.60	15.84	
A 0.60	5	10.68	0.73	9.48	11.89	-4.90	2.08	-8.30	-1.50	21.34	0.61	20.35	22.33	2.56	18.40	2.56	18.40	
R 0.70	5	10.25	0.63	9.22	11.29	-6.72	1.94	-9.90	-3.54	21.82	0.26	21.59	22.24	1.93	20.33	1.93	20.33	
D 0.80	5	10.06	0.67	8.96	11.16	-7.81	1.57	-10.40	-5.23	22.04	0.23	21.66	22.41	1.13	21.46	1.13	21.46	
0.90	4	9.94	0.70	8.80	11.09	-8.84	0.92	-10.36	-7.33	22.08	0.14	21.85	22.31	1.04	22.50	1.04	22.50	
1.00	4	9.87	0.70	8.72	11.02	-9.23	0.96	-10.80	-7.66	22.13	0.15	21.88	22.38	0.40	22.89	0.40	22.89	
0.0	4	9.87	0.70	8.72	11.02	-9.23	0.96	-10.80	-7.66	22.13	0.15	21.88	22.38	0.0	0.0	0.0	0.0	
0.10	4	9.98	0.90	8.51	11.45	-7.98	1.06	-9.72	-6.25	22.03	0.25	21.63	22.44	1.26	1.26	1.26	1.26	
0.20	4	10.18	1.32	8.02	12.35	-6.07	1.51	-8.54	-3.63	21.57	0.69	20.44	22.70	1.97	3.23	1.97	3.23	
R 0.30	5	10.88	1.36	8.64	13.11	-2.99	1.78	-5.91	-0.07	20.91	1.20	18.95	22.88	3.23	6.46	3.23	6.46	
E 0.40	7	11.65	1.54	9.13	14.17	0.55	1.66	-2.17	3.28	19.76	1.21	17.77	21.74	3.81	10.26	3.81	10.26	
T 0.50	7	11.87	1.59	9.27	14.47	3.58	2.13	0.08	7.07	18.40	1.44	16.07	20.82	3.30	13.57	3.30	13.57	
O 0.60	7	12.34	1.77	9.43	15.24	7.57	3.34	2.09	13.05	16.57	1.66	13.85	19.29	4.44	18.00	4.44	18.00	
U 0.70	6	12.24	0.98	10.64	13.84	8.79	1.06	7.05	10.54	15.75	1.52	13.26	18.24	1.46	19.46	1.46	19.46	
R 0.80	6	12.62	0.57	11.69	13.55	10.11	0.60	9.13	11.10	14.71	1.33	12.53	16.89	1.72	21.20	1.72	21.20	
N 0.90	6	12.92	0.35	12.34	13.49	10.79	0.40	10.13	11.46	13.81	1.06	12.06	15.55	1.17	22.37	1.17	22.37	
1.00	6	13.48	0.71	12.33	14.64	10.92	0.09	10.77	11.08	12.95	0.86	11.55	14.36	1.03	23.41	1.03	23.41	

MMMT NO. 21260/30

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO HATCH RELEASE CONTROLLER AT +11.0, -13.0, +23.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +13.0, -13.0, +4.8.

MOTION NUMBER - 22260
 BACK ANGLE - 30

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.69	0.13	0.50 TO 0.90 SECS.
LEFT REV	0.66	0.11	0.50 TO 0.80 SECS.

(1)

TIME	SAMPLE SIZE, N	-----X-----				-----Y-----				-----Z-----				DISTANCE		MOVES CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	-0.17	1.17	-2.09	1.75	0.38	1.13	2.24	27.17	1.47	24.83	29.50	0.0	0.0		
0.10	7	-0.37	1.64	-3.06	2.32	-1.05	1.22	-3.04	27.89	0.97	26.29	29.48	1.61	1.61		
0.20	7	-0.64	1.89	-3.73	2.45	-2.07	1.07	-3.82	28.27	1.06	26.54	30.01	1.13	2.74		
0.30	7	-0.85	1.80	-3.80	2.09	-2.48	1.15	-4.37	28.35	1.18	26.42	30.28	0.47	3.21		
0.40	7	-0.88	1.80	-3.83	2.07	-2.61	1.16	-4.52	28.44	1.19	26.49	30.40	0.16	3.37		
0.50	7	-1.03	2.04	-4.38	2.32	-2.71	1.23	-4.73	28.48	1.22	26.49	30.40	0.18	3.55		
0.60	7	-1.07	1.95	-4.27	2.12	-2.77	1.45	-5.15	28.53	1.19	26.58	30.48	0.09	3.64		
0.70	7	-0.97	1.73	-3.81	1.88	-2.82	1.47	-5.24	28.54	1.14	26.67	30.41	0.12	3.76		
0.80	7	-1.15	1.83	-4.14	1.84	-3.11	1.48	-5.54	28.53	1.21	26.55	30.51	0.34	4.10		
0.90	7	-1.08	1.70	-3.86	1.71	-3.35	1.70	-6.14	28.52	1.30	26.38	30.66	0.25	4.36		
1.00	7	-0.87	1.38	-3.13	1.38	-3.47	1.79	-6.41	28.46	1.51	25.99	30.93	0.24	4.60		
0.0	7	-0.87	1.38	-3.13	1.38	-3.47	1.79	-6.41	28.46	1.51	25.99	30.93	0.0	0.0		
0.10	7	-0.76	1.25	-2.82	1.29	-1.64	1.71	-4.44	27.73	1.22	25.73	29.74	1.97	1.97		
0.20	7	-0.66	1.32	-2.83	1.51	-0.68	2.00	-3.95	27.36	1.26	25.29	29.44	1.04	3.01		
0.30	7	-0.65	1.27	-2.73	1.44	-0.70	1.98	-3.95	27.38	1.27	25.30	29.46	0.03	3.04		
0.40	7	-0.58	1.16	-2.49	1.33	-0.59	1.97	-3.83	27.34	1.27	25.30	29.42	0.11	3.18		
0.50	7	-0.53	1.25	-2.59	1.52	-0.53	1.98	-3.77	27.26	1.29	25.14	29.38	0.29	3.29		
0.60	7	-0.45	1.13	-2.30	1.40	-0.48	1.64	-3.18	27.24	1.29	25.12	29.36	0.10	3.39		
0.70	7	-0.44	1.14	-2.30	1.43	-0.32	1.40	-2.61	27.26	1.33	25.08	29.43	0.17	3.56		
0.80	7	-0.42	1.17	-2.34	1.50	-0.03	1.30	-2.42	27.26	1.42	24.92	29.59	0.28	3.84		
0.90	7	-0.31	1.20	-2.28	1.66	0.19	1.22	-1.81	27.23	1.46	24.83	29.62	0.25	4.10		
1.00	7	-0.17	1.17	-2.09	1.75	0.38	1.13	-1.48	27.17	1.42	24.83	29.50	0.24	4.33		

LANDMARK - CERVICAL

TIME	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE		MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	
0.0	7	-7.19	1.00	-8.82	-5.55	-0.77	0.69	-1.90	0.36	21.14	1.57	18.57	23.72	0.0	0.0	
0.10	7	-7.56	1.23	-9.58	-5.54	-0.49	0.68	-1.60	0.63	21.39	1.15	19.50	23.28	0.53	0.53	
0.20	7	-7.86	1.53	-10.37	-5.35	-0.47	0.80	-1.79	0.85	21.59	1.07	19.84	23.35	0.37	0.89	
0.30	7	-7.80	1.62	-10.45	-5.14	-0.64	0.76	-1.90	0.61	21.59	1.10	19.79	23.39	0.19	1.08	
0.40	7	-7.68	1.52	-10.18	-5.19	-0.70	0.78	-1.98	0.57	21.61	1.11	19.79	23.42	0.13	1.21	
0.50	7	-7.71	1.44	-10.08	-5.35	-0.83	0.79	-2.14	0.47	21.72	1.18	19.78	23.66	0.18	1.39	
0.60	7	-7.46	1.52	-9.94	-4.97	-0.98	0.54	-2.52	0.56	21.79	1.23	19.77	23.81	0.31	1.69	
0.70	7	-7.12	1.54	-9.65	-4.58	-1.13	1.07	-3.06	0.64	21.75	1.25	19.70	23.79	0.41	2.10	
0.80	7	-7.21	1.38	-9.47	-4.94	-1.37	1.07	-3.12	0.39	21.77	1.20	19.80	23.75	0.18	2.29	
0.90	7	-7.09	1.30	-9.23	-4.96	-1.62	1.12	-3.45	0.22	21.87	1.25	19.81	23.92	0.29	2.57	
1.00	7	-6.90	1.38	-9.17	-4.63	-1.79	1.15	-3.67	0.10	21.87	1.42	19.54	24.20	0.26	2.83	
2.0	7	-6.90	1.38	-9.17	-4.63	-1.79	1.15	-3.67	0.10	21.87	1.42	19.54	24.20	0.0	0.0	
3.0	7	-7.19	1.33	-9.37	-5.01	-1.09	1.09	-3.32	0.18	21.53	1.58	18.95	24.31	0.48	0.48	
4.0	7	-7.38	1.27	-9.47	-5.30	-1.46	1.01	-3.12	0.20	21.36	1.80	18.41	24.31	0.78	0.78	
5.0	7	-7.43	1.22	-9.44	-5.42	-1.43	0.91	-2.91	0.06	21.33	1.77	18.42	24.23	0.07	0.85	
6.0	7	-7.52	1.08	-9.30	-5.74	-1.34	0.88	-2.77	0.10	21.26	1.71	18.46	24.06	0.14	0.99	
7.0	7	-7.63	1.10	-9.42	-5.83	-1.36	0.98	-2.97	0.26	21.19	1.71	18.38	23.99	0.13	1.12	
8.0	7	-7.43	0.87	-8.85	-6.01	-1.50	0.83	-2.85	-0.14	21.18	1.71	18.37	23.98	0.24	1.12	
9.0	7	-7.36	0.83	-8.73	-5.99	-1.36	0.80	-2.68	-0.05	21.20	1.70	18.41	23.99	0.16	1.51	
10.0	7	-7.48	0.78	-8.76	-6.20	-1.11	0.61	-2.11	-0.10	21.19	1.69	18.41	23.96	0.28	1.80	
11.0	7	-7.41	0.77	-8.68	-6.14	-0.93	0.63	-1.96	0.10	21.16	1.63	18.50	23.83	0.19	1.98	
12.0	7	-7.19	1.00	-8.82	-5.55	-0.77	0.63	-1.90	0.36	21.14	1.57	18.57	23.72	0.27	2.26	

LANDMARK - LT GRIP CENTER (17)

TIME T	SAMPLE SIZE, N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	16.73	0.74	15.51	17.95	10.29	1.02	8.61	11.96	12.96	0.11	12.77	13.14	0.0	0.0	0.0	0.0
0.10	7	16.13	0.92	14.63	17.63	8.58	1.08	6.81	10.35	16.81	0.91	13.32	16.30	2.59	2.59	2.59	2.59
0.20	7	15.32	1.20	13.35	17.30	5.51	1.36	3.28	7.73	17.20	1.65	14.50	19.91	3.98	6.57	3.98	6.57
0.30	7	14.61	1.46	11.91	16.70	1.45	1.41	-0.86	3.77	19.88	2.30	16.11	23.66	4.97	11.53	4.97	11.53
0.40	7	13.35	1.54	10.82	15.87	-1.32	1.76	-4.20	1.57	20.95	1.19	19.00	22.90	3.12	14.65	3.12	14.65
0.50	6	12.53	1.24	10.49	14.57	-4.50	2.24	-8.18	-0.82	22.50	0.80	21.20	23.81	3.63	18.29	3.63	18.29
0.60	5	12.48	1.30	10.34	14.62	-6.97	2.46	-11.00	-0.93	23.05	0.73	21.86	24.25	2.53	20.81	2.53	20.81
0.70	4	12.06	0.96	10.48	13.63	-10.02	0.98	-11.63	-8.41	23.40	0.43	22.70	24.10	3.10	23.92	3.10	23.92
0.80	4	11.56	1.01	9.91	13.21	-10.89	1.35	-13.10	-8.68	23.59	0.19	23.27	23.90	1.02	24.94	1.02	24.94
0.90	4	11.34	0.96	9.76	12.91	-11.43	1.42	-13.75	-9.10	23.72	0.15	23.47	23.96	0.59	25.53	0.59	25.53
1.00	4	11.45	0.92	9.95	12.96	-11.83	0.85	-13.23	-10.43	23.54	0.34	22.99	24.10	0.46	25.99	0.46	25.99
0.0	4	11.45	0.92	9.95	12.96	-11.83	0.85	-13.23	-10.43	23.54	0.34	22.99	24.10	0.0	0.0	0.0	0.0
0.10	4	11.76	0.89	10.30	13.23	-10.06	0.66	-11.13	-8.98	23.11	0.30	22.62	23.60	1.85	1.85	1.85	1.85
0.20	5	11.70	1.31	9.56	13.84	-7.67	1.08	-9.44	-5.91	22.75	0.71	21.58	23.92	2.41	4.26	2.41	4.26
0.30	5	12.21	1.56	9.64	14.77	-4.74	0.72	-5.92	-3.55	22.02	1.25	19.96	24.07	3.07	7.33	3.07	7.33
0.40	7	13.00	1.51	10.53	15.48	-1.13	0.62	-2.15	-0.11	20.87	1.26	18.78	22.97	3.87	11.20	3.87	11.20
0.50	7	13.67	1.52	11.17	16.16	2.09	0.92	0.58	3.60	19.44	1.26	17.37	21.51	3.59	14.78	3.59	14.78
0.60	7	14.51	1.53	12.00	17.03	5.10	1.28	3.00	7.21	17.76	1.17	15.85	19.67	3.55	18.33	3.55	18.33
0.70	7	15.15	1.29	13.03	17.27	7.48	1.33	5.31	9.66	16.23	0.87	14.81	17.66	2.90	21.24	2.90	21.24
0.80	7	15.86	0.85	14.46	17.25	9.20	1.04	7.49	10.90	14.72	0.50	13.90	15.54	2.59	23.82	2.59	23.82
0.90	7	16.59	0.83	15.22	17.95	10.19	1.33	8.01	12.38	13.43	0.83	12.07	14.80	1.79	25.41	1.79	25.41
1.00	7	16.73	0.74	15.51	17.95	10.29	1.02	8.61	11.96	12.96	0.11	12.77	13.14	0.51	25.92	0.51	25.92

LANDMARK - LT TROCHANTER (19)

TIME T	SAMPLE SIZE, N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	3.85	1.33	1.88	6.03	6.65	0.66	5.56	7.74	3.44	0.48	2.65	4.23	0.0	0.0	0.0	0.0
0.10	7	3.48	0.64	2.43	4.54	6.79	0.74	5.58	8.00	3.51	0.46	2.76	4.27	0.40	0.40	0.40	0.40
0.20	7	3.09	0.47	2.33	3.85	6.85	0.73	5.66	8.04	3.54	0.45	2.80	4.28	0.40	0.80	0.80	0.80
0.30	7	3.11	0.35	2.53	3.69	6.75	0.61	5.75	7.76	3.50	0.38	2.87	4.13	0.11	0.91	0.91	0.91
0.40	7	3.19	0.34	2.64	3.75	6.65	0.59	5.69	7.62	3.55	0.41	2.87	4.22	0.14	1.04	1.04	1.04
0.50	7	3.07	0.38	2.44	3.70	6.64	0.84	5.27	8.02	3.64	0.41	2.96	4.32	0.15	1.20	1.20	1.20
0.60	7	3.02	0.37	2.41	3.64	6.70	1.01	5.05	8.35	3.61	0.38	2.99	4.32	0.08	1.28	1.28	1.28
0.70	7	3.07	0.33	2.54	3.61	6.80	1.08	5.03	8.57	3.58	0.38	2.96	4.20	0.11	1.39	1.39	1.39
0.80	7	3.00	0.30	2.51	3.50	6.69	0.99	5.07	8.32	3.63	0.42	2.94	4.31	0.14	1.53	1.53	1.53
0.90	7	3.02	0.36	2.43	3.61	6.54	0.91	5.05	8.04	3.65	0.41	2.99	4.32	0.15	1.68	1.68	1.68
1.00	7	3.19	0.56	2.27	4.10	6.52	0.88	5.08	7.96	3.57	0.45	2.84	4.31	0.19	1.86	1.86	1.86
0.0	7	3.19	0.56	2.27	4.10	6.52	0.88	5.08	7.96	3.57	0.45	2.84	4.31	0.0	0.0	0.0	0.0
0.10	7	3.64	1.22	1.63	5.65	6.52	0.82	5.17	7.86	3.57	0.47	2.81	4.33	0.45	0.45	0.45	0.45
0.20	7	3.83	1.58	1.24	6.42	6.53	0.74	5.31	7.74	3.55	0.49	2.75	4.35	0.19	0.64	0.64	0.64
0.30	7	3.76	1.38	1.50	6.02	6.59	0.64	5.52	7.63	3.52	0.45	2.78	4.25	0.09	0.73	0.73	0.73
0.40	7	3.79	1.43	1.45	6.13	6.57	0.75	5.33	7.80	3.48	0.42	2.79	4.18	0.05	0.78	0.78	0.78
0.50	7	3.72	1.33	1.54	5.91	6.60	0.77	5.33	7.87	3.50	0.43	2.79	4.21	0.08	0.86	0.86	0.86
0.60	7	3.76	1.21	1.77	5.75	6.62	0.62	5.61	7.63	3.49	0.44	2.77	4.22	0.05	0.90	0.90	0.90
0.70	7	3.78	1.16	1.88	5.68	6.59	0.74	5.37	7.81	3.46	0.45	2.71	4.20	0.05	0.95	0.95	0.95
0.80	7	3.73	1.22	1.74	5.72	6.77	0.75	5.54	8.00	3.47	0.55	2.59	4.38	0.19	1.14	1.14	1.14
0.90	7	3.76	1.28	1.67	5.85	6.77	0.70	5.63	7.92	3.49	0.56	2.58	4.41	0.03	1.17	1.17	1.17
1.00	7	3.85	1.33	1.68	6.03	6.65	0.66	5.56	7.74	3.44	0.48	2.65	4.23	0.17	1.34	1.34	1.34

LANDMARK - LT KNEE TOP (21)

TIME	SAMPLE	X - CO-ORDINATE					Y - CO-ORDINATE					Z - CO-ORDINATE					DISTANCE	MOVED
T	SIZE	MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR	CUM
0.0	5	19.48	0.64	18.43	20.52		5.28	0.27	4.84	5.72		11.37	1.16	9.47	13.27		0.0	0.0
0.10	5	19.58	0.45	18.84	20.32		5.73	0.58	4.78			11.50	1.43	9.15	13.86		0.48	0.48
F 0.20	5	19.29	0.53	18.43	20.15		5.67	0.59	4.70	6.64		11.61	1.53	9.10	14.12		0.32	0.80
O 0.30	5	19.23	0.40	18.57	19.89		5.54	0.48	4.76	6.33		11.61	1.45	9.23	13.99		0.14	0.94
R 0.40	5	19.24	0.59	18.27	20.22		5.55	0.58	4.60	6.49		11.61	1.41	9.31	13.92		0.01	0.95
W 0.50	5	19.10	0.70	17.96	20.25		5.62	0.60	4.63	6.60		11.63	1.39	9.35	13.88		0.16	1.11
A 0.60	5	19.18	0.58	18.22	20.14		5.58	0.70	4.43	6.74		11.62	1.38	9.36	13.88		0.09	1.19
R 0.70	5	19.36	0.38	18.74	19.99		5.50	0.71	4.33	6.66		11.54	1.29	9.42	13.66		0.22	1.41
D 0.80	5	19.25	0.50	18.43	20.07		5.52	0.70	4.37	6.68		11.53	1.34	9.33	13.72		0.12	1.53
N 0.90	5	19.30	0.43	18.60	20.00		5.41	0.64	4.36	6.46		11.51	1.36	9.27	13.75		0.13	1.65
1.00	5	19.40	0.49	18.60	20.40		5.27	0.52	4.42	6.11		11.56	1.25	9.50	13.61		0.18	1.83
0.0	5	19.40	0.49	18.60	20.20		5.27	0.52	4.42	6.11		11.56	1.25	9.50	13.61		0.0	0.0
0.10	5	19.41	0.54	18.53	20.29		5.26	0.38	4.64			11.50	1.37	9.36	13.84		0.04	0.04
0.20	6	19.90	1.19	17.94	21.86		5.36	0.34	4.81	5.91		11.72	1.29	9.61	13.83		0.52	0.56
R 0.30	6	19.93	1.09	18.14	21.73		5.32	0.29	4.85	5.80		11.59	1.28	9.59	13.79		0.06	0.62
E 0.40	6	19.94	1.08	18.16	21.71		5.32	0.39	4.69	5.95		11.67	1.28	9.57	13.78		0.02	0.63
T 0.50	6	19.77	1.15	17.83	21.70		5.13	0.47	4.36	5.90		11.66	1.28	9.57	13.76		0.25	0.89
U 0.60	6	19.77	1.15	17.89	21.65		5.06	0.41	4.39	5.74		11.53	1.24	9.60	13.66		0.08	0.96
R 0.70	6	19.79	1.08	18.02	21.56		5.18	0.58	4.23	6.12		11.60	1.19	9.65	13.55		0.12	1.09
N 0.80	6	19.79	1.08	18.01	21.56		5.32	0.43	4.61	5.07		11.57	1.15	9.68	13.47		0.15	1.23
0.90	5	19.43	0.45	18.69	20.17		5.28	0.30	4.78	6.03		11.43	1.22	9.43	13.43		0.39	1.62
1.00	5	19.48	0.64	18.43	20.52		5.28	0.27	4.84	5.72		11.37	1.16	9.47	13.27		0.08	1.70

LANDMARK - LT SHOULDER CENTER (23)

TIME	SAMPLE	X - CO-ORDINATE					Y - CO-ORDINATE					Z - CO-ORDINATE					DISTANCE	MOVED
T	SIZE	MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR	CUM
0.0	7	-3.77	0.80	-5.07	-2.46		7.57	1.45	5.19	9.94		18.63	1.20	16.97	20.59		0.0	0.0
0.10	7	-4.11	0.98	-5.72	-2.50		7.72	1.13	5.87	9.56		18.53	0.70	17.38	20.19		0.39	0.39
F 0.20	7	-4.16	1.18	-6.09	-2.23		7.52	0.98	5.91	9.13		18.62	0.95	17.06	20.36		0.22	0.61
O 0.30	7	-3.67	1.26	-5.74	-1.61		7.20	0.97	5.61	8.79		18.84	0.93	17.32	20.36		0.62	1.23
R 0.40	7	-3.09	1.21	-5.08	-1.10		7.00	0.94	5.46	8.53		19.39	0.91	17.60	20.57		0.67	1.89
W 0.50	7	-2.80	1.21	-4.78	-0.82		6.83	0.69	5.69	7.96		19.52	0.81	18.19	20.86		0.55	2.44
A 0.60	7	-2.38	1.21	-4.35	-0.40		6.63	0.58	5.68	7.58		19.90	0.71	18.74	21.06		0.60	3.04
R 0.70	7	-2.03	1.01	-3.70	-0.37		6.30	0.68	5.18	7.92		20.18	0.75	18.96	21.41		0.55	3.60
D 0.80	7	-2.09	1.04	-3.79	-0.38		6.08	0.76	4.84	7.33		20.43	0.80	19.12	21.73		0.33	3.92
0.90	7	-2.07	1.06	-3.80	-0.33		5.81	0.90	4.32	7.29		20.52	0.85	19.13	21.91		0.30	4.22
1.00	7	-1.88	0.93	-3.41	-0.35		5.36	1.08	3.58	7.13		20.52	0.94	18.97	22.06		0.48	4.70
0.0	7	-1.88	0.93	-3.41	-0.35		5.36	1.08	3.58	7.13		20.52	0.94	18.97	22.06		0.0	0.0
0.10	7	-2.23	0.84	-3.61	-0.86		5.68	0.86	4.27	7.08		19.98	1.10	18.17	21.79		0.72	0.72
0.20	7	-2.46	0.79	-3.76	-1.17		5.88	0.81	4.56	7.21		19.62	1.28	17.53	21.71		0.48	1.19
R 0.30	7	-2.69	0.79	-3.98	-1.39		6.05	0.95	4.50	7.60		19.44	1.29	17.30	21.52		0.35	1.54
E 0.40	7	-3.07	0.75	-4.29	-1.85		6.34	1.15	4.46	8.22		19.23	1.35	17.02	21.44		0.51	2.06
T 0.50	7	-3.53	0.89	-4.98	-2.08		6.58	1.47	4.17	8.00		19.32	1.46	16.63	21.41		0.56	2.62
U 0.60	7	-3.89	0.81	-5.21	-2.56		6.79	1.21	4.80	8.78		18.94	1.35	16.73	21.14		0.42	3.04
R 0.70	7	-4.12	0.85	-5.51	-2.72		6.85	1.07	5.10	8.61		18.95	1.25	16.90	21.00		0.24	3.28
N 0.80	7	-4.07	0.87	-5.49	-2.65		7.15	1.21	5.16	9.14		18.88	1.28	16.77	20.98		0.31	3.59
0.90	7	-3.88	0.85	-5.27	-2.49		7.40	1.35	5.17	9.62		18.73	1.24	16.69	20.77		0.35	3.93
1.00	7	-3.77	0.80	-5.07	-2.46		7.57	1.45	5.19	9.94		18.63	1.20	16.67	20.59		0.23	4.16

LANDMARK - LT ELBOW CENTER (25)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	INCR	MOVED
0.0		7		3.63	0.81	2.30	4.95	11.99	0.81	10.67	13.32	12.65	1.34	10.45	14.85	0.0	0.0			
0.10		7		3.41	0.85	2.01	4.81	11.42	0.61	10.42	12.43	12.41	1.02	10.73	14.09	0.65	0.65			
0.20	F	7		3.57	1.06	1.84	5.30	10.32	0.57	9.38	11.25	12.70	1.06	10.97	14.44	1.16	1.81			
0.30	O	7		4.57	1.01	2.91	6.23	8.81	0.81	7.48	10.14	13.56	1.07	11.81	15.31	2.00	3.81			
0.40	R	7		5.55	0.90	4.07	7.02	6.88	1.03	5.19	8.58	14.55	1.04	12.94	16.36	2.42	6.23			
0.50	W	7		6.20	0.77	4.94	7.47	4.64	1.40	2.34	6.95	15.78	0.96	12.94	16.36	2.60	8.82			
0.60	A	7		6.75	0.81	5.42	8.08	2.63	1.52	0.15	5.12	16.78	0.83	15.42	18.14	2.31	11.13			
0.70	R	7		6.96	0.66	5.88	8.04	1.28	1.36	-0.95	3.51	17.36	0.85	15.98	18.75	1.49	12.62			
0.80	D	7		6.86	0.64	5.82	7.91	0.34	1.09	-1.46	2.13	17.73	0.91	16.23	19.23	1.02	13.64			
0.90		7		6.79	0.66	5.71	7.87	-0.25	1.01	-1.91	1.40	17.90	0.97	16.50	19.49	0.62	14.26			
1.00		7		6.86	0.71	5.70	8.02	-0.64	0.79	-1.94	0.66	17.90	1.09	16.12	19.69	0.39	14.65			
0.0		7		6.86	0.71	5.70	8.02	-0.64	0.79	-1.94	0.66	17.90	1.09	16.12	19.69	0.0	0.0			
0.10		7		6.84	0.92	5.34	8.35	1.36	1.43	-0.98	3.69	17.35	0.69	16.22	18.47	2.07	2.07			
0.20		7		6.74	1.01	5.07	8.40	3.62	2.38	-0.29	7.53	16.44	0.84	15.06	17.81	2.44	4.51			
0.30	R	7		6.39	1.01	4.73	8.05	6.17	3.27	0.81	11.53	15.19	1.18	13.25	17.13	2.86	7.37			
0.40	E	7		5.75	0.90	4.27	7.23	7.42	1.05	5.69	9.15	14.64	1.27	12.55	16.73	1.51	8.88			
0.50	U	7		4.56	0.78	3.29	5.84	9.30	1.16	7.40	11.20	13.82	1.46	11.43	16.22	2.37	11.25			
0.60	U	7		3.75	0.70	2.60	4.90	10.43	1.08	8.66	12.20	13.24	1.64	10.55	15.94	1.51	12.76			
0.70	R	7		3.23	0.72	2.04	4.41	11.19	1.04	9.49	12.90	12.93	1.63	10.25	15.60	0.98	13.74			
0.80	N	7		3.04	0.80	1.73	4.36	11.69	0.95	10.13	13.26	12.82	1.49	10.37	15.26	0.54	14.28			
0.90		7		3.25	0.71	2.08	4.42	11.91	0.91	10.42	13.39	12.67	1.37	10.42	14.92	0.33	14.61			
1.00		7		3.63	0.81	2.30	4.95	11.99	0.81	10.67	13.32	12.65	1.34	10.45	14.85	0.39	15.00			

LANDMARK - LT WRIST CENTER (27)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	INCR	MOVED
0.0		6		12.93	1.16	11.03	14.83	10.97	0.97	9.39	12.56	12.81	0.74	11.60	14.02	0.0	0.0			
0.10		6		12.82	1.34	10.62	15.02	9.81	0.56	8.89	10.72	13.75	0.72	12.57	14.94	1.50	1.50			
0.20	F	6		12.17	1.47	9.76	14.57	7.21	0.36	6.62	7.80	15.32	1.13	13.46	17.18	3.10	4.61			
0.30	O	6		11.53	1.50	9.07	13.99	3.58	0.66	2.49	4.66	17.34	1.41	15.03	19.66	4.20	8.81			
0.40	R	7		11.37	1.44	9.00	13.74	0.65	1.70	-2.74	3.43	19.33	1.16	17.13	20.92	3.38	12.19			
0.50	W	6		10.85	1.15	8.96	12.75	-2.46	2.12	-5.93	1.01	20.59	0.90	19.11	22.06	3.52	15.71			
0.60	A	5		10.83	1.09	9.05	12.62	-4.86	2.43	-8.85	-0.87	21.35	0.72	20.17	22.53	2.52	18.23			
0.70	R	4		10.68	0.75	9.44	11.91	-7.59	0.68	-8.71	-6.47	21.89	0.24	21.49	22.29	2.79	21.02			
0.80	D	4		10.43	0.45	9.69	11.18	-8.22	0.98	-9.84	-6.61	22.04	0.22	21.68	22.40	0.69	21.71			
0.90		4		10.39	0.59	9.42	11.36	-8.55	1.40	-10.85	-6.26	22.32	0.15	21.78	22.26	0.33	22.05			
1.00		4		10.82	0.83	9.46	12.19	-8.62	1.46	-11.01	-6.23	21.85	0.33	21.31	22.38	0.47	22.52			
0.0		4		10.82	0.83	9.46	12.19	-8.62	1.46	-11.01	-6.23	21.85	0.33	21.31	22.38	0.0	0.0			
0.10		4		10.60	0.82	9.26	11.95	-7.53	0.82	-8.88	-6.18	21.59	0.31	21.09	22.09	1.14	1.14			
0.20		4		10.73	0.92	9.22	12.24	-5.76	0.61	-6.76	-4.77	21.00	0.60	20.01	21.99	1.87	3.01			
0.30	R	5		10.83	1.32	8.66	13.00	-2.43	0.95	-3.99	-0.86	20.14	1.06	18.39	21.86	3.45	6.46			
0.40	E	7		11.23	1.25	9.19	13.28	0.93	1.06	-0.81	2.66	18.96	1.19	17.01	20.91	3.57	10.03			
0.50	U	7		11.39	1.28	9.28	13.50	3.86	1.10	2.05	5.67	17.57	1.27	15.59	19.76	3.21	13.24			
0.60	T	7		11.62	1.45	9.24	14.00	6.47	1.27	4.39	8.56	16.26	1.32	14.10	18.43	2.98	16.21			
0.70	R	7		11.80	1.32	9.63	13.97	8.60	1.31	6.46	10.74	15.12	1.16	13.22	17.02	2.42	18.64			
0.80	N	6		12.32	1.08	10.55	14.10	10.24	1.05	8.52	11.95	14.14	1.00	12.50	15.77	1.98	20.61			
0.90		6		12.61	1.05	10.89	14.33	10.76	1.00	9.13	12.40	13.46	0.80	12.15	14.78	0.90	21.52			
1.00		6		12.93	1.16	11.03	14.83	10.97	0.97	9.39	12.56	12.81	0.74	11.60	14.02	0.76	22.27			

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +18.0, +10.0, +12.4 TO STICK CONTROLLER AT +20.0, 0.0, +15.0 AND REMAINS AT STICK CONTROLLER FOR RIGHT HAND TO COMPLETE A MOVEMENT AND THEN RETURNS BACK TO THROTTLE CONTROLLER.

BACK ANGLE - 30

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.42	0.09	0.30 TO 0.60 SECS.
LEFT REV	0.39	0.11	0.10 TO 0.60 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	42	0.48	1.23	-1.53	2.49	0.09	1.40	-2.21	2.39	27.67	1.36	25.44	29.89	0.0	0.0	0.0	
0.10	42	0.27	1.18	-1.67	2.20	-0.13	1.21	-2.11	1.86	27.78	1.26	25.71	29.84	0.32	0.32	0.32	
F 0.20	42	0.06	1.20	-1.91	2.04	-0.33	1.10	-2.13	1.47	27.87	1.20	25.89	29.84	0.30	0.62	0.62	
O 0.30	42	-0.03	1.21	-2.00	1.95	-0.43	1.10	-2.23	1.38	27.87	1.22	25.87	29.87	0.13	0.75	0.75	
R 0.40	42	-0.03	1.18	-1.96	1.90	-0.42	1.10	-2.23	1.39	27.86	1.25	25.81	29.90	0.01	0.77	0.77	
W 0.50	42	0.01	1.16	-1.89	1.91	-0.39	1.09	-2.17	1.40	27.88	1.26	25.81	29.94	0.05	0.82	0.82	
A 0.60	42	0.03	1.18	-1.91	1.97	-0.34	1.06	-2.08	1.40	27.94	1.26	25.88	30.01	0.08	0.90	0.90	
O 0.70	42	0.04	1.22	-1.96	2.04	-0.26	1.06	-1.99	1.48	27.99	1.25	25.95	30.04	0.10	1.00	1.00	
D 0.80	42	0.03	1.22	-1.98	2.03	-0.18	1.09	-1.96	1.61	28.06	1.26	25.99	30.13	0.10	1.10	1.10	
O 0.90	42	0.00	1.19	-1.96	1.96	-0.13	1.14	-2.01	1.75	28.15	1.30	26.02	30.28	0.11	1.21	1.21	
1.00	42	-0.02	1.18	-1.96	1.91	-0.09	1.22	-2.10	1.92	28.25	1.35	26.04	30.45	0.11	1.32	1.32	
0.0	42	-0.02	1.18	-1.96	1.91	-0.09	1.22	-2.10	1.92	28.25	1.35	26.04	30.45	0.0	0.0	0.0	
0.10	42	0.63	1.11	-1.19	2.46	0.78	1.19	-1.18	2.73	27.78	1.27	25.69	29.87	1.18	1.18	1.18	
0.20	42	0.63	1.13	-1.23	2.49	0.67	1.21	-1.32	2.65	27.76	1.29	25.64	29.88	0.11	1.30	1.30	
R 0.30	42	0.62	1.15	-1.26	2.49	0.54	1.22	-1.46	2.53	27.72	1.29	25.61	29.84	0.13	1.43	1.43	
E 0.40	42	0.59	1.16	-1.31	2.49	0.43	1.23	-1.58	2.44	27.70	1.28	25.60	29.79	0.12	1.55	1.55	
T 0.50	42	0.57	1.20	-1.41	2.54	0.34	1.26	-1.73	2.41	27.70	1.26	25.63	29.78	0.09	1.64	1.64	
U 0.60	42	0.56	1.22	-1.44	2.56	0.27	1.31	-1.87	2.42	27.71	1.28	25.60	29.81	0.07	1.71	1.71	
R 0.70	42	0.54	1.21	-1.44	2.53	0.21	1.34	-1.98	2.40	27.69	1.30	25.55	29.82	0.07	1.77	1.77	
N 0.80	42	0.53	1.21	-1.45	2.51	0.15	1.35	-2.06	2.36	27.66	1.32	25.49	29.83	0.07	1.84	1.84	
O 0.90	42	0.50	1.21	-1.48	2.49	0.12	1.37	-2.13	2.36	27.67	1.34	25.47	29.86	0.04	1.88	1.88	
1.00	42	0.48	1.23	-1.53	2.49	0.09	1.40	-2.21	2.39	27.67	1.36	25.44	29.89	0.04	1.92	1.92	

338

LANDMARK - CERVICALE

(2)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	42	-6.71	1.10	-8.51	-4.91	0.11	1.44	-2.25	2.47	21.49	1.22	19.49	23.48	0.0	0.0	0.0	
0.10	42	-6.90	1.04	-8.60	-5.20	-0.00	1.22	-2.01	2.00	21.44	1.21	19.45	23.42	0.22	0.22	0.22	
F 0.20	42	-7.09	1.14	-8.96	-5.22	-0.11	1.15	-2.00	1.79	21.38	1.22	19.38	23.39	0.22	0.45	0.45	
O 0.30	42	-7.16	1.26	-9.23	-5.09	-0.14	1.15	-2.03	1.75	21.37	1.21	19.38	23.36	0.08	0.53	0.53	
R 0.40	42	-7.13	1.27	-9.22	-5.05	-0.11	1.12	-1.96	1.73	21.38	1.20	19.41	23.35	0.04	0.57	0.57	
W 0.50	42	-7.07	1.25	-9.12	-5.01	-0.11	1.08	-1.89	1.67	21.41	1.20	19.45	23.37	0.07	0.64	0.64	
A 0.60	42	-7.01	1.21	-8.99	-5.03	-0.08	1.03	-1.77	1.62	21.42	1.20	19.46	23.39	0.06	0.70	0.70	
R 0.70	42	-6.94	1.23	-8.95	-4.93	-0.02	1.05	-1.74	1.71	21.41	1.17	19.49	23.32	0.09	0.80	0.80	
D 0.80	42	-6.87	1.25	-8.92	-4.82	0.04	1.08	-1.73	1.81	21.41	1.15	19.53	23.29	0.09	0.89	0.89	
O 0.90	42	-6.84	1.26	-8.90	-4.78	0.07	1.10	-1.74	1.88	21.42	1.15	19.53	23.31	0.05	0.93	0.93	
1.00	42	-6.82	1.28	-8.91	-4.72	0.11	1.14	-1.77	1.98	21.43	1.16	19.52	23.34	0.04	0.98	0.98	
0.0	42	-6.82	1.28	-8.91	-4.72	0.11	1.14	-1.77	1.98	21.43	1.16	19.52	23.34	0.0	0.0	0.0	
0.10	42	-6.45	1.04	-8.15	-4.75	0.30	1.38	-1.96	2.55	21.55	1.17	19.63	23.46	0.43	0.43	0.43	
0.20	42	-6.47	1.04	-8.18	-4.76	0.22	1.44	-2.13	2.58	21.55	1.17	19.62	23.47	0.07	0.50	0.50	
R 0.30	42	-6.51	1.06	-8.24	-4.78	0.17	1.45	-2.21	2.55	21.52	1.17	19.61	23.44	0.07	0.58	0.58	
E 0.40	42	-6.59	1.10	-8.39	-4.79	0.15	1.42	-2.18	2.49	21.50	1.18	19.57	23.44	0.08	0.66	0.66	
U 0.50	42	-6.64	1.19	-8.60	-4.68	0.17	1.43	-2.17	2.51	21.52	1.22	19.52	23.51	0.06	0.71	0.71	
T 0.60	42	-6.64	1.16	-8.54	-4.75	0.14	1.45	-2.24	2.51	21.53	1.22	19.52	23.53	0.03	0.75	0.75	
R 0.70	42	-6.68	1.14	-8.55	-4.81	0.10	1.47	-2.32	2.52	21.51	1.22	19.51	23.51	0.06	0.80	0.80	
N 0.80	42	-6.72	1.15	-8.60	-4.83	0.09	1.47	-2.33	2.50	21.49	1.22	19.50	23.49	0.04	0.84	0.84	
O 0.90	42	-6.72	1.12	-8.55	-4.89	0.10	1.45	-2.27	2.47	21.49	1.21	19.50	23.48	0.01	0.86	0.86	
1.00	42	-6.71	1.10	-8.51	-4.91	0.11	1.44	-2.25	2.47	21.49	1.22	19.49	23.48	0.01	0.87	0.87	

BACK ANGLE = 30

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
				(-----X-----)				(-----Y-----)					(-----Z-----)						
0.0	42			-2.23	1.55	-4.77	0.32	0.54	1.43	-1.80	2.88	20.60	0.99	18.97	22.23	0.0	0.0	0.0	0.0
0.10	42			-2.40	1.25	-4.45	-0.35	0.37	1.32	-1.80	2.54	20.59	0.94	19.04	22.13	0.24	0.24	0.24	0.24
F 0.20	42			-2.61	1.16	-4.51	-0.70	0.18	1.45	-2.20	2.55	20.57	0.92	19.06	22.08	0.28	0.28	0.28	0.53
O 0.30	42			-2.74	1.24	-4.77	-0.71	0.05	1.66	-2.68	2.77	20.60	0.91	19.11	22.09	0.19	0.19	0.19	0.72
R 0.40	42			-2.68	1.20	-4.65	-0.71	0.13	1.60	-2.49	2.75	20.64	0.95	19.09	22.19	0.11	0.11	0.11	0.83
W 0.50	42			-2.56	1.20	-4.52	-0.59	0.25	1.42	-2.09	2.58	20.70	1.06	18.96	22.44	0.18	0.18	0.18	1.01
A 0.60	42			-2.44	1.18	-4.34	-0.46	0.27	1.25	-1.79	2.32	20.67	0.95	19.12	22.23	0.16	0.16	0.16	1.17
O 0.70	42			-2.26	1.28	-4.35	-0.17	0.32	1.19	-1.63	2.27	20.63	0.90	19.16	22.10	0.15	0.15	0.15	1.32
D 0.80	42			-2.20	1.31	-4.34	-0.06	0.37	1.18	-1.57	2.31	20.61	0.92	19.10	22.11	0.08	0.08	0.08	1.40
O 0.90	42			-2.14	1.34	-4.33	0.05	0.41	1.22	-1.59	2.40	20.63	0.92	19.12	22.14	0.08	0.08	0.08	1.48
1.00	42			-2.08	1.41	-4.39	0.23	0.44	1.29	-1.67	2.55	20.65	0.92	19.14	22.16	0.07	0.07	0.07	1.55
0.0	42			-2.08	1.41	-4.39	0.23	0.44	1.29	-1.67	2.55	20.65	0.92	19.14	22.16	0.0	0.0	0.0	0.0
0.10	42			-1.97	1.31	-4.12	0.18	0.69	1.30	-1.44	2.82	20.56	1.04	18.86	22.26	0.29	0.29	0.29	0.29
0.20	42			-2.00	1.35	-4.21	0.21	0.63	1.29	-1.48	2.75	20.56	1.06	18.82	22.30	0.07	0.07	0.07	0.35
R 0.30	42			-1.29	1.45	-4.47	0.29	0.62	1.29	-1.49	2.74	20.56	1.06	18.83	22.29	0.09	0.09	0.09	0.44
E 0.40	42			-2.18	1.60	-4.81	0.45	0.65	1.33	-1.52	2.83	20.56	1.04	18.85	22.27	0.09	0.09	0.09	0.54
T 0.50	42			-2.16	1.50	-4.61	0.30	0.61	1.28	-1.48	2.71	20.60	1.05	18.88	22.32	0.06	0.06	0.06	0.59
U 0.60	42			-2.23	1.53	-4.73	0.28	0.64	1.49	-1.80	3.08	20.63	1.06	18.90	22.36	0.08	0.08	0.08	0.67
R 0.70	42			-2.37	1.83	-5.38	0.64	0.72	1.83	-2.28	3.71	20.61	1.04	18.91	22.32	0.16	0.16	0.16	0.83
N 0.80	42			-2.41	1.86	-5.46	0.63	0.71	1.85	-2.33	3.74	20.60	1.03	18.92	22.29	0.05	0.05	0.05	0.88
O 0.90	42			-2.32	1.60	-4.95	0.31	0.62	1.55	-1.91	3.16	20.60	1.01	18.95	22.25	0.12	0.12	0.12	1.00
1.00	42			-2.23	1.55	-4.77	0.32	0.54	1.43	-1.80	2.88	20.60	0.99	18.97	22.23	0.13	0.13	0.13	1.13

LANDMARK - LT ACRCION (5)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
				(-----X-----)				(-----Y-----)					(-----Z-----)						
0.0	26			-5.90	1.01	-7.56	-4.24	7.49	0.88	6.04	8.93	20.89	1.45	18.51	23.28	0.0	0.0	0.0	0.0
0.10	26			-5.89	0.94	-7.43	-4.35	7.52	0.82	6.17	8.88	20.80	1.32	18.63	22.97	0.10	0.10	0.10	0.10
F 0.20	26			-5.89	0.97	-7.48	-4.31	7.56	0.90	6.09	9.03	20.71	1.22	18.71	22.71	0.10	0.10	0.10	0.20
O 0.30	26			-5.76	1.08	-7.54	-3.98	7.45	0.97	5.85	9.05	20.67	1.19	18.72	22.62	0.18	0.18	0.18	0.38
R 0.40	26			-5.63	1.37	-7.88	-3.38	7.37	1.30	5.24	9.50	20.58	1.16	18.68	22.49	0.18	0.18	0.18	0.55
W 0.50	25			-5.53	1.73	-8.37	-2.69	7.26	1.77	4.36	10.16	20.50	1.10	18.71	22.30	0.17	0.17	0.17	0.72
A 0.60	25			-5.15	1.33	-7.33	-2.98	7.43	1.25	5.38	9.47	20.52	1.06	18.78	22.25	0.42	0.42	0.42	1.14
R 0.70	26			-4.77	1.03	-6.46	-3.08	7.58	0.84	6.20	8.96	20.53	0.99	18.91	22.15	0.41	0.41	0.41	1.54
D 0.80	25			-4.53	1.00	-6.17	-2.89	7.64	0.74	6.42	8.86	20.45	0.88	19.00	21.90	0.26	0.26	0.26	1.81
O 0.90	25			-4.36	0.96	-5.94	-2.78	7.54	0.72	6.45	8.83	20.47	0.87	19.04	21.89	0.17	0.17	0.17	1.98
1.00	25			-4.20	0.96	-5.77	-2.63	7.64	0.73	6.45	8.84	20.48	0.86	19.07	21.89	0.16	0.16	0.16	2.14
0.0	25			-4.20	0.96	-5.77	-2.63	7.64	0.73	6.45	8.84	20.48	0.86	19.07	21.89	0.0	0.0	0.0	0.0
0.10	23			-4.44	0.96	-7.01	-3.87	7.92	0.89	6.47	9.37	20.50	1.48	18.07	22.94	1.27	1.27	1.27	1.27
0.20	23			-5.62	1.02	-7.29	-3.95	7.80	0.95	6.24	9.36	20.60	1.49	18.16	23.05	0.23	0.23	0.23	1.51
R 0.30	24			-5.66	1.04	-7.37	-3.95	7.70	0.89	6.24	9.17	20.72	1.53	18.21	23.23	0.16	0.16	0.16	1.67
E 0.40	24			-5.74	1.09	-7.52	-3.96	7.62	0.89	6.16	9.08	20.73	1.52	18.24	23.21	0.12	0.12	0.12	1.78
T 0.50	24			-5.82	1.15	-7.70	-3.94	7.57	0.95	6.01	9.13	20.79	1.53	18.29	23.29	0.11	0.11	0.11	1.90
U 0.60	24			-5.88	1.12	-7.72	-4.04	7.54	1.01	5.89	9.20	20.85	1.55	18.31	23.38	0.09	0.09	0.09	1.99
R 0.70	24			-5.95	1.10	-7.76	-4.14	7.52	0.95	5.97	9.08	20.87	1.55	18.32	23.41	0.07	0.07	0.07	2.05
N 0.80	25			-5.96	1.10	-7.77	-4.16	7.51	0.89	6.04	8.98	20.86	1.52	18.38	23.38	0.03	0.03	0.03	2.08
O 0.90	25			-5.92	1.05	-7.64	-4.20	7.50	0.89	6.03	8.96	20.89	1.50	18.43	23.35	0.05	0.05	0.05	2.13
1.00	26			-5.90	1.01	-7.56	-4.24	7.49	0.88	6.04	8.93	20.89	1.45	18.51	23.28	0.02	0.02	0.02	2.15

LANDMARK - LT GRIP CENTER (17)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	19	16.34	0.54	15.46	17.22	10.33	0.49	9.53	11.13	12.94	0.36	12.94	0.36	12.94	13.53	0.0	0.0
0.10	19	16.38	0.65	15.31	17.44	8.96	0.70	7.81	10.11	13.72	0.41	13.05	0.57	13.55	14.39	1.57	1.57
0.20	19	16.45	0.99	14.84	18.07	7.64	1.36	5.42	9.86	14.49	0.57	13.55	0.67	13.83	15.43	1.53	3.11
0.30	20	16.56	1.12	14.73	18.39	6.04	1.76	3.15	8.93	14.93	0.67	13.83	0.86	13.86	16.04	1.67	4.77
0.40	21	16.71	1.10	14.90	18.52	4.49	2.14	0.98	8.01	15.28	0.86	13.86	0.86	13.70	16.70	1.59	6.36
0.50	24	17.07	0.95	15.51	18.63	3.94	1.25	1.88	8.01	15.28	0.86	13.86	0.86	13.70	16.70	1.59	6.36
0.60	23	17.61	0.87	16.19	19.04	2.87	1.53	0.36	5.99	15.15	0.89	13.70	0.96	13.70	16.60	0.67	7.04
0.70	24	17.94	0.57	17.00	18.88	2.66	1.76	1.41	3.91	14.98	0.96	13.39	0.73	13.44	15.56	1.21	8.25
0.80	23	18.21	0.49	17.41	19.02	2.10	0.47	1.33	2.87	14.30	0.59	13.33	0.59	13.33	15.27	0.51	8.76
0.90	22	18.32	0.49	17.52	19.12	1.83	0.34	1.27	2.87	14.30	0.59	13.33	0.59	13.33	15.27	0.71	9.47
1.00	23	18.42	0.53	17.56	19.29	1.58	0.35	1.00	2.17	14.05	0.38	13.42	0.38	13.42	14.67	0.28	10.08
0.0	23	18.42	0.53	17.56	19.29	1.58	0.35	1.00	2.17	14.05	0.38	13.42	0.38	13.42	14.67	0.0	0.0
0.10	21	16.26	0.69	15.14	17.39	3.59	1.02	1.92	5.26	14.49	0.65	13.41	0.65	13.41	15.56	2.98	2.98
0.20	21	15.77	0.74	14.55	16.98	4.30	1.28	2.20	6.40	14.76	0.71	13.60	0.71	13.60	15.92	3.99	3.99
0.30	19	15.44	0.68	14.34	16.55	5.59	1.32	3.42	7.75	15.06	0.69	13.92	0.69	13.92	16.19	1.36	5.25
0.40	19	15.32	0.86	13.92	16.73	6.68	1.23	4.67	8.69	15.18	0.66	14.10	0.66	14.10	16.27	1.11	6.35
0.50	20	15.48	0.94	13.94	17.01	8.15	1.15	6.26	10.03	15.24	0.83	13.89	0.83	13.89	16.60	1.47	7.83
0.60	19	15.68	0.96	14.10	17.25	8.91	0.83	7.55	10.28	14.74	0.65	13.68	0.65	13.68	15.80	0.94	8.77
0.70	19	15.91	0.85	14.53	17.30	9.65	0.68	8.53	10.77	14.20	0.57	12.75	0.57	12.75	14.53	0.95	9.72
0.80	19	16.18	0.82	14.83	17.53	10.02	0.60	9.05	11.00	13.67	0.56	12.75	0.56	12.75	14.53	0.69	10.41
0.90	19	16.27	0.65	15.19	17.34	10.19	0.48	9.39	10.98	13.30	0.44	12.58	0.44	12.58	14.02	0.42	10.83
1.00	19	16.34	0.54	15.46	17.22	10.33	0.49	9.53	11.13	12.94	0.36	12.94	0.36	12.94	13.53	0.39	11.22

LANDMARK - LT TROCHANTER (19)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	21	3.16	0.83	1.79	4.52	6.71	0.74	5.50	7.93	3.48	0.35	2.90	0.35	2.90	4.06	0.0	0.0
0.10	21	3.38	0.88	1.93	4.83	6.74	0.69	5.61	7.88	3.51	0.38	2.88	0.38	2.88	4.14	0.22	0.22
0.20	21	3.58	1.02	1.91	5.24	6.79	0.75	5.55	8.03	3.53	0.45	2.80	0.45	2.80	4.27	0.21	0.43
0.30	21	3.56	1.03	1.87	5.25	6.83	0.75	5.61	8.05	3.56	0.45	2.82	0.45	2.82	4.30	0.08	0.48
0.40	21	3.88	0.97	1.89	5.08	6.80	0.68	5.68	7.92	3.57	0.45	2.83	0.45	2.83	4.30	0.08	0.56
0.50	21	3.87	1.03	1.83	5.11	6.76	0.67	5.66	7.86	3.59	0.49	2.79	0.49	2.79	4.40	0.05	0.62
0.60	21	3.51	1.08	1.74	5.29	6.79	0.63	5.76	7.81	3.58	0.45	2.84	0.45	2.84	4.32	0.06	0.67
0.70	21	3.44	0.88	2.00	4.88	6.74	0.59	5.77	7.72	3.52	0.39	2.88	0.39	2.88	4.16	0.11	0.78
0.80	21	3.45	0.85	2.05	4.85	6.73	0.63	5.71	7.76	3.49	0.38	2.87	0.38	2.87	4.11	0.04	0.81
0.90	20	3.48	0.80	2.17	4.79	6.72	0.61	5.72	7.73	3.49	0.39	2.86	0.39	2.86	4.13	0.03	0.84
1.00	20	3.44	0.78	2.16	4.72	6.69	0.62	5.67	7.70	3.51	0.39	2.87	0.39	2.87	4.16	0.06	0.90
0.0	20	3.44	0.78	2.16	4.72	6.69	0.62	5.67	7.70	3.51	0.39	2.87	0.39	2.87	4.16	0.0	0.0
0.10	21	3.42	0.81	2.09	4.75	6.74	0.60	5.75	7.73	3.51	0.36	2.92	0.36	2.92	4.11	0.06	0.06
0.20	21	3.37	0.76	2.13	4.61	6.72	0.63	5.68	7.76	3.55	0.42	2.85	0.42	2.85	4.25	0.06	0.12
0.30	21	3.35	0.74	2.14	4.56	6.73	0.64	5.68	7.78	3.53	0.42	2.86	0.42	2.86	4.22	0.03	0.15
0.40	21	3.34	0.76	2.10	4.59	6.73	0.69	5.59	7.87	3.50	0.39	2.86	0.39	2.86	4.15	0.03	0.18
0.50	21	3.32	0.80	2.01	4.64	6.71	0.67	5.61	7.81	3.50	0.39	2.85	0.39	2.85	4.15	0.03	0.21
0.60	21	3.29	0.86	1.88	4.70	6.71	0.59	5.75	7.67	3.49	0.40	2.82	0.40	2.82	4.15	0.04	0.25
0.70	21	3.29	0.83	1.92	4.65	6.76	0.58	5.80	7.71	3.48	0.38	2.86	0.38	2.86	4.10	0.05	0.30
0.80	21	3.29	0.80	1.97	4.60	6.78	0.62	5.76	7.80	3.48	0.35	2.90	0.35	2.90	4.06	0.02	0.32
0.90	21	3.23	0.80	1.92	4.53	6.75	0.65	5.68	7.82	3.48	0.34	2.92	0.34	2.92	4.04	0.07	0.39
1.00	21	3.16	0.83	1.79	4.52	6.71	0.74	5.50	7.93	3.48	0.35	2.90	0.35	2.90	4.06	0.08	0.47

BACK ANGLE = 30

LANDMARK - LT KNEE TOP (21)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	MOVED	CUM
0.0	20	19.27	0.72	18.09	20.45	5.27	0.76	4.03	6.52	11.57	0.94	10.13	13.21	0.0	0.0	0.0	0.0
0.10	18	19.39	0.75	18.16	20.63	5.38	0.74	4.18	6.59	11.75	0.97	10.16	13.33	0.18	0.18	0.18	0.18
F 0.20	20	19.31	0.93	17.78	20.83	5.57	0.95	4.02	7.13	11.64	0.99	10.02	13.26	0.23	0.23	0.41	0.41
O 0.30	20	19.27	0.94	17.73	20.81	5.56	1.03	3.87	7.24	11.64	0.97	10.06	13.23	0.04	0.04	0.45	0.45
R 0.40	22	19.23	0.86	17.82	20.63	5.47	0.97	3.88	7.06	11.79	0.97	10.19	13.38	0.17	0.17	0.63	0.63
W 0.50	22	19.20	0.35	17.80	20.59	5.49	0.95	3.94	7.05	11.82	0.96	10.24	13.39	0.05	0.05	0.68	0.68
A 0.60	22	19.33	0.76	18.08	20.58	5.41	1.08	3.64	7.17	11.85	0.98	10.25	13.45	0.16	0.16	0.84	0.84
R 0.70	21	19.38	0.84	17.99	20.76	5.36	1.24	3.32	7.39	11.72	0.93	10.20	13.24	0.15	0.15	0.99	0.99
D 0.80	21	19.29	0.82	17.94	20.65	5.46	1.04	3.76	7.17	11.67	0.94	10.13	13.21	0.14	0.14	1.14	1.14
O 0.90	21	19.30	0.81	17.97	20.62	5.44	1.01	3.78	7.09	11.59	0.92	10.18	13.20	0.03	0.03	1.17	1.17
1.00	21	19.30	0.82	17.96	20.64	5.42	1.01	3.76	7.08	11.71	0.91	10.23	13.20	0.00	0.00	1.20	1.20
0.0	21	19.30	0.82	17.96	20.64	5.42	1.01	3.76	7.08	11.71	0.91	10.23	13.20	0.0	0.0	0.0	0.0
0.10	22	19.28	0.76	18.03	20.52	5.34	0.92	3.84	6.84	11.57	0.93	10.03	13.10	0.17	0.17	0.17	0.17
0.20	22	19.31	0.75	18.08	20.53	5.40	1.00	3.76	7.04	11.57	0.96	10.01	13.14	0.07	0.07	0.23	0.23
R 0.30	22	19.26	0.72	18.08	20.44	5.35	0.93	3.83	6.87	11.52	0.98	9.91	13.14	0.08	0.08	0.32	0.32
E 0.40	22	19.20	0.69	18.07	20.34	5.29	0.84	3.92	6.66	11.50	1.00	9.85	13.14	0.09	0.09	0.40	0.40
Y 0.50	21	19.27	0.69	18.14	20.40	5.21	0.74	4.00	6.42	11.55	1.02	9.88	13.22	0.12	0.12	0.52	0.52
U 0.60	21	19.30	0.72	18.11	20.49	5.24	0.76	3.99	6.48	11.55	0.99	9.92	13.18	0.04	0.04	0.56	0.56
R 0.70	21	19.30	0.78	18.02	20.57	5.27	0.79	3.98	6.55	11.54	0.94	10.00	13.08	0.04	0.04	0.60	0.60
N 0.80	21	19.30	0.81	17.97	20.63	5.31	0.80	4.00	6.62	11.53	0.90	10.05	13.01	0.04	0.04	0.64	0.64
O 0.90	20	19.31	0.76	18.06	20.55	5.28	0.77	4.01	6.55	11.62	0.91	10.14	13.11	0.10	0.10	0.74	0.74
1.00	20	19.27	0.72	18.09	20.45	5.27	0.76	4.03	6.52	11.57	0.94	10.13	13.21	0.06	0.06	0.79	0.79

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	INCR	MOVED	CUM
0.0	20	-4.02	0.74	-5.24	-2.81	8.05	1.33	5.87	10.23	18.49	1.23	16.48	20.50	0.0	0.0	0.0	0.0
0.10	20	-4.07	0.70	-5.21	-2.93	7.83	1.20	5.85	9.80	18.45	1.01	16.78	20.11	0.23	0.23	0.23	0.23
F 0.20	20	-4.10	0.71	-5.27	-2.93	7.64	1.15	5.76	9.52	18.30	0.92	16.88	19.91	0.20	0.20	0.43	0.43
O 0.30	21	-3.85	0.72	-5.03	-2.67	7.59	1.14	5.73	9.46	18.38	0.96	16.81	19.95	0.25	0.25	0.68	0.68
R 0.40	21	-3.64	0.64	-4.69	-2.59	7.55	1.23	5.53	9.57	18.32	0.89	16.87	19.78	0.22	0.22	0.91	0.91
W 0.50	21	-3.43	0.54	-4.31	-2.55	7.43	1.26	5.36	9.50	18.34	0.83	16.97	19.70	0.24	0.24	1.15	1.15
A 0.60	21	-3.16	0.62	-4.17	-2.15	7.42	1.21	5.44	9.41	18.35	0.77	17.08	19.61	0.27	0.27	1.42	1.42
R 0.70	21	-2.87	0.77	-4.13	-1.61	7.44	1.15	5.56	9.33	18.32	0.76	17.07	19.56	0.29	0.29	1.71	1.71
D 0.80	21	-2.63	0.83	-4.00	-1.26	7.45	1.09	5.66	9.23	18.29	0.77	17.03	19.56	0.24	0.24	1.95	1.95
O 0.90	21	-2.56	0.81	-3.88	-1.24	7.41	1.08	5.64	9.17	18.30	0.78	17.03	19.57	0.08	0.08	2.03	2.03
1.00	21	-2.49	0.82	-3.83	-1.15	7.36	1.11	5.54	9.19	18.31	0.79	17.02	19.61	0.08	0.08	2.11	2.11
0.0	21	-2.49	0.82	-3.83	-1.15	7.36	1.11	5.54	9.19	18.31	0.79	17.02	19.61	0.0	0.0	0.0	0.0
0.10	21	-3.73	0.75	-4.95	-2.51	7.74	1.17	5.82	9.66	18.21	1.11	16.39	20.04	1.30	1.30	1.30	1.30
0.20	21	-3.86	0.74	-5.08	-2.65	7.71	1.22	5.70	9.71	18.27	1.14	16.40	20.14	0.15	0.15	1.44	1.44
R 0.30	21	-3.98	0.70	-5.14	-2.83	7.66	1.24	5.63	9.70	18.29	1.11	16.47	20.11	0.13	0.13	1.57	1.57
E 0.40	21	-4.11	0.71	-5.27	-2.94	7.62	1.27	5.53	9.71	18.29	1.10	16.48	20.09	0.13	0.13	1.70	1.70
U 0.50	21	-4.20	0.79	-5.50	-2.91	7.63	1.27	5.55	9.71	18.34	1.15	16.45	20.22	0.11	0.11	1.81	1.81
O 0.60	21	-4.20	0.84	-5.58	-2.91	7.69	1.25	5.64	9.74	18.42	1.17	16.51	20.33	0.10	0.10	1.92	1.92
R 0.70	21	-4.17	0.87	-5.60	-2.73	7.73	1.24	5.70	9.75	18.46	1.18	16.53	20.40	0.07	0.07	1.98	1.98
N 0.80	21	-4.15	0.92	-5.65	-2.64	7.75	1.24	5.71	9.79	18.50	1.21	16.51	20.48	0.05	0.05	2.03	2.03
O 0.90	20	-4.10	0.82	-5.43	-2.76	7.94	1.27	5.85	10.02	18.48	1.23	16.46	20.50	0.19	0.19	2.22	2.22
1.00	20	-4.02	0.74	-5.24	-2.81	8.05	1.33	5.87	10.23	18.49	1.23	16.48	20.50	0.14	0.14	2.36	2.36

BACK ANGLE = 30

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE, N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	20	3.46	0.53	2.59	4.32	11.60	0.90	10.13	13.07	12.74	1.57	10.16	15.32	0.0	0.0	0.0	
0.10	20	3.53	0.62	2.51	4.55	10.97	0.78	9.70	12.25	12.39	1.46	10.00	14.77	0.72	0.72	0.72	
F 0.20	20	3.61	0.82	2.26	4.96	10.35	0.80	9.04	11.66	12.05	1.47	9.64	14.46	0.71	1.43	1.43	
O 0.30	20	3.96	0.87	2.53	5.39	9.70	0.83	8.35	11.06	12.05	1.43	9.71	14.40	0.73	2.17	2.17	
R 0.40	21	4.47	0.80	3.16	5.77	9.10	0.89	7.64	10.56	12.22	1.36	9.99	14.46	0.81	2.97	2.97	
W 0.50	21	5.09	0.75	3.86	6.33	8.33	0.87	6.91	9.76	12.42	1.36	10.19	14.65	1.01	3.98	3.98	
A 0.60	21	5.58	0.67	4.47	6.68	7.78	0.98	6.17	9.38	12.50	1.26	10.43	14.57	0.74	4.73	4.73	
R 0.70	21	5.93	0.72	4.75	7.11	7.32	1.05	5.59	9.04	12.44	1.19	10.59	14.39	0.58	5.31	5.31	
D 0.80	20	6.20	0.69	5.07	7.33	6.90	1.02	5.22	8.58	12.37	1.14	10.50	14.25	0.50	5.81	5.81	
O 0.90	20	6.25	0.64	5.21	7.29	6.55	0.95	5.00	8.11	12.31	1.16	10.42	14.21	0.35	6.17	6.17	
1.00	20	6.27	0.63	5.25	7.30	6.20	0.92	4.69	7.70	12.26	1.19	10.30	14.21	0.36	6.52	6.52	
0.0	20	6.27	0.63	5.25	7.30	6.20	0.92	4.69	7.70	12.26	1.19	10.30	14.21	0.0	0.0	0.0	
0.10	21	4.54	0.66	3.46	5.62	8.17	1.02	6.51	9.84	11.67	1.28	9.57	13.77	2.69	2.69	2.69	
0.20	21	4.11	0.70	2.97	5.26	7.77	1.13	6.92	10.62	11.56	1.39	9.28	13.84	0.74	3.43	3.43	
R 0.30	21	3.71	0.68	2.60	4.83	9.51	1.15	7.63	11.40	11.58	1.54	9.05	14.11	0.84	4.28	4.28	
E 0.40	21	3.37	0.79	2.08	4.66	10.18	1.20	8.20	12.15	11.66	1.68	8.92	14.43	0.75	5.03	5.03	
O 0.50	21	3.15	0.81	1.82	4.48	10.74	1.20	8.77	12.71	11.99	1.70	9.19	14.78	0.68	5.71	5.71	
U 0.60	21	3.14	0.83	1.78	4.50	11.02	1.07	9.27	12.77	12.22	1.73	9.39	15.05	0.36	6.08	6.08	
R 0.70	21	3.15	0.79	1.86	4.45	11.44	1.29	9.32	13.57	12.54	1.71	9.73	15.35	0.53	6.61	6.61	
N 0.80	21	3.29	0.74	2.08	4.50	11.60	1.00	9.96	13.23	12.66	1.63	9.98	15.34	0.24	6.85	6.85	
O 0.90	20	3.39	0.61	2.39	4.38	11.55	0.88	10.11	12.99	12.70	1.62	10.05	15.36	0.11	6.96	6.96	
1.00	20	3.46	0.53	2.59	4.32	11.60	0.90	10.13	13.07	12.74	1.57	10.16	15.32	0.09	7.05	7.05	

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE, N	-----X-----				-----Y-----				-----Z-----				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	15	12.98	0.75	11.75	14.20	10.77	0.46	10.02	11.52	12.49	0.95	10.93	14.06	0.0	0.0	0.0	
0.10	15	12.95	0.76	11.70	14.21	9.43	0.78	8.16	10.71	13.52	0.77	11.76	14.28	1.44	1.44	1.44	
F 0.20	17	13.12	1.06	11.38	14.86	8.27	1.40	5.98	10.56	13.59	0.78	12.41	14.96	1.35	2.79	2.79	
O 0.30	18	13.16	0.99	11.54	14.79	6.79	1.69	4.01	9.57	13.98	0.84	12.60	15.37	1.51	4.30	4.30	
R 0.40	18	13.41	0.93	11.89	14.92	5.28	2.03	1.95	8.61	14.37	0.80	13.05	15.69	1.58	5.88	5.88	
W 0.50	19	13.90	0.82	12.56	15.25	5.01	0.88	3.57	6.45	14.31	0.83	12.94	15.68	0.57	6.44	6.44	
A 0.60	19	14.44	0.70	13.29	15.59	4.24	0.94	2.69	5.78	14.16	0.75	12.93	15.38	0.96	7.40	7.40	
R 0.70	21	14.85	0.59	13.88	15.81	3.71	0.87	2.29	5.13	13.97	0.66	12.88	15.06	0.69	8.09	8.09	
D 0.80	21	15.13	0.55	14.23	16.03	3.19	0.75	1.96	4.41	13.72	0.60	12.72	14.71	0.64	8.74	8.74	
O 0.90	21	15.24	0.52	14.38	16.09	2.86	0.65	1.79	3.93	13.56	0.50	12.74	14.38	0.38	9.12	9.12	
1.00	22	15.34	0.52	14.49	16.19	2.56	0.60	1.58	3.54	13.47	0.50	12.66	14.29	0.33	9.44	9.44	
0.0	22	15.34	0.52	14.49	16.19	2.56	0.60	1.58	3.54	13.47	0.50	12.66	14.29	0.0	0.0	0.0	
0.10	20	13.08	0.71	11.93	14.24	4.32	1.11	2.49	6.14	13.88	0.68	12.77	15.00	2.89	2.89	2.89	
0.20	20	12.56	0.69	11.43	13.68	5.06	1.31	2.90	7.21	14.08	0.72	12.89	15.26	0.93	3.82	3.82	
R 0.30	18	12.30	0.62	11.28	13.32	6.06	1.36	3.82	8.30	14.07	0.81	12.74	15.40	1.03	4.85	4.85	
E 0.40	18	12.04	0.71	10.87	13.21	7.22	1.40	4.92	9.52	14.07	0.95	12.51	15.64	1.19	6.04	6.04	
T 0.50	15	12.09	0.82	10.74	13.44	8.51	1.17	6.60	10.43	13.90	1.01	12.25	15.55	1.31	7.35	7.35	
U 0.60	15	12.38	0.88	10.93	13.99	9.41	0.85	8.01	10.82	13.70	1.02	12.03	15.37	0.97	8.31	8.31	
R 0.70	15	12.57	0.86	11.16	13.99	10.03	0.79	8.73	11.33	13.43	0.96	11.85	15.00	0.70	9.02	9.02	
N 0.80	15	12.74	0.87	11.31	14.17	10.51	0.70	9.37	11.65	13.12	0.91	11.62	14.62	0.60	9.61	9.61	
O 0.90	15	12.86	0.76	11.62	14.10	10.65	0.51	9.81	11.49	12.81	0.92	11.30	14.32	0.36	9.97	9.97	
1.00	15	12.98	0.75	11.75	14.20	10.77	0.46	10.02	11.52	12.49	0.95	10.93	14.06	0.35	10.33	10.33	

BACK ANGLE = 30

DATA FOR 65° BACK ANGLE CONFIGURATION

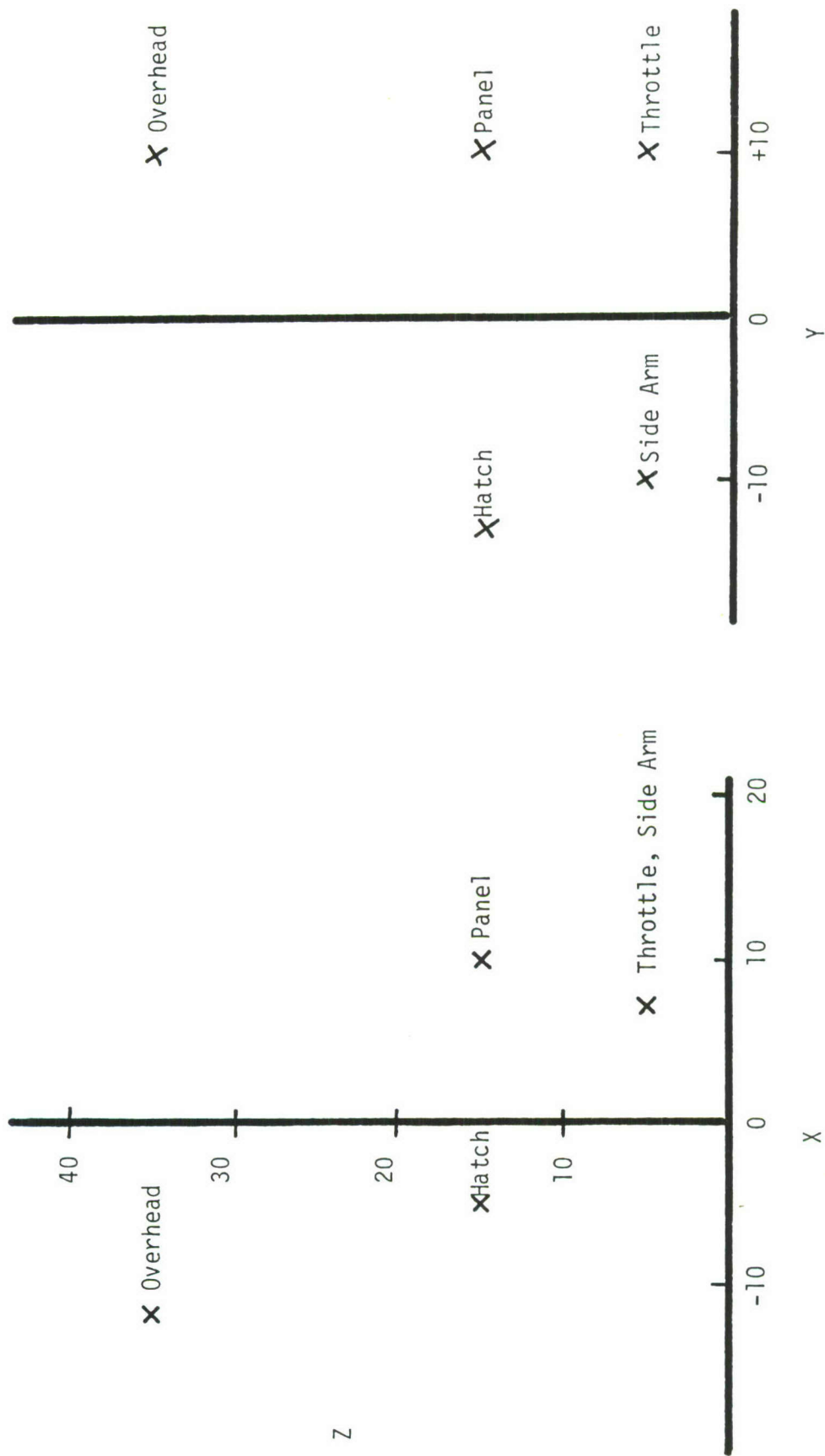


Fig. A-26. Controller Locations for 65° Back Rest Angle

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +7.0, -10.0, +5.0 TO OVER-HEAD CONTROLLER AT -12.0, +10.0, +35.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +7.0, +10.0, +5.0.

MOTION NUMBER - 12130
 BACK ANGLE - 65

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RGHT FWD	0.91	0.09	0.80 TO 1.00 SECS.
RGHT REV	1.01	0.15	0.90 TO 1.30 SECS.

LANDMARK - NASION (1)														
TIME	SAMPLE	-----X-----			-----Y-----			-----Z-----			-----5 PCT-----			Moved
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	CUM
0.0	7	-17.04	1.33	-19.21	-0.96	1.33	-3.14	21.01	0.64	19.96	22.06	0.0	0.0	0.0
0.10	7	-17.46	1.25	-19.51	0.67	0.96	-0.89	21.51	0.59	20.55	22.48	1.76	1.76	1.76
F 0.20	7	-17.66	1.14	-19.53	1.14	0.96	-0.44	21.46	0.63	20.43	22.49	0.51	2.27	2.27
O 0.30	7	-17.30	1.23	-19.33	1.39	1.60	-1.23	21.38	0.49	20.59	22.18	0.44	2.71	2.71
R 0.40	7	-17.20	1.32	-19.36	1.43	1.46	-0.96	21.41	0.54	20.52	22.31	0.12	2.83	2.83
W 0.50	7	-17.63	1.03	-19.32	1.79	0.97	0.20	21.53	0.52	20.67	22.38	0.58	3.40	3.40
A 0.60	7	-17.81	1.15	-19.70	1.89	0.98	0.28	21.47	0.51	20.65	22.30	0.21	3.62	3.62
R 0.70	7	-17.91	1.28	-20.00	1.88	0.96	0.31	21.40	0.52	20.55	22.25	0.13	3.74	3.74
D 0.80	7	-17.83	1.17	-19.75	1.89	0.89	0.43	21.42	0.56	20.51	22.33	0.08	3.82	3.82
0.90	7	-17.64	1.02	-19.31	1.94	1.18	-0.00	21.28	0.73	20.09	22.47	0.24	4.06	4.06
1.00	7	-17.79	1.12	-19.62	2.04	1.18	0.10	21.24	0.85	19.84	22.63	0.19	4.25	4.25
0.0	7	-17.79	1.12	-19.62	2.04	1.18	0.10	21.24	0.85	19.84	22.63	0.0	0.0	0.0
0.10	7	-17.47	1.36	-19.70	1.08	1.22	-0.92	21.13	0.76	19.87	22.38	1.02	1.02	1.02
0.20	7	-17.24	1.30	-19.38	0.88	1.34	-1.32	21.12	0.60	20.14	22.10	0.30	1.33	1.33
R 0.30	7	-17.18	1.25	-19.22	0.43	1.69	-2.33	21.04	0.59	20.07	22.01	0.46	1.79	1.79
E 0.40	7	-17.11	1.25	-19.16	0.08	1.35	-2.13	21.02	0.58	20.08	21.97	0.36	2.15	2.15
T 0.50	7	-17.07	1.38	-19.33	0.43	1.19	-2.33	21.02	0.56	20.10	21.94	0.46	2.61	2.61
U 0.60	7	-17.00	1.39	-19.27	0.63	1.14	-2.50	21.03	0.58	20.08	21.98	0.26	2.87	2.87
R 0.70	7	-17.09	1.44	-19.44	0.77	1.20	-2.74	21.02	0.59	20.02	21.95	0.17	3.04	3.04
N 0.80	7	-17.11	1.35	-19.32	0.85	1.35	-3.07	21.02	0.59	20.05	22.00	0.09	3.13	3.13
0.90	7	-17.04	1.38	-19.30	0.91	1.29	-3.04	21.02	0.61	19.99	21.99	0.10	3.23	3.23
1.00	7	-17.04	1.33	-19.21	0.96	1.33	-3.14	21.01	0.64	19.96	22.06	0.05	3.28	3.28

LANDMARK - CERVICALE (2)														
TIME	SAMPLE	-----X-----			-----Y-----			-----Z-----			-----5 PCT-----			Moved
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	CUM
0.0	7	-18.63	1.06	-20.37	-0.87	1.19	-2.83	13.21	0.75	11.98	14.43	0.0	0.0	0.0
0.10	7	-18.40	0.59	-19.37	-0.80	1.31	-2.95	13.21	0.70	12.05	14.36	0.25	0.25	0.25
F 0.20	7	-18.67	0.82	-20.02	-0.85	1.06	-2.59	13.12	0.67	12.01	14.22	0.29	0.54	0.54
O 0.30	7	-18.56	0.88	-20.02	-1.02	1.06	-2.76	12.93	0.60	11.82	13.92	0.27	0.81	0.81
R 0.40	7	-18.59	1.15	-20.48	-0.76	1.15	-2.65	13.16	0.81	11.82	14.49	0.34	1.15	1.15
W 0.50	7	-18.65	0.92	-20.16	-0.65	1.05	-2.38	13.37	0.63	12.34	14.40	0.25	1.40	1.40
A 0.60	7	-18.90	0.80	-20.21	-0.81	1.17	-2.73	13.50	0.56	12.58	14.42	0.32	1.72	1.72
R 0.70	7	-19.01	0.78	-20.29	-0.61	1.25	-2.65	13.89	0.70	12.75	15.04	0.46	2.18	2.18
D 0.80	7	-18.93	0.73	-20.13	-0.56	1.35	-2.77	13.79	0.69	12.65	14.92	0.14	2.32	2.32
0.90	7	-18.58	0.90	-20.05	-0.43	1.53	-2.93	13.86	0.50	13.04	14.67	0.38	2.70	2.70
1.00	7	-18.84	1.06	-20.59	-0.34	1.64	-3.02	14.05	0.61	13.05	15.05	0.33	3.03	3.03
0.0	7	-18.84	1.06	-20.59	-0.34	1.64	-3.02	14.05	0.61	13.05	15.05	0.0	0.0	0.0
0.10	7	-19.06	0.88	-20.51	-0.75	1.39	-3.03	13.52	0.54	13.04	14.80	0.49	0.49	0.49
0.20	7	-18.77	0.87	-20.19	-0.92	1.35	-3.13	13.51	0.40	12.85	14.17	0.54	1.03	1.03
R 0.30	7	-18.65	1.04	-20.36	-0.77	1.32	-2.94	13.42	0.56	12.50	14.34	0.21	1.24	1.24
E 0.40	7	-18.47	0.86	-19.88	-0.72	1.33	-2.90	13.28	0.69	12.15	14.42	0.23	1.47	1.47
T 0.50	7	-18.64	0.81	-19.97	-0.82	1.24	-2.84	13.18	0.73	11.98	14.38	0.23	1.69	1.69
U 0.60	7	-18.67	0.82	-20.01	-0.82	1.12	-2.66	13.22	0.73	12.02	14.42	0.05	1.74	1.74
R 0.70	7	-18.67	0.99	-20.29	-0.83	0.99	-2.45	13.38	0.69	11.95	14.22	0.14	1.88	1.88
N 0.80	7	-18.85	1.15	-20.73	-0.81	1.06	-2.55	13.19	0.79	11.88	14.49	0.21	2.09	2.09
0.90	7	-18.90	1.03	-20.58	-0.68	1.07	-2.44	13.20	0.74	11.98	14.41	0.14	2.22	2.22
1.00	7	-18.63	1.06	-20.37	-0.87	1.19	-2.83	13.21	0.75	11.98	14.43	0.33	2.55	2.55

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-14.00	0.67	-15.09	-12.90	0.01	0.69	-1.11	1.14	14.58	0.44	13.86	15.30	0.0	0.0	0.0	0.0
0.10	7	-14.08	0.47	-14.85	-13.31	-0.08	0.64	-1.12	0.96	14.58	0.34	14.03	15.14	0.13	0.13	0.13	0.13
F 0.20	7	-14.14	0.66	-15.22	-13.06	0.03	0.51	-0.82	0.87	14.63	0.39	13.99	15.27	0.13	0.26	0.26	0.26
O 0.30	7	-13.85	0.76	-15.10	-12.61	0.11	0.53	-0.75	0.98	14.50	0.43	13.80	15.20	0.33	0.59	0.59	0.59
R 0.40	7	-13.95	0.83	-15.31	-12.59	0.30	0.57	-0.63	1.23	14.52	0.36	13.93	15.12	0.21	0.80	0.80	0.80
W 0.50	7	-14.33	0.53	-15.20	-13.46	0.54	0.42	-0.22	1.03	14.70	0.44	13.98	15.42	0.49	1.28	1.28	1.28
A 0.60	7	-12.64	4.64	-20.24	-5.03	2.49	4.82	-5.41	10.39	14.91	0.43	14.21	15.62	2.59	3.88	3.88	3.88
R 0.70	7	-11.40	7.95	-24.44	1.65	4.00	8.43	-9.82	17.82	14.99	0.42	14.29	15.69	1.95	5.83	5.83	5.83
D 0.80	7	-14.29	0.66	-15.37	-13.21	1.11	0.55	-0.46	2.67	14.90	0.52	14.05	15.76	4.09	9.92	9.92	9.92
O 0.90	7	-14.30	0.91	-15.80	-12.80	1.24	0.96	-0.34	2.82	14.97	0.53	14.11	15.84	0.16	10.08	10.08	10.08
1.00	7	-14.30	1.01	-15.97	-12.64	1.38	1.06	-0.36	3.12	15.03	0.40	14.38	15.69	0.15	10.23	10.23	10.23
0.0	7	-14.30	1.01	-15.97	-12.64	1.38	1.06	-0.36	3.12	15.03	0.40	14.38	15.69	0.0	0.0	0.0	0.0
0.10	7	-14.29	0.45	-15.03	-13.56	0.86	0.85	-0.53	2.26	14.91	0.56	13.99	15.82	0.53	0.53	0.53	0.53
0.20	7	-14.19	0.73	-15.38	-13.00	0.69	0.89	-0.78	2.15	14.85	0.58	13.90	15.80	0.21	0.74	0.74	0.74
R 0.30	7	-13.95	0.88	-15.40	-12.50	0.60	0.96	-0.97	2.18	14.57	0.55	13.77	15.57	0.31	1.05	1.05	1.05
E 0.40	7	-14.06	0.74	-15.27	-12.85	0.46	0.71	-0.69	1.82	14.56	0.50	13.84	15.48	0.17	1.23	1.23	1.23
T 0.50	7	-14.09	0.58	-15.05	-13.14	0.15	0.54	-0.74	1.04	14.51	0.50	13.79	15.43	0.32	1.55	1.55	1.55
U 0.60	7	-14.06	0.60	-15.05	-13.07	-0.04	0.55	-0.94	0.86	14.57	0.43	13.86	15.28	0.19	1.74	1.74	1.74
R 0.70	7	-14.06	0.71	-15.22	-12.90	-0.03	0.58	-0.98	0.92	14.57	0.44	13.84	15.29	0.01	1.76	1.76	1.76
N 0.80	7	-13.89	0.61	-14.89	-12.88	0.08	0.65	-0.98	1.15	14.57	0.43	13.87	15.27	0.20	1.96	1.96	1.96
O 0.90	7	-14.01	0.61	-15.01	-13.00	0.08	0.67	-1.02	1.18	14.52	0.40	13.87	15.18	0.13	2.09	2.09	2.09
1.00	7	-14.00	0.67	-15.09	-12.90	0.01	0.69	-1.11	1.14	14.58	0.44	13.86	15.30	0.09	2.18	2.18	2.18

LANDMARK - RT ACROMION (4)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	-16.35	1.22	-18.34	-14.36	-7.34	0.79	-8.63	-6.06	12.35	0.45	11.62	13.09	0.0	0.0	0.0	0.0
0.10	6	-17.28	0.88	-18.72	-15.84	-7.68	0.53	-8.54	-6.81	11.88	0.61	10.87	12.89	1.09	1.09	1.09	1.09
F 0.20	6	-17.34	0.74	-18.55	-16.13	-7.81	0.47	-8.58	-7.04	11.92	0.59	10.95	12.88	0.15	1.25	1.25	1.25
O 0.30	6	-17.45	0.74	-18.66	-16.24	-7.57	0.46	-8.32	-6.82	12.05	0.65	10.98	13.11	0.29	1.54	1.54	1.54
R 0.40	6	-17.48	0.74	-18.70	-16.26	-7.32	0.66	-8.40	-6.24	12.45	0.75	11.22	13.67	0.47	2.01	2.01	2.01
W 0.50	6	-17.79	1.02	-19.47	-16.11	-7.06	0.57	-8.00	-6.13	12.86	0.69	11.72	13.99	0.57	2.59	2.59	2.59
A 0.60	6	-18.06	1.13	-19.92	-16.20	-6.41	0.71	-7.58	-5.24	13.34	0.84	11.96	14.71	0.86	3.44	3.44	3.44
R 0.70	6	-18.26	1.05	-19.98	-16.55	-6.05	0.84	-7.43	-4.66	13.55	0.77	12.38	14.92	0.52	3.96	3.96	3.96
D 0.80	6	-18.35	0.91	-19.85	-16.85	-5.74	0.87	-7.17	-4.32	13.88	0.63	12.86	14.91	0.39	4.36	4.36	4.36
O 0.90	6	-18.25	0.86	-19.66	-16.84	-5.55	0.86	-6.97	-4.13	14.19	0.58	13.24	15.14	0.37	4.73	4.73	4.73
1.00	6	-18.56	0.91	-20.05	-17.08	-5.27	0.72	-6.44	-4.09	14.35	0.55	13.45	15.25	0.45	5.18	5.18	5.18
0.0	6	-18.56	0.91	-20.05	-17.08	-5.27	0.72	-6.44	-4.09	14.35	0.55	13.45	15.25	0.0	0.0	0.0	0.0
0.10	6	-18.49	0.66	-19.57	-17.41	-5.80	0.95	-7.35	-4.25	13.80	0.36	13.21	14.40	0.77	0.77	0.77	0.77
0.20	6	-18.11	0.69	-19.25	-16.97	-6.21	0.97	-7.80	-4.63	13.41	0.53	12.55	14.28	0.68	1.45	1.45	1.45
R 0.30	6	-17.75	0.79	-19.05	-16.46	-6.49	0.70	-7.64	-5.34	13.15	0.53	12.28	14.03	0.52	1.97	1.97	1.97
E 0.40	6	-17.39	0.60	-18.37	-16.41	-6.88	0.67	-7.98	-5.78	12.81	0.46	12.06	13.56	0.63	2.60	2.60	2.60
U 0.50	6	-17.35	0.85	-18.74	-15.96	-7.16	0.59	-8.13	-6.18	12.57	0.44	11.85	13.30	0.37	2.97	2.97	2.97
T 0.60	6	-17.24	0.91	-18.72	-15.75	-7.46	0.66	-8.55	-6.38	12.47	0.47	11.70	13.24	0.34	3.32	3.32	3.32
R 0.70	6	-17.21	1.01	-18.87	-15.56	-7.38	0.69	-8.51	-6.24	12.42	0.47	11.65	13.19	0.10	3.42	3.42	3.42
N 0.80	6	-16.85	1.01	-18.51	-15.19	-7.46	0.81	-8.78	-6.16	12.44	0.50	11.61	13.26	0.37	3.79	3.79	3.79
O 0.90	6	-16.62	0.88	-18.07	-15.18	-7.46	0.79	-8.76	-6.13	12.41	0.44	11.61	13.13	0.23	4.01	4.01	4.01
1.00	6	-16.35	1.22	-18.34	-14.36	-7.34	0.79	-8.63	-6.06	12.35	0.45	11.62	13.09	0.30	4.32	4.32	4.32

LANDMARK - - RT GRIP CENTER (16)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N															INCR	CUM
0.0	7	6.29	1.04	4.59	7.99	-11.02	0.87	-12.44	-9.60	4.16	0.98	2.56	5.76	0.0	0.0	0.0	0.0
0.10	7	5.62	0.77	4.37	6.88	-10.49	1.27	-10.58	-8.43	4.16	0.78	3.81	5.76	0.0	0.0	0.0	0.0
F 0.20	7	3.28	1.71	0.48	6.08	-7.71	1.97	-10.94	-4.48	13.25	2.18	9.67	16.83	7.46	10.17	7.46	10.17
O 0.30	7	-0.87	2.86	-5.57	3.82	-3.94	1.92	-7.09	-0.79	20.23	2.55	16.05	24.41	8.95	19.13	8.95	19.13
R 0.40	7	-5.95	3.60	-11.86	-0.04	0.08	1.86	-2.97	3.12	25.13	1.41	22.82	27.44	8.12	27.25	8.12	27.25
W 0.50	7	-9.87	3.65	-15.85	-3.88	0.36	1.72	0.28	5.88	30.79	1.55	25.36	30.45	5.65	32.90	5.65	32.90
A 0.60	7	-12.33	2.97	-17.20	-7.46	5.39	1.65	2.68	8.10	27.31	1.16	28.39	32.18	4.14	37.04	4.14	37.04
R 0.70	7	-13.31	1.70	-16.10	-10.51	7.23	1.68	4.48	9.98	31.90	0.95	30.34	33.46	2.64	39.68	2.64	39.68
D 0.80	7	-13.70	0.78	-14.98	-12.43	8.43	1.35	6.22	10.65	32.93	0.82	31.59	34.27	1.63	41.31	1.63	41.31
O 0.90	7	-13.28	0.58	-14.24	-12.32	9.36	0.82	8.02	10.70	33.47	0.60	32.49	34.45	1.15	42.46	1.15	42.46
1.00	7	-13.02	0.57	-13.95	-12.09	9.78	0.50	8.97	10.60	33.56	0.49	32.77	34.36	0.50	42.97	0.50	42.97
0.0	7	-13.02	0.57	-13.95	-12.09	9.78	0.50	8.97	10.60	33.56	0.49	32.77	34.36	0.0	0.0	0.0	0.0
0.10	7	-12.96	0.57	-13.89	-12.02	7.01	1.98	3.77	10.66	31.67	0.91	30.17	33.16	3.36	3.36	3.36	3.36
0.20	7	-11.23	1.91	-14.37	-8.09	3.67	3.05	-1.33	8.66	28.65	1.63	25.98	31.32	4.82	8.18	4.82	8.18
R 0.30	7	-7.49	3.80	-13.71	-1.26	0.60	3.80	-5.63	6.84	25.18	2.38	21.27	29.09	5.96	14.14	5.96	14.14
E 0.40	7	-2.92	4.67	-10.49	4.84	-2.78	4.31	-9.85	4.28	20.84	3.69	14.78	26.90	7.22	21.35	7.22	21.35
T 0.50	7	1.20	3.23	-4.10	6.50	-6.15	4.21	-13.06	0.76	16.28	4.45	8.98	23.58	6.95	28.31	6.95	28.31
U 0.60	7	3.63	1.51	1.15	6.12	-8.94	3.57	-14.79	-3.08	11.85	4.23	4.92	18.79	5.77	34.07	5.77	34.07
R 0.70	7	4.93	1.08	3.16	6.70	-10.31	2.36	-14.19	-6.43	8.42	3.18	3.20	13.63	3.92	37.99	3.92	37.99
N 0.80	7	5.56	1.10	3.76	7.36	-10.85	1.43	-13.20	-8.50	6.12	2.14	2.62	9.63	2.44	40.43	2.44	40.43
O 0.90	7	5.99	0.88	4.55	7.43	-11.10	0.77	-12.36	-9.83	4.99	1.41	2.68	7.30	1.24	41.67	1.24	41.67
1.00	7	6.29	1.04	4.59	7.99	-11.02	0.87	-12.44	-9.60	4.16	0.98	2.56	5.76	0.89	42.56	0.89	42.56

LANDMARK - - RT TROCHANTER (18)

TIME	SAMPLE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
T	SIZE,N															INCR	CUM
0.0	5	1.76	0.65	0.69	2.83	-6.63	0.95	-8.19	-5.08	3.20	0.98	1.60	4.80	0.0	0.0	0.0	0.0
0.10	5	1.98	0.65	0.92	3.05	-7.12	0.28	-7.59	-6.66	2.93	0.74	1.72	4.13	0.61	0.61	0.61	0.61
F 0.20	6	1.77	0.74	0.56	2.97	-7.47	0.29	-7.94	-7.00	3.17	0.80	1.86	4.49	0.48	1.08	0.48	1.08
O 0.30	6	2.02	0.97	0.42	3.61	-7.40	0.31	-7.90	-6.90	3.14	0.76	1.89	4.38	0.26	1.35	0.26	1.35
R 0.40	6	2.15	1.01	0.50	3.80	-7.41	0.61	-8.41	-6.41	3.11	0.73	1.92	4.31	0.14	1.48	0.14	1.48
W 0.50	6	1.83	0.69	0.70	2.97	-7.35	0.44	-8.07	-6.62	3.13	0.76	1.89	4.37	0.33	1.81	0.33	1.81
A 0.60	6	1.91	0.64	0.86	2.95	-7.22	0.32	-7.74	-6.70	3.18	0.75	1.96	4.41	0.16	1.97	0.16	1.97
R 0.70	6	1.74	0.65	0.67	2.81	-7.26	0.43	-7.97	-6.55	3.14	0.70	2.00	4.28	0.18	2.14	0.18	2.14
D 0.80	6	1.75	0.71	0.59	2.90	-7.28	0.48	-8.07	-6.49	3.13	0.75	1.90	4.37	0.02	2.16	0.02	2.16
O 0.90	6	1.93	0.70	0.78	3.08	-7.15	0.40	-7.81	-6.49	3.21	0.69	2.07	4.35	0.24	2.41	0.24	2.41
1.00	6	1.81	0.65	0.75	2.87	-7.20	0.62	-8.21	-6.18	3.24	0.77	1.98	4.49	0.13	2.54	0.13	2.54
0.0	6	1.81	0.65	0.75	2.87	-7.20	0.62	-8.21	-6.18	3.24	0.77	1.98	4.49	0.0	0.0	0.0	0.0
0.10	6	1.86	0.67	0.76	2.96	-7.19	0.36	-7.77	-6.60	3.11	0.75	1.87	4.34	0.14	0.14	0.14	0.14
0.20	6	1.98	0.73	0.77	3.18	-7.26	0.36	-7.85	-6.67	3.14	0.80	1.83	4.46	0.15	0.29	0.15	0.29
R 0.30	6	2.00	0.78	0.72	3.28	-7.34	0.36	-7.93	-6.76	3.11	0.79	1.82	4.40	0.09	0.38	0.09	0.38
E 0.40	6	1.91	0.82	0.57	3.26	-7.26	0.31	-7.77	-6.74	3.12	0.77	1.86	4.37	0.12	0.50	0.12	0.50
U 0.50	6	1.98	0.74	0.77	3.19	-7.29	0.36	-7.89	-6.70	3.08	0.74	1.87	4.29	0.08	0.58	0.08	0.58
T 0.60	6	1.92	0.66	0.85	3.00	-7.36	0.40	-8.02	-6.70	3.13	0.68	2.03	4.24	0.10	0.69	0.10	0.69
R 0.70	6	1.86	0.79	0.55	3.16	-7.10	0.39	-7.74	-6.46	2.98	0.65	1.91	4.04	0.31	0.99	0.31	0.99
N 0.80	6	1.75	0.79	0.45	3.05	-7.36	0.58	-8.31	-6.46	2.98	0.72	1.80	4.16	0.28	1.27	0.28	1.27
O 0.90	5	2.02	0.82	0.67	3.37	-6.93	0.50	-7.75	-6.11	2.94	0.78	1.66	4.22	0.51	1.78	0.51	1.78
1.00	5	1.76	0.65	0.69	2.83	-6.63	0.95	-8.19	-5.08	3.20	0.98	1.60	4.80	0.48	2.26	0.48	2.26

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE:IN	MEAN	SE	5 PCT	95 PCT	CUM
0.0	7	17.78	0.90	16.30	19.27	0.0
0.10	7	17.62	0.83	16.26	18.97	0.0
0.20	F	17.67	0.94	16.13	19.21	0.30
0.30	O	17.74	1.14	15.87	19.62	0.38
0.40	R	17.88	1.27	15.80	19.96	0.61
0.50	W	17.67	0.88	16.23	19.11	0.82
0.60	A	17.55	1.03	15.86	19.23	0.16
0.70	R	17.63	0.87	16.20	19.07	0.14
0.80	D	17.64	0.91	16.14	19.14	0.10
0.90	7	17.75	0.91	16.25	19.25	1.40
1.00	7	17.72	0.86	16.32	19.12	1.56
0.0	7	17.72	0.86	16.32	19.12	1.67
0.10	7	17.68	0.95	16.13	19.24	0.0
0.20	7	17.71	0.85	16.32	19.09	0.12
0.30	R	17.86	0.98	16.26	19.46	0.12
0.40	E	17.81	1.00	16.17	19.44	0.22
0.50	U	17.73	0.95	16.17	19.29	0.41
0.60	U	17.80	0.90	16.33	19.28	0.55
0.70	R	17.82	0.96	16.26	19.39	0.64
0.80	N	17.81	0.98	16.20	19.42	0.72
0.90	7	17.83	0.85	16.44	19.22	0.80
1.00	7	17.78	0.90	16.30	19.27	0.84

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE:IN	MEAN	SE	5 PCT	95 PCT	CUM
0.0	7	-13.81	0.79	-15.11	-12.50	0.0
0.10	7	-14.24	0.66	-15.32	-13.15	0.0
0.20	F	-14.29	0.81	-15.61	-12.97	0.80
0.30	O	-13.99	0.96	-15.57	-12.42	0.80
0.40	R	-13.69	1.25	-15.73	-11.64	1.05
0.50	W	-14.33	1.13	-16.19	-12.48	1.77
0.60	A	-14.87	1.29	-16.99	-12.75	3.01
0.70	R	-15.55	1.26	-17.62	-13.48	4.50
0.80	D	-15.95	1.14	-17.82	-14.08	5.98
0.90	7	-16.02	1.06	-17.76	-14.29	6.98
1.00	7	-16.20	1.06	-17.93	-14.47	7.65
0.0	7	-16.20	1.06	-17.93	-14.47	8.21
0.10	7	-15.42	1.09	-17.20	-13.64	8.63
0.20	7	-14.95	1.36	-17.18	-12.72	0.0
0.30	R	-14.34	1.09	-16.13	-12.54	0.0
0.40	E	-14.09	0.93	-15.61	-12.57	1.41
0.50	U	-14.36	0.89	-15.81	-12.91	1.48
0.60	T	-14.53	0.84	-15.91	-13.15	1.40
0.70	R	-14.45	0.99	-16.08	-12.83	1.76
0.80	N	-14.26	0.96	-15.84	-12.69	1.55
0.90	7	-14.09	0.93	-15.62	-12.56	0.68
1.00	7	-13.81	0.79	-15.11	-12.50	0.37

MMWT NO. 12130/65

(24)

[illegible]

(26)

TIME Y	SAMPLE SIZE: N	-----X-----				-----Y-----				-----Z-----				DISTANCE		
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVES	
0.0	6	-12.74	0.48	-13.53	-11.94	8.17	7.26	0.55	7.26	9.08	30.88	0.48	30.09	31.67	0.0	0.0
0.10	6	-11.54	0.83	-12.90	-10.18	4.44	2.17	0.88	0.88	8.08	30.88	0.74	30.54	29.97	4.45	4.45
0.20	7	-9.66	1.60	-12.28	-7.03	1.21	3.65	-4.78	7.21	25.74	1.33	23.56	27.91	4.80	9.26	4.80
0.30	7	-6.74	2.71	-11.19	-2.30	-0.87	3.31	-6.29	4.56	22.53	3.29	18.61	26.46	4.80	14.06	4.80
0.40	7	-3.16	3.22	-8.44	2.11	-3.85	3.55	-9.68	1.98	18.33	3.26	12.99	23.67	6.28	20.34	6.28
0.50	7	-0.36	2.35	-4.22	3.49	-6.63	3.46	-12.31	-3.95	14.33	3.65	8.03	20.02	5.84	26.17	5.84
0.60	7	1.15	1.23	-0.87	3.17	-8.74	3.00	-13.67	-3.82	10.28	3.40	4.71	15.85	4.56	30.74	4.56
0.70	7	1.94	1.14	0.07	3.81	-9.99	2.24	-13.66	-6.31	7.53	3.28	11.78	33.74	3.12	33.85	3.12
0.80	7	2.21	1.06	0.47	3.95	-10.52	1.45	-12.90	-8.14	5.70	1.83	2.70	8.69	1.93	35.78	1.93
0.90	6	2.49	0.94	0.94	4.04	-10.58	0.90	-11.91	-9.19	4.84	2.36	7.33	0.90	36.68	0.90	36.68
1.00	6	2.87	0.96	1.31	4.44	-10.55	0.83	-11.91	-9.19	4.13	1.23	2.12	6.14	0.81	37.44	0.81

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +7.0, +10.0, +5.0 TO OVER-HEAD CONTROLLER AT -12.0, +10.0, +35.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +7.0, -10.0, -5.0.

MOTION NUMBER - 22230
BACK ANGLE - 65

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.79	0.16	0.60 TO 1.00 SECS.
LEFT REV	0.70	0.17	0.50 TO 0.90 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT			
0.0	7	-17.45	1.15	-19.34	-15.56		1.67	0.53	0.15	3.19		20.48	0.81	19.16	21.81	0.0	0.0	
0.10	7	-17.52	1.07	-19.27	-15.76		1.35	1.00	-0.29	2.99		20.38	0.63	19.95	22.02	0.60	0.60	
0.20	7	-17.68	1.27	-19.76	-15.60		1.37	1.04	-0.33	3.07		21.04	0.56	20.07	22.01	0.18	0.77	
0.30	7	-17.68	1.10	-19.48	-15.88		1.61	0.55	0.04	3.17		21.06	0.56	20.14	21.97	0.24	1.01	
0.40	7	-17.72	1.05	-19.45	-15.99		1.71	0.83	0.34	3.08		21.09	0.40	20.43	21.75	0.11	1.12	
0.50	7	-17.73	1.06	-19.46	-15.99		1.71	0.87	0.28	3.13		21.10	0.42	20.41	21.79	0.01	1.14	
0.60	7	-17.80	0.96	-19.37	-16.23		1.68	0.89	0.22	3.14		21.21	0.45	20.48	21.95	0.14	1.28	
0.70	7	-17.77	0.99	-19.40	-16.14		1.77	0.92	0.26	3.29		21.17	0.50	20.35	21.98	0.11	1.39	
0.80	7	-17.70	1.04	-19.41	-15.99		1.74	0.95	0.18	3.29		21.09	0.41	20.41	21.77	0.11	1.50	
0.90	7	-17.69	1.03	-19.38	-15.99		1.63	0.85	0.23	3.03		21.03	0.44	20.31	21.75	0.12	1.62	
1.00	7	-17.55	0.97	-19.14	-15.96		1.71	0.78	0.44	2.99		20.88	0.65	19.81	21.94	0.23	1.85	
0.0	7	-17.55	0.97	-19.14	-15.96		1.71	0.78	0.44	2.99		20.88	0.65	19.81	21.94	0.0	0.0	
0.10	7	-17.44	1.02	-19.12	-15.77		1.64	0.85	0.24	3.03		20.58	0.67	19.58	21.78	0.23	0.23	
0.20	7	-17.36	1.12	-19.21	-15.52		1.74	0.83	0.38	3.09		20.53	0.72	19.35	21.70	0.20	0.43	
0.30	7	-17.48	1.21	-19.46	-15.50		1.76	0.97	0.17	3.36		20.49	0.70	19.34	21.64	0.12	0.56	
0.40	7	-17.42	1.10	-19.23	-15.62		1.67	0.85	0.27	3.07		20.50	0.72	19.32	21.68	0.11	0.67	
0.50	7	-17.26	1.07	-19.02	-15.50		1.67	0.74	0.45	2.88		20.51	0.75	19.28	21.73	0.16	0.83	
0.60	7	-17.30	1.13	-19.16	-15.44		1.70	0.77	0.44	2.95		20.57	0.76	19.32	21.82	0.08	0.91	
0.70	7	-17.44	1.05	-19.17	-15.72		1.74	0.84	0.36	3.11		20.56	0.75	19.33	21.78	0.15	1.06	
0.80	7	-17.47	1.04	-19.17	-15.77		1.76	0.83	0.41	3.12		20.48	0.71	19.31	21.65	0.09	1.15	
0.90	7	-17.47	1.04	-19.18	-15.76		1.73	0.88	0.29	3.17		20.48	0.77	19.21	21.75	0.03	1.18	
1.00	7	-17.45	1.15	-19.34	-15.56		1.67	0.93	0.15	3.19		20.48	0.81	19.16	21.81	0.07	1.24	

LANDMARK - CERVICALE

(2)

TIME	SAMPLE SIZE,N	(------X - CO-ORDINATE-----)				(------Y - CO-ORDINATE-----)				(------Z - CO-ORDINATE-----)				DISTANCE		MOVED
T		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM	
0.0	7	-18.76	1.07	-20.51	-17.01	0.27	2.39	-3.65	4.19	12.58	0.88	11.23	14.13	0.0	0.0	
0.10	7	-18.82	0.97	-20.41	-17.23	0.09	2.54	-4.06	4.25	12.78	0.86	11.36	14.19	0.21	0.21	
0.20	7	-18.81	1.15	-20.69	-16.93	0.01	2.67	-4.40	4.25	12.58	0.71	11.52	13.85	0.12	0.33	
0.30	7	-18.79	1.30	-20.92	-16.67	0.04	2.65	-4.31	4.40	12.88	0.79	11.58	14.17	0.20	0.53	
0.40	7	-18.89	1.36	-21.12	-16.67	0.42	2.52	-3.72	4.56	13.00	0.85	11.59	14.40	0.41	0.94	
0.50	7	-18.87	1.43	-21.21	-16.53	0.58	2.52	-3.55	4.71	12.92	0.81	11.59	14.40	0.18	1.12	
0.60	7	-18.96	1.28	-21.06	-16.87	0.50	2.66	-3.85	4.86	13.05	0.87	11.63	14.48	0.18	1.29	
0.70	7	-18.98	1.15	-20.86	-17.09	0.62	2.66	-3.74	4.97	13.12	0.98	11.52	14.73	0.13	1.43	
0.80	7	-18.94	1.13	-20.80	-17.09	0.66	2.64	-3.66	4.98	13.03	0.93	11.51	14.55	0.11	1.53	
0.90	7	-19.08	1.16	-20.98	-17.18	0.54	2.75	-3.96	5.04	13.14	0.96	11.56	14.73	0.22	1.75	
1.00	7	-19.17	1.29	-21.29	-17.06	0.53	2.74	-3.97	5.03	13.13	1.08	11.36	14.90	0.09	1.84	
0.0	7	-19.17	1.29	-21.29	-17.06	0.53	2.74	-3.97	5.03	13.13	1.08	11.36	14.90	0.0	0.0	
0.10	7	-19.15	1.09	-20.94	-17.36	0.29	2.65	-4.05	4.63	13.11	0.97	11.51	14.70	0.25	0.25	
0.20	7	-19.13	1.09	-20.91	-17.35	0.23	2.73	-4.25	4.70	12.98	0.84	11.60	14.36	0.14	0.39	
0.30	7	-19.18	1.16	-21.09	-17.27	0.43	2.47	-3.62	4.49	12.85	0.80	11.53	14.17	0.25	0.64	
0.40	7	-19.12	1.24	-21.16	-17.09	0.57	2.31	-3.21	4.36	12.78	0.76	11.54	14.03	0.16	0.80	
0.50	7	-18.86	1.22	-20.85	-16.86	0.35	2.49	-3.73	4.43	12.58	0.73	11.48	13.88	0.36	1.16	
0.60	7	-18.79	1.07	-20.55	-17.03	0.26	2.32	-3.53	4.06	12.60	0.80	11.28	13.92	0.14	1.30	
0.70	7	-18.93	1.01	-20.59	-17.28	0.34	2.26	-3.38	4.05	12.67	0.86	11.27	14.08	0.18	1.48	
0.80	7	-18.92	1.21	-20.91	-16.93	0.42	2.32	-3.38	4.22	12.71	0.83	11.25	14.16	0.09	1.57	
0.90	7	-18.77	1.25	-20.83	-16.72	0.35	2.39	-3.56	4.27	12.70	0.90	11.22	14.18	0.16	1.73	
1.00	7	-18.76	1.07	-20.51	-17.01	0.27	2.39	-3.65	4.19	12.58	0.88	11.23	14.13	0.09	1.82	

LANDMARK - SUPRASTERNALE (3)

TIME	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVEMENT
T		MEAN	SE	5 PCT	95 PCT	INCR
0.0	7	-14.61	1.25	-16.66	-12.57	0.0
0.0	7	-14.61	1.31	-16.75	-12.47	0.0
0.10	7	-14.61	1.26	-16.74	-12.62	0.14
0.20	7	-14.68	1.27	-16.87	-12.70	0.14
0.30	7	-14.78	1.27	-16.87	-12.70	0.42
0.40	7	-14.89	1.30	-17.01	-12.76	0.56
0.50	7	-15.10	1.39	-17.38	-12.82	0.95
0.60	7	-15.06	1.23	-17.08	-13.05	0.98
0.70	7	-14.97	1.15	-16.86	-13.08	1.08
0.80	7	-14.98	1.17	-16.90	-13.06	1.27
0.90	7	-15.27	1.47	-17.68	-12.85	1.31
0.90	7	-15.27	1.47	-17.68	-12.85	1.71
1.00	7	-15.28	1.35	-17.49	-13.06	1.77
0.0	7	-15.28	1.35	-17.49	-13.06	0.07
0.0	7	-14.86	1.07	-16.61	-13.10	0.0
0.10	7	-14.86	1.07	-16.61	-13.10	0.43
0.20	7	-14.92	1.08	-16.70	-13.15	0.18
0.30	7	-14.92	1.17	-16.84	-13.00	0.23
0.40	7	-15.01	1.31	-17.16	-12.87	0.15
0.40	7	-15.01	1.31	-17.16	-12.87	0.18
0.50	7	-15.03	1.25	-17.08	-12.98	0.22
0.50	7	-15.03	1.25	-17.08	-12.98	0.25
0.60	7	-14.87	1.07	-16.63	-13.11	0.10
0.60	7	-14.87	1.07	-16.63	-13.11	0.16
0.70	7	-14.79	1.13	-16.65	-12.93	0.21
0.80	7	-14.81	1.06	-16.55	-13.06	0.26
0.80	7	-14.81	1.06	-16.55	-13.06	0.36
0.90	7	-14.93	1.17	-16.84	-13.01	0.36
0.90	7	-14.93	1.17	-16.84	-13.01	0.36
1.00	7	-14.61	1.25	-16.66	-12.57	0.36

LANDMARK - LT ACRCMION (5)

TIME T	SAMPLE SIZE, N	(- - - - - X - CO-ORDINATE - - - - -)			(- - - - - Y - CO-ORDINATE - - - - -)			(- - - - - Z - CO-ORDINATE - - - - -)			DISTANCE			MOVES CUM
		MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	95 PCT	12.04	INCR	
0.0	7	-17.16	0.85	-18.56	-15.76	7.54	0.56	11.49	0.44	10.76	12.21	0.0	0.0	
0.10	7	-17.35	0.60	-18.34	-16.36	7.39	0.53	8.46	0.48	10.47	12.06	0.32	0.32	
0.20	7	-17.75	0.54	-18.64	-16.86	7.47	0.69	8.46	0.46	10.27	11.93	0.47	0.80	
0.30	7	-17.85	0.48	-18.64	-17.06	7.49	0.80	8.80	0.54	10.18	11.93	0.11	0.90	
0.40	7	-17.90	0.39	-18.55	-17.26	7.42	0.64	8.46	0.47	10.31	11.86	0.10	1.00	
0.50	6	-17.86	0.51	-18.69	-17.03	7.03	0.59	7.99	0.39	10.36	11.66	0.40	1.40	
0.60	6	-18.14	0.62	-19.16	-17.13	7.05	0.87	8.48	0.50	10.34	11.98	0.32	1.72	
0.70	6	-18.23	0.56	-19.16	-17.31	7.06	0.97	8.46	0.42	10.45	11.82	1.26	2.99	
0.80	6	-18.43	0.46	-19.19	-17.67	7.06	0.90	8.53	0.42	10.45	11.82	1.30	4.29	
0.90	5	-18.59	0.61	-19.60	-17.58	6.99	0.80	8.50	0.46	10.36	11.88	0.18	4.46	
1.00	5	-18.49	0.75	-19.73	-17.26	7.01	1.01	8.66	0.57	10.17	12.04	0.10	4.56	
0.0	5	-18.49	0.75	-19.73	-17.26	7.01	1.01	8.66	0.57	10.17	12.04	0.0	0.0	
0.10	5	-18.43	0.66	-19.56	-17.40	6.97	0.87	8.41	0.39	10.40	11.66	0.08	0.08	
0.20	5	-18.65	0.75	-19.88	-17.43	7.13	0.77	8.40	0.31	10.49	11.52	0.24	0.32	
0.30	5	-18.77	0.67	-19.86	-17.68	7.38	0.88	8.83	0.35	10.31	11.58	0.27	0.59	
0.40	5	-18.73	0.73	-19.94	-17.53	7.34	0.70	8.49	0.55	10.43	11.92	0.06	0.65	
0.50	6	-18.12	0.64	-19.16	-17.08	7.53	0.53	8.41	0.39	10.37	11.65	0.64	1.29	
0.60	7	-17.68	0.51	-18.52	-16.84	7.44	0.52	8.30	0.46	10.47	11.99	0.50	1.80	
0.70	7	-17.51	0.71	-18.68	-16.35	7.52	0.54	8.41	0.40	10.55	12.20	0.23	2.03	
0.80	7	-17.35	0.85	-18.74	-15.96	7.55	0.56	8.47	0.50	10.61	12.25	0.18	2.20	
0.90	7	-17.23	0.84	-18.60	-15.86	7.52	0.55	8.42	0.49	10.65	12.27	0.13	2.33	
1.00	7	-17.16	0.85	-18.56	-15.76	7.54	0.56	8.46	0.44	10.76	12.21	0.08	2.41	

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				-----			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DISTANCE	MOVED	CUM
0.0	6	5.53	0.86	4.13	6.94	10.90	0.25	10.49	11.31	5.81	0.49	5.61	6.61	0.0	0.0	0.0	0.0
0.10	7	4.39	1.00	2.76	6.03	10.79	0.72	9.61	11.98	8.87	1.94	5.68	12.06	3.27	3.27	3.27	3.27
F 0.20	7	0.13	1.51	-2.35	2.62	10.24	0.92	8.73	11.98	14.54	2.91	9.77	19.31	7.12	7.12	10.38	10.38
O 0.30	7	-5.65	2.57	-9.86	-1.44	9.64	0.95	8.07	11.20	21.24	1.92	18.09	24.38	8.86	8.86	19.25	19.25
R 0.40	7	-11.11	4.30	-18.16	-4.07	9.23	0.97	7.65	10.82	26.55	3.23	21.25	31.85	7.63	7.63	26.88	26.88
W 0.50	7	-11.82	2.10	-15.26	-8.37	9.48	0.67	8.36	10.57	27.04	2.07	23.25	30.83	0.89	0.89	27.77	27.77
A 0.60	7	-13.26	1.58	-15.85	-10.68	9.42	0.73	8.23	10.62	29.21	2.07	25.81	32.61	2.61	2.61	30.38	30.38
R 0.70	7	-13.68	0.86	-15.08	-12.28	9.68	0.64	8.62	10.74	30.84	1.70	28.05	33.63	1.70	32.08	32.08	32.08
D 0.80	7	-13.72	0.67	-14.81	-12.62	9.80	0.72	8.62	10.93	31.55	1.00	30.01	33.28	0.82	32.90	32.90	32.90
O 0.90	7	-13.73	0.94	-15.27	-12.18	9.70	0.99	8.08	11.32	31.70	0.79	30.40	33.00	0.11	33.01	33.01	33.01
1.00	7	-13.80	0.98	-15.42	-12.19	9.94	0.99	8.31	11.57	31.85	0.60	30.86	32.83	0.29	33.30	33.30	33.30
0.0	7	-13.80	0.98	-15.42	-12.19	9.94	0.99	8.31	11.57	31.85	0.60	30.86	32.83	0.0	0.0	0.0	0.0
0.10	7	-12.94	0.95	-14.50	-11.38	9.48	1.00	7.83	11.12	30.13	1.43	27.78	32.48	1.98	1.98	1.98	1.98
0.20	7	-11.44	1.60	-14.07	-8.81	9.05	0.91	7.55	10.54	27.72	2.13	24.23	31.21	2.87	4.85	4.85	4.85
R 0.30	7	-9.13	3.17	-14.33	-3.94	8.55	0.91	7.06	10.44	24.43	2.74	19.95	28.92	4.04	8.89	8.89	8.89
E 0.40	7	-6.16	4.19	-13.02	0.71	8.38	1.08	6.61	10.16	20.82	3.50	15.09	26.56	4.68	13.58	13.58	13.58
O 0.50	7	-2.07	2.31	-5.86	1.72	8.84	1.29	6.72	10.96	16.58	2.26	12.87	20.28	5.91	19.49	19.49	19.49
U 0.60	7	2.46	4.53	-5.13	10.04	9.56	1.86	6.51	12.60	11.96	4.37	4.79	19.13	6.51	25.99	25.99	25.99
R 0.70	7	4.26	2.92	-0.52	9.05	10.09	1.36	7.86	12.32	9.26	2.86	4.58	13.95	3.29	29.28	29.28	29.28
N 0.80	6	4.55	1.39	2.27	6.83	10.28	0.69	9.14	11.41	8.31	1.32	6.14	10.48	1.02	30.30	30.30	30.30
O 0.90	6	5.16	1.08	3.40	6.93	10.61	0.41	9.93	11.29	6.93	0.84	5.54	8.32	1.54	31.84	31.84	31.84
1.00	6	5.53	0.86	4.13	6.94	10.90	0.25	10.49	11.31	5.81	0.49	5.61	6.61	1.21	33.05	33.05	33.05

LANDMARK - LT TROCHANTER (19)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				-----			
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DISTANCE	MOVED	CUM
0.0	7	2.12	0.88	0.68	3.56	6.83	0.94	5.30	8.37	2.75	0.50	1.93	3.58	0.0	0.0	0.0	0.0
0.10	7	2.08	0.86	0.67	3.48	6.74	0.77	5.47	8.01	2.87	0.51	2.03	3.72	0.16	0.16	0.16	0.16
F 0.20	7	2.00	0.94	0.46	3.54	6.72	0.67	5.63	7.82	2.85	0.49	2.08	3.62	0.08	0.08	0.24	0.24
O 0.30	7	2.10	0.95	0.54	3.66	6.67	0.58	5.72	7.63	2.85	0.47	2.08	3.62	0.11	0.35	0.35	0.35
R 0.40	7	2.09	0.76	0.85	3.33	6.73	0.65	5.66	7.80	2.85	0.46	2.10	3.60	0.06	0.41	0.41	0.41
W 0.50	7	2.11	0.72	0.93	3.29	6.71	0.71	5.55	7.87	2.87	0.48	2.07	3.66	0.03	0.44	0.44	0.44
A 0.60	7	1.94	0.90	0.46	3.42	6.55	0.78	5.28	7.82	2.89	0.41	2.22	3.55	0.23	0.68	0.68	0.68
R 0.70	7	1.99	0.80	0.69	3.29	6.63	0.72	5.45	7.81	2.86	0.46	2.11	3.61	0.10	0.77	0.77	0.77
D 0.80	7	1.97	0.73	0.78	3.16	6.64	0.78	5.36	7.92	2.86	0.41	2.44	3.78	0.25	1.03	1.03	1.03
O 0.90	7	1.92	0.75	0.70	3.15	6.67	0.80	5.35	7.99	2.83	0.47	2.05	3.61	0.28	1.31	1.31	1.31
1.00	7	1.94	0.80	0.63	3.25	6.60	0.76	5.35	7.86	2.89	0.42	2.21	3.58	0.09	1.40	1.40	1.40
0.0	7	1.94	0.80	0.63	3.25	6.60	0.76	5.35	7.86	2.89	0.42	2.21	3.58	0.0	0.0	0.0	0.0
0.10	7	2.08	0.81	0.75	3.42	6.58	0.69	5.46	7.71	2.87	0.50	2.05	3.69	0.15	0.15	0.15	0.15
0.20	7	2.08	0.90	0.61	3.56	6.65	0.72	5.47	7.84	2.84	0.49	2.04	3.64	0.08	0.22	0.22	0.22
R 0.30	7	2.08	0.83	0.72	3.44	6.71	0.87	5.28	8.13	2.86	0.44	2.13	3.59	0.06	0.28	0.28	0.28
E 0.40	7	2.03	0.83	0.67	3.38	6.68	0.86	5.28	8.08	2.87	0.45	2.14	3.60	0.06	0.34	0.34	0.34
T 0.50	7	2.08	0.80	0.77	3.39	6.66	0.75	5.29	8.25	2.76	0.44	2.05	3.50	0.11	0.45	0.45	0.45
U 0.60	7	2.17	0.84	0.79	3.54	6.77	0.90	5.29	8.25	2.76	0.44	2.04	3.49	0.14	0.60	0.60	0.60
R 0.70	7	2.15	1.02	0.48	3.81	6.80	1.00	5.16	8.45	2.82	0.44	2.10	3.53	0.06	0.66	0.66	0.66
N 0.80	7	2.13	0.89	0.66	3.59	6.71	0.86	5.30	8.11	2.85	0.38	2.22	3.48	0.10	0.76	0.76	0.76
O 0.90	7	2.19	0.78	0.92	3.46	6.76	0.70	5.61	7.91	2.77	0.39	2.12	3.42	0.11	0.87	0.87	0.87
1.00	7	2.12	0.83	0.68	3.56	6.83	0.54	5.30	8.37	2.75	0.50	1.93	3.58	0.11	0.98	0.98	0.98

LANDMARK - LT KNEE TOP (21)

TIME	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE	
T		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED CUM
0.0	5	17.38	1.11	15.56	19.19	5.62	0.92	4.11	7.12	9.19	2.32	5.38	13.00	0.0	0.0
0.10	5	17.50	1.20	15.53	19.48	5.56	0.91	4.06	7.06	9.20	2.32	5.39	13.01	0.14	0.14
0.20	5	17.59	1.26	15.52	19.66	5.75	1.07	3.99	7.50	9.19	2.37	5.30	13.08	0.21	0.34
0.30	5	17.58	1.17	15.66	19.50	5.71	0.98	4.10	7.32	9.22	2.37	5.34	13.10	0.05	0.39
0.40	5	17.50	1.07	15.74	19.27	5.72	1.08	3.96	7.49	9.19	2.36	5.31	13.07	0.08	0.48
0.50	5	17.48	1.12	15.64	19.32	5.67	1.10	3.86	7.48	9.18	2.38	5.29	13.08	0.06	0.53
0.60	5	17.43	1.28	15.33	19.53	5.55	0.98	3.95	7.15	9.27	2.34	5.43	13.12	0.16	0.69
0.70	5	17.48	1.09	15.69	19.28	5.65	1.09	3.86	7.45	9.22	2.46	5.18	13.26	0.13	0.82
0.80	5	17.41	1.08	15.63	19.19	5.75	1.06	4.01	7.49	9.14	2.33	5.32	12.97	0.15	0.97
0.90	5	17.40	1.04	15.70	19.10	5.71	1.13	3.86	7.56	9.18	2.38	5.27	13.08	0.05	1.02
1.00	5	17.46	1.16	15.55	19.37	5.71	1.20	3.75	7.67	9.13	2.37	5.25	13.02	0.08	1.10
0.0	5	17.46	1.16	15.55	19.37	5.71	1.20	3.75	7.67	9.13	2.37	5.25	13.02	0.0	0.0
0.10	5	17.50	1.18	15.56	19.44	5.59	1.04	3.88	7.31	9.22	2.44	5.23	13.22	0.15	0.15
0.20	5	17.47	1.23	15.46	19.49	5.65	1.15	3.76	7.54	9.20	2.38	5.30	13.11	0.07	0.22
0.30	5	17.49	1.23	15.46	19.51	5.63	1.04	3.93	7.34	9.19	2.38	5.28	13.10	0.03	0.25
0.40	5	17.48	1.28	15.38	19.59	5.63	0.91	4.13	7.12	9.20	2.39	5.29	13.11	0.01	0.26
0.50	5	17.63	1.31	15.48	19.77	5.71	0.97	4.12	7.29	9.20	2.33	5.39	13.01	0.16	0.42
0.60	5	17.58	1.25	15.53	19.64	5.71	0.92	4.20	7.22	9.23	2.35	5.36	13.09	0.05	0.47
0.70	5	17.44	1.36	15.20	19.67	5.65	0.80	4.34	6.97	9.18	2.37	5.29	13.07	0.16	0.63
0.80	5	17.44	1.27	15.36	19.53	5.65	0.95	4.08	7.21	9.14	2.29	5.39	12.90	0.04	0.67
0.90	5	17.48	1.19	15.53	19.43	5.73	1.12	3.88	7.57	9.16	2.30	5.39	12.93	0.09	0.76
1.00	5	17.38	1.11	15.56	19.19	5.62	0.92	4.11	7.12	9.19	2.32	5.38	13.00	0.15	0.91

LANDMARK - LT SHOULDER CENTER (23)

TIME T	SAMPLE SIZE,N	-----X-----				-----Y-----				-----Z-----				DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR		
0.0	7	-14.90	1.04	-16.61	-13.20	8.27	0.31	7.75	8.78	10.90	0.42	10.22	11.59	0.0	0.0	
0.10	7	-14.90	0.54	-15.78	-14.01	7.94	0.64	6.90	8.99	10.70	0.37	10.10	11.31	0.38	0.38	
0.20	7	-15.25	0.50	-16.08	-14.42	8.10	0.55	7.20	9.00	10.67	0.30	10.17	11.16	0.39	0.77	
0.30	7	-15.32	0.45	-16.06	-14.58	8.11	0.81	6.78	9.44	10.90	0.32	10.38	12.09	0.25	1.03	
0.40	7	-15.28	0.23	-15.66	-14.90	8.32	0.68	7.20	9.43	11.37	0.44	10.65	12.09	0.51	1.53	
0.50	7	-15.20	0.51	-16.04	-14.37	8.13	0.63	7.10	9.16	11.98	0.69	11.04	13.11	0.64	2.17	
0.60	7	-15.56	0.70	-16.70	-14.42	8.08	0.74	6.87	9.30	12.35	0.80	11.04	13.66	0.52	2.68	
0.70	7	-15.77	0.56	-16.70	-14.85	8.11	0.73	6.91	9.31	12.64	0.83	11.28	14.01	0.36	3.05	
0.80	7	-15.84	0.57	-16.77	-14.91	8.14	0.85	6.74	9.53	12.89	0.90	11.41	14.37	0.26	3.30	
0.90	7	-15.70	0.66	-16.79	-14.62	8.33	0.85	6.94	9.73	13.13	1.03	11.43	14.82	0.34	3.64	
1.00	7	-15.74	0.74	-16.95	-14.52	8.36	0.79	7.07	9.66	13.11	0.98	11.50	14.72	0.04	3.68	
0.0	7	-15.74	0.74	-16.95	-14.52	8.36	0.79	7.07	9.66	13.11	0.98	11.50	14.72	0.0	0.0	
0.10	7	-15.64	0.79	-16.94	-14.34	8.16	0.71	7.00	9.32	12.79	0.85	11.39	14.18	0.40	0.40	
0.20	7	-15.54	0.73	-16.74	-14.33	8.16	0.82	6.82	9.51	12.27	0.70	11.12	13.42	0.53	0.92	
0.30	7	-15.67	0.77	-16.94	-14.40	8.21	0.80	6.89	9.52	11.76	0.86	12.65	0.54	1.46		
0.40	7	-15.86	0.74	-17.08	-14.64	8.31	0.66	7.23	9.39	11.28	0.49	10.49	12.08	0.52	1.97	
0.50	7	-15.59	0.69	-16.71	-14.66	8.33	0.63	7.30	9.36	11.04	0.37	10.44	11.65	0.36	2.34	
0.60	7	-15.39	0.77	-16.65	-14.13	8.31	0.65	7.25	9.37	11.04	0.37	10.40	11.60	0.21	2.54	
0.70	7	-15.26	0.91	-16.75	-13.77	8.27	0.65	7.21	9.33	10.99	0.32	10.46	11.52	0.14	2.68	
0.80	7	-15.06	0.97	-16.64	-13.47	8.24	0.59	7.27	9.21	10.97	0.34	10.42	11.53	0.20	2.88	
0.90	7	-14.90	1.00	-16.55	-13.25	8.29	0.43	7.60	8.99	10.34	0.34	10.39	11.49	0.17	3.05	
1.00	7	-14.90	1.04	-16.61	-13.20	8.27	0.31	7.75	8.78	10.90	0.42	10.22	11.59	0.05	3.10	

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)				(-----Y - CO-ORDINATE-----)				(-----Z - CO-ORDINATE-----)				DISTANCE MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	7	-7.56	0.98	-9.17	-5.56	12.71	0.36	12.12	13.31	5.04	1.63	2.37	7.71	0.0	0.0		
0.10	7	-7.14	0.34	-7.70	-6.58	12.07	1.32	9.90	14.24	4.70	1.61	2.06	7.34	0.84	0.84		
F 0.20	7	-7.14	0.49	-7.94	-6.35	12.51	1.28	10.42	14.60	5.85	1.91	2.12	8.98	1.23	2.07		
0 0.30	7	-7.08	0.67	-8.18	-5.99	13.28	0.87	11.86	14.71	8.57	2.22	4.93	12.21	2.82	4.89		
R 0.40	7	-7.50	1.16	-9.41	-5.60	13.57	0.64	12.52	14.61	11.85	2.50	7.75	15.95	3.32	8.21		
W 0.50	7	-8.43	1.64	-11.13	-5.73	13.30	0.60	12.32	14.28	14.83	2.58	10.60	19.07	3.14	11.35		
A 0.60	7	-9.81	1.87	-12.88	-6.74	12.99	0.72	11.81	14.28	16.91	2.44	13.99	20.42	2.51	13.86		
R 0.70	7	-10.58	2.04	-14.16	-7.47	12.91	0.79	11.61	14.21	18.16	1.62	15.51	20.82	1.61	15.47		
D 0.80	7	-11.58	2.02	-14.89	-8.27	12.87	0.69	11.74	13.99	18.86	1.14	16.98	20.73	1.04	16.50		
0 0.90	6	-12.37	1.89	-15.46	-8.28	12.71	0.40	12.06	13.37	19.37	0.76	18.13	20.62	0.95	17.46		
1.00	6	-12.19	1.86	-15.25	-9.14	13.04	0.99	11.42	14.66	19.12	1.14	17.25	21.00	0.45	17.90		
0.0	6	-12.19	1.86	-15.25	-9.14	13.04	0.99	11.42	14.66	19.12	1.14	17.25	21.00	0.0	0.0		
0.10	6	-11.00	1.29	-13.11	-8.89	13.33	0.95	11.77	14.89	17.71	1.76	14.83	20.59	1.87	1.87		
0.20	7	-9.54	0.91	-11.04	-8.04	13.75	0.75	12.53	14.97	15.60	2.18	12.03	19.17	2.60	4.47		
R 0.30	7	-8.72	0.91	-10.22	-7.23	14.03	0.52	13.18	14.89	13.14	2.45	9.13	17.15	2.61	7.08		
E 0.40	7	-8.17	1.00	-9.81	-6.54	14.22	0.52	13.37	15.07	10.62	2.08	7.20	14.04	2.59	9.67		
T 0.50	7	-7.77	0.91	-9.26	-6.28	13.98	0.58	13.03	14.93	8.39	1.58	5.80	10.99	2.28	11.94		
U 0.60	7	-7.57	0.91	-9.07	-6.07	13.63	0.68	12.52	14.74	6.72	1.50	4.26	9.18	1.72	13.66		
R 0.70	7	-7.63	1.01	-9.28	-5.98	13.38	0.60	12.40	14.35	5.87	1.66	3.14	8.60	0.89	14.55		
N 0.80	7	-7.59	0.98	-9.20	-5.98	13.15	0.42	12.45	13.85	5.40	1.79	2.46	8.33	0.53	15.08		
0 0.90	7	-7.61	0.97	-9.21	-6.01	12.92	0.33	12.38	13.45	5.20	1.73	2.36	8.04	0.30	15.38		
1.00	7	-7.56	0.98	-9.17	-5.96	12.71	0.36	12.12	13.31	5.04	1.63	2.37	7.71	0.27	15.65		

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	(-----X - CO-ORDINATE-----)				(-----Y - CO-ORDINATE-----)				(-----Z - CO-ORDINATE-----)				DISTANCE MOVED			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	CUM		
0.0	3	2.92	0.71	1.76	4.08	11.44	0.30	10.95	11.93	6.17	0.58	5.22	7.12	0.0	0.0		
0.10	4	1.44	0.90	-0.04	2.91	11.18	0.40	10.53	11.83	8.73	1.17	6.81	10.65	2.97	2.97		
F 0.20	4	-1.15	1.19	-3.10	0.79	11.02	0.69	9.89	12.15	13.28	1.14	11.41	15.15	5.24	8.21		
U 0.30	6	-4.82	1.26	-6.89	-2.76	10.67	0.83	9.30	12.04	18.04	1.06	16.29	19.78	6.02	14.23		
R 0.40	7	-7.56	1.88	-10.64	-4.47	10.64	0.79	9.34	11.94	21.01	2.70	16.58	25.43	4.04	18.26		
W 0.50	7	-9.99	1.94	-13.17	-6.82	10.53	0.71	9.37	11.69	24.12	2.55	19.94	28.31	3.96	22.22		
A 0.60	7	-11.64	1.79	-14.57	-8.70	10.51	0.72	9.33	11.69	26.27	2.15	22.74	25.80	2.70	24.92		
R 0.70	7	-12.50	1.42	-14.83	-10.17	10.65	0.65	9.58	11.71	27.71	1.69	24.94	30.48	1.68	26.61		
D 0.80	7	-12.81	1.14	-14.68	-10.94	10.80	0.65	9.72	11.87	28.46	1.08	26.69	30.24	0.83	27.44		
0 0.90	7	-12.76	0.79	-14.05	-11.46	10.94	0.61	9.94	11.94	28.79	0.71	27.61	29.96	0.36	27.80		
1.00	7	-12.74	0.52	-13.59	-11.89	11.00	0.52	10.15	11.86	28.62	0.73	27.42	29.82	0.18	27.98		
0.0	7	-12.74	0.52	-13.59	-11.89	11.00	0.52	10.15	11.86	28.62	0.73	27.42	29.82	0.0	0.0		
0.10	7	-11.66	0.81	-13.00	-10.33	10.69	0.59	9.72	11.67	27.08	1.57	24.50	29.65	1.90	1.90		
0.20	7	-10.06	1.39	-12.34	-7.79	10.32	0.51	9.49	11.16	24.77	2.33	20.96	28.58	2.83	4.74		
R 0.30	7	-8.12	2.13	-11.62	-4.63	9.98	0.41	9.31	10.66	21.66	2.72	17.21	26.11	3.68	8.42		
E 0.40	6	-6.59	1.94	-9.76	-3.41	9.59	0.56	8.68	10.51	19.18	2.07	15.79	22.57	2.95	11.36		
U 0.50	5	-3.90	1.64	-6.59	-1.21	9.92	0.60	8.94	10.90	15.54	2.05	12.18	18.89	4.54	15.90		
T 0.60	5	-1.77	1.21	-3.76	0.22	10.34	0.55	9.44	11.24	12.61	1.68	9.85	15.37	3.64	19.54		
R 0.70	4	0.33	1.21	-1.65	2.31	10.95	0.49	10.15	11.75	9.68	1.34	7.49	11.87	3.66	23.20		
N 0.80	3	1.49	0.15	1.24	1.75	10.94	0.10	10.78	11.11	8.57	0.80	7.26	9.87	1.61	24.81		
0 0.90	3	3.37	2.23	-0.29	7.02	11.67	0.85	10.27	13.07	5.86	2.70	1.44	10.29	3.37	28.18		
1.00	3	2.92	0.71	1.76	4.08	11.44	0.30	10.95	11.93	6.17	0.58	5.22	7.12	0.59	28.76		

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +7.0, -10.0, +5.0 TO PANEL CONTROLLER AT +10.0, +10.0, +15.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +7.0, +10.0, +5.0.

MOTION NUMBER - 12140
 BACK ANGLE - 65

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RGHT FWD	0.74	0.08	0.60 TO 0.80 SECS.
RGHT REV	0.86	0.11	0.80 TO 1.10 SECS.

LANDMARK - NASION

(1)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-16.54	1.12	-18.57	-14.71	-0.72	1.39	-3.01	1.56	21.31	0.72	20.13	22.50	0.0	0.0
0.10	7	-16.83	1.06	-18.57	-15.09	0.72	1.12	-1.12	2.55	21.31	0.65	20.24	22.37	1.47	1.47
F 0.20	7	-16.75	1.29	-18.86	-14.63	1.50	1.31	-0.65	3.66	21.25	0.60	20.26	22.23	0.79	2.26
O 0.30	7	-16.42	1.54	-18.95	-13.89	2.10	1.45	-0.28	4.49	21.26	0.64	20.21	22.31	0.68	2.94
R 0.40	7	-16.21	1.97	-19.45	-12.98	2.65	1.82	-0.34	5.44	21.36	0.78	20.08	22.63	0.59	3.54
W 0.50	7	-16.54	1.59	-19.15	-13.84	2.97	1.48	0.31	5.17	21.42	0.77	20.16	22.69	0.35	3.88
A 0.60	7	-16.43	1.58	-19.01	-13.84	2.97	1.40	0.67	5.27	21.48	0.75	20.25	22.71	0.26	4.15
R 0.70	7	-16.29	1.54	-18.82	-13.76	3.26	1.52	0.77	5.75	21.55	0.79	20.26	22.85	0.33	4.47
D 0.80	7	-16.15	1.57	-18.71	-13.58	3.63	1.64	0.95	6.32	21.68	0.92	20.17	23.19	0.42	4.90
O 0.90	6	-16.50	1.33	-18.68	-14.31	3.60	1.68	0.84	6.37	21.87	1.09	20.07	23.66	0.40	5.29
1.00	6	-16.60	1.51	-19.08	-14.13	3.68	1.89	0.57	6.78	21.97	1.07	20.21	23.72	0.16	5.46
0.0	6	-16.60	1.51	-19.08	-14.13	3.68	1.89	0.57	6.78	21.97	1.07	20.21	23.72	0.0	0.0
0.10	6	-16.89	1.41	-19.21	-14.57	3.40	1.69	0.63	6.17	21.89	1.11	20.06	23.71	0.41	0.41
0.20	7	-16.43	1.63	-19.10	-13.76	3.02	1.47	0.60	5.43	21.56	1.09	19.78	23.35	0.68	1.09
R 0.30	7	-16.26	1.40	-18.55	-13.96	2.29	1.37	0.04	4.55	21.42	1.00	19.77	23.06	0.76	1.85
E 0.40	7	-16.16	1.30	-18.30	-14.02	1.58	1.22	-0.43	3.58	21.28	0.92	19.77	22.79	0.73	2.58
T 0.50	7	-16.36	1.14	-18.23	-14.48	1.11	1.45	-1.27	3.48	21.24	0.76	19.99	22.49	0.51	3.09
U 0.60	7	-16.49	1.29	-18.61	-14.37	0.65	1.21	-1.33	2.64	21.24	0.81	19.92	22.57	0.47	3.57
R 0.70	7	-16.55	1.22	-18.54	-14.55	0.14	1.10	-1.66	1.94	21.33	0.80	20.01	22.65	0.52	4.09
N 0.80	7	-16.51	1.19	-18.46	-14.57	-0.35	1.10	-2.16	1.67	21.32	0.82	19.97	22.66	0.49	4.58
O 0.90	7	-16.64	1.29	-18.76	-14.52	-0.58	1.19	-2.55	1.37	21.23	0.82	19.89	22.57	0.28	4.86
1.00	7	-16.54	1.12	-18.37	-14.71	-0.72	1.39	-3.01	1.56	21.31	0.72	20.13	22.50	0.19	5.05

361

LANDMARK - CERVICAL

(2)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-17.78	0.75	-19.00	-16.55	-0.25	1.80	-3.20	2.70	13.88	0.79	12.59	15.17	0.0	0.0
0.10	7	-17.93	0.76	-19.22	-16.73	0.37	1.21	-1.62	2.36	13.80	0.86	12.59	15.21	0.65	0.65
F 0.20	7	-17.82	0.77	-19.08	-16.56	0.63	1.31	-1.52	2.78	13.82	0.89	12.36	15.28	0.31	0.96
O 0.30	7	-17.59	0.83	-18.91	-16.28	0.74	1.56	-1.81	3.29	13.83	0.89	12.37	15.28	0.25	1.21
R 0.40	7	-17.71	0.80	-19.03	-16.39	1.03	1.83	-1.98	4.04	13.97	0.88	12.52	15.42	0.34	1.55
W 0.50	7	-17.36	0.86	-18.77	-15.95	1.19	1.90	-1.92	4.30	14.24	0.95	12.69	15.79	0.47	2.02
A 0.60	7	-17.54	0.95	-19.10	-15.99	1.30	1.87	-1.77	4.37	14.54	0.98	12.93	16.14	0.37	2.39
R 0.70	7	-17.80	1.05	-19.52	-16.09	1.02	1.95	-2.18	4.22	14.63	1.19	12.68	16.58	0.39	2.78
D 0.80	7	-17.44	0.73	-18.63	-16.25	1.24	2.00	-2.04	4.53	14.80	1.28	12.71	16.89	0.45	3.23
O 0.90	7	-16.91	0.84	-18.28	-15.53	1.51	2.15	-2.02	5.03	15.06	1.24	13.03	17.09	0.65	3.88
1.00	7	-16.79	1.01	-18.45	-15.14	1.40	2.38	-2.51	5.31	15.39	1.30	13.25	17.53	0.37	4.25
0.0	7	-16.79	1.01	-18.45	-15.14	1.40	2.38	-2.51	5.31	15.39	1.30	13.25	17.53	0.0	0.0
0.10	7	-17.51	0.67	-18.61	-16.42	1.26	1.84	-1.75	4.28	14.98	1.01	13.34	16.63	0.84	0.84
0.20	7	-17.49	0.67	-18.59	-16.38	1.11	1.77	-1.79	4.01	14.65	0.89	13.20	16.11	0.36	1.20
R 0.30	7	-17.32	0.68	-18.44	-16.20	0.80	1.67	-1.93	3.54	14.39	0.83	13.02	15.75	0.44	1.65
E 0.40	7	-17.25	0.69	-18.38	-16.13	0.43	1.37	-1.81	2.67	14.27	0.77	13.00	15.54	0.39	2.04
T 0.50	7	-17.25	0.70	-18.40	-16.10	0.27	1.40	-2.02	2.56	14.13	0.85	12.74	15.52	0.22	2.25
U 0.60	7	-17.34	0.56	-18.25	-16.43	-0.07	1.22	-2.07	1.93	13.88	0.90	12.40	15.36	0.43	2.68
R 0.70	7	-17.67	0.55	-18.57	-16.78	-0.37	1.31	-2.52	1.78	13.88	0.91	12.38	15.38	0.45	3.13
N 0.80	7	-17.81	0.50	-18.64	-16.99	-0.38	1.34	-2.58	1.62	13.86	0.87	12.43	15.28	0.14	3.28
O 0.90	7	-17.72	0.49	-18.52	-16.91	-0.32	1.25	-2.37	1.72	13.78	0.81	12.46	15.11	0.14	3.41
1.00	7	-17.78	0.75	-19.00	-16.55	-0.25	1.80	-3.20	2.70	13.88	0.79	12.59	15.17	0.14	3.55

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	CO-ORDINATE 5 PCT	CO-ORDINATE 95 PCT	-----Y----- MEAN	-----Y----- SE	CO-ORDINATE 5 PCT	CO-ORDINATE 95 PCT	-----Z----- MEAN	-----Z----- SE	CO-ORDINATE 5 PCT	CO-ORDINATE 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-13.80	0.61	-14.81	-12.80	-0.31	0.75	-1.53	0.91	14.69	0.51	13.86	15.53	0.0	0.0
0.10	7	-13.92	0.38	-14.55	-13.30	-0.15	0.69	-1.29	0.98	14.58	0.54	13.70	15.47	0.23	0.23
F 0.20	7	-13.81	0.40	-14.47	-13.15	0.02	0.68	-1.10	1.13	14.58	0.49	13.78	15.39	0.21	0.43
O 0.30	7	-13.68	0.45	-14.42	-12.93	0.15	0.81	-1.18	1.48	14.62	0.51	13.78	15.47	0.19	0.62
R 0.40	7	-13.66	0.35	-14.23	-13.08	0.40	1.00	-1.24	2.04	14.59	0.63	13.66	15.73	0.26	0.89
W 0.50	7	-13.57	0.37	-14.19	-12.96	0.96	0.97	-1.53	2.55	14.52	0.54	14.04	15.81	0.61	1.50
A 0.60	7	-13.60	0.69	-14.73	-12.47	1.41	1.22	-0.59	3.41	15.11	0.62	14.10	16.12	0.49	1.99
R 0.70	7	-13.62	0.83	-14.99	-12.26	1.61	1.31	-0.55	3.76	15.23	0.87	13.79	16.66	0.23	2.22
D 0.80	7	-13.54	0.85	-14.94	-12.15	1.89	1.50	-0.58	4.36	15.47	0.98	13.86	17.07	0.38	2.60
O 0.90	7	-13.41	0.85	-14.81	-12.01	2.12	1.71	-0.68	4.92	15.58	1.00	14.04	17.33	0.34	2.94
1.00	7	-13.40	0.83	-14.77	-12.04	2.07	1.87	-0.99	5.14	15.83	1.10	14.02	17.64	0.15	3.09
0.0	7	-13.40	0.83	-14.77	-12.04	2.07	1.87	-0.99	5.14	15.83	1.10	14.02	17.64	0.0	0.0
0.10	7	-13.48	0.88	-14.59	-12.38	2.07	0.99	0.45	3.70	15.47	0.78	14.19	16.75	0.37	0.37
0.20	7	-13.26	0.59	-14.22	-12.30	1.69	1.03	0.00	3.37	15.10	0.75	13.87	16.34	0.58	0.95
R 0.30	7	-13.26	0.48	-14.04	-12.48	1.43	0.75	0.19	2.66	14.89	0.73	13.70	16.08	0.34	1.28
E 0.40	7	-13.36	0.51	-14.20	-12.52	1.13	0.48	0.34	1.91	14.87	0.65	13.81	15.93	0.32	1.60
T 0.50	7	-13.38	0.69	-14.51	-12.24	0.61	0.84	-0.76	1.98	14.78	0.58	13.83	15.74	0.53	2.12
U 0.60	7	-13.72	0.48	-14.50	-12.93	0.36	0.42	-0.33	1.05	14.58	0.58	13.72	15.64	0.44	2.56
U 0.70	7	-13.72	0.55	-14.63	-12.82	0.10	0.56	-0.82	1.02	14.73	0.57	13.80	15.66	0.27	2.83
N 0.80	7	-13.70	0.56	-14.61	-12.78	-0.14	0.60	-1.12	0.85	14.69	0.52	13.84	15.54	0.24	3.07
O 0.90	7	-13.80	0.54	-14.69	-12.91	-0.19	0.44	-0.92	0.53	14.58	0.49	13.77	15.39	0.16	3.23
1.00	7	-13.80	0.61	-14.81	-12.80	-0.31	0.75	-1.53	0.91	14.69	0.51	13.86	15.53	0.16	3.39

LANDMARK - RT ACROMION (4)

TIME T	SAMPLE SIZE,N	-----X----- MEAN	-----X----- SE	CO-ORDINATE 5 PCT	CO-ORDINATE 95 PCT	-----Y----- MEAN	-----Y----- SE	CO-ORDINATE 5 PCT	CO-ORDINATE 95 PCT	-----Z----- MEAN	-----Z----- SE	CO-ORDINATE 5 PCT	CO-ORDINATE 95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	-15.16	2.04	-18.51	-11.81	-7.12	2.75	-11.63	-2.61	12.40	0.47	11.63	13.18	0.0	0.0
0.10	6	-16.35	0.80	-17.67	-15.04	-7.46	1.21	-9.44	-5.48	12.23	0.60	11.24	13.22	1.25	1.25
F 0.20	7	-16.91	0.51	-17.74	-16.07	-7.67	0.29	-8.15	-7.19	12.27	0.68	11.15	13.39	0.59	1.84
O 0.30	7	-16.68	0.71	-17.84	-15.52	-7.67	0.30	-8.17	-7.17	12.62	0.75	11.39	13.86	0.42	2.26
R 0.40	7	-16.11	0.42	-16.81	-15.42	-7.46	0.43	-8.17	-6.76	13.18	0.88	11.74	14.63	0.83	3.09
W 0.50	7	-15.45	0.57	-16.39	-14.51	-7.12	0.73	-8.31	-5.93	14.00	1.06	12.27	15.73	1.10	4.19
A 0.60	6	-14.60	0.78	-15.89	-13.32	-6.86	0.81	-8.18	-5.54	14.87	1.18	12.93	16.80	1.24	5.43
R 0.70	6	-13.96	0.73	-15.17	-12.76	-6.35	1.06	-8.09	-4.61	15.55	1.17	13.74	17.57	1.13	6.57
D 0.80	6	-13.34	0.61	-14.34	-12.33	-5.63	1.18	-7.56	-3.70	16.31	1.11	14.50	18.13	1.16	7.73
O 0.90	6	-12.87	0.45	-13.61	-12.13	-5.06	1.18	-7.00	-3.13	16.74	1.07	14.99	18.49	0.85	8.58
1.00	6	-12.75	0.26	-13.17	-12.33	-5.05	1.02	-6.72	-3.38	16.85	1.13	15.00	18.71	0.16	8.74
0.0	6	-12.75	0.26	-13.17	-12.33	-5.05	1.02	-6.72	-3.38	16.85	1.13	15.00	18.71	0.0	0.0
0.10	6	-13.77	0.55	-14.67	-12.87	-5.63	0.55	-6.53	-4.72	15.83	0.97	14.24	17.42	1.55	1.55
0.20	6	-14.52	0.63	-15.56	-13.49	-6.09	0.40	-6.75	-5.43	14.99	0.91	13.50	16.49	1.22	2.77
R 0.30	6	-15.16	0.61	-16.16	-14.16	-6.57	0.44	-7.30	-5.85	14.23	0.84	12.84	15.62	1.10	3.88
E 0.40	6	-15.78	0.67	-16.89	-14.68	-6.89	0.36	-7.48	-6.31	13.57	0.72	12.39	14.74	0.97	4.84
T 0.50	6	-16.22	0.73	-17.58	-14.85	-7.28	0.45	-8.02	-6.54	13.10	0.43	12.41	13.80	0.74	5.59
U 0.60	6	-16.40	0.79	-17.69	-15.10	-7.56	0.33	-8.11	-7.01	12.80	0.42	12.11	13.49	0.45	6.04
R 0.70	6	-16.42	0.90	-17.90	-14.94	-7.79	0.37	-8.39	-7.18	12.67	0.45	11.93	13.41	0.26	6.30
N 0.80	6	-16.35	0.91	-17.85	-14.86	-7.94	0.44	-8.67	-7.22	12.54	0.46	11.79	13.30	0.21	6.51
O 0.90	6	-16.02	0.81	-17.36	-14.69	-7.72	0.99	-9.35	-6.10	12.41	0.46	11.66	13.17	0.42	6.93
1.00	6	-15.16	2.04	-18.51	-11.81	-7.12	2.75	-11.63	-2.61	12.40	0.47	11.63	13.18	1.05	7.98

LANDMARK - RT GRIP CENTER (16)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED
0.0	7	6.40	0.94	4.86	7.93	-11.19	0.56	-12.11	-10.26	3.63	1.04	1.93	5.33	0.0	0.0
0.10	7	6.04	0.87	4.61	7.46	-10.93	0.89	-12.40	-9.46	6.00	0.54	5.12	6.89	2.41	2.41
F 0.20	7	5.78	0.83	4.42	7.15	-9.23	1.30	-11.36	-7.10	9.14	1.06	7.40	10.89	3.58	5.99
O 0.30	7	5.78	0.93	4.25	7.31	-8.68	1.71	-8.68	-3.07	12.70	1.20	10.73	14.67	4.89	10.88
R 0.40	7	5.81	1.11	3.99	7.64	-1.27	2.64	-5.60	3.06	15.78	1.34	13.57	17.98	5.54	16.42
W 0.50	7	5.87	0.94	4.33	7.42	2.00	1.65	-0.70	4.71	17.18	1.03	15.49	18.88	3.56	19.98
A 0.60	7	6.43	0.97	4.84	8.01	5.23	1.44	2.86	7.59	17.91	0.72	16.74	19.08	3.35	23.34
R 0.70	7	7.00	0.79	5.71	8.39	9.10	0.73	7.90	9.33	17.82	0.62	16.81	18.83	2.41	25.75
D 0.80	6	7.52	0.53	6.65	8.39	9.10	0.73	7.90	10.29	17.44	0.49	16.64	18.25	1.66	27.40
O 0.90	5	8.16	0.44	7.44	8.88	9.64	0.59	8.67	10.61	16.90	0.41	16.23	17.58	1.00	28.40
1.00	5	8.34	0.79	7.04	9.64	9.59	0.94	8.05	11.13	16.57	0.66	15.48	17.66	0.38	28.78
0.0	5	8.34	0.79	7.04	9.64	9.59	0.94	8.05	11.13	16.57	0.66	15.48	17.66	0.0	0.0
0.10	5	7.27	0.84	5.90	8.64	6.96	2.67	2.58	11.35	16.89	0.97	15.30	18.47	2.86	2.86
0.20	7	6.81	0.80	5.49	8.13	4.02	3.45	-1.64	9.68	16.44	1.33	14.26	18.62	3.01	5.87
R 0.30	7	6.31	1.28	4.21	8.41	-0.54	6.04	-10.44	9.36	14.75	3.39	9.20	20.30	4.89	10.76
E 0.40	7	6.10	1.40	3.82	8.39	-3.72	4.14	-10.51	3.07	13.47	2.52	9.34	17.60	3.43	14.19
T 0.50	7	5.79	1.30	3.66	7.92	-7.29	3.52	-13.06	-1.52	11.30	2.65	6.96	15.64	4.20	18.39
U 0.60	7	5.95	1.09	4.16	7.75	-9.51	2.62	-13.80	-5.21	9.09	2.42	5.11	13.06	3.13	21.52
R 0.70	7	5.82	1.04	4.11	7.53	-10.79	1.65	-13.48	-8.09	7.25	2.07	3.86	10.64	2.24	23.76
N 0.80	7	5.86	1.15	3.97	7.74	-11.38	0.90	-12.85	-9.91	5.59	1.49	3.15	8.03	1.76	25.53
O 0.90	7	6.16	1.07	4.41	7.92	-11.31	0.60	-12.29	-10.33	4.26	1.01	2.60	5.91	1.37	26.90
1.00	7	6.40	0.94	4.86	7.93	-11.19	0.56	-12.11	-10.26	3.63	1.04	1.93	5.33	0.68	27.57

LANDMARK - RT TROCHANTER (18)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED
0.0	6	1.82	0.81	0.49	3.15	-7.18	1.14	-9.06	-5.30	2.57	0.59	1.61	3.54	0.0	0.0
0.10	6	1.78	0.67	0.68	2.88	-7.07	0.72	-8.24	-5.89	2.76	0.52	1.91	3.60	0.22	0.22
F 0.20	7	1.98	0.47	1.22	2.75	-6.99	0.71	-8.15	-5.82	2.97	0.38	2.35	3.58	0.30	0.52
O 0.30	7	2.12	0.51	1.28	2.95	-6.96	0.76	-8.22	-5.71	3.05	0.32	2.53	3.57	0.16	0.68
R 0.40	7	2.04	0.59	1.07	3.00	-6.95	0.78	-8.24	-5.67	2.97	0.33	2.43	3.51	0.12	0.80
W 0.50	7	2.10	0.71	0.94	3.26	-6.97	1.08	-8.75	-5.20	2.95	0.35	2.38	3.53	0.06	0.86
A 0.60	7	2.24	0.77	0.98	3.51	-6.92	1.01	-8.58	-5.26	2.92	0.19	2.62	3.23	0.16	1.02
R 0.70	7	2.09	0.54	1.21	2.97	-6.96	0.85	-8.35	-5.58	2.98	0.17	2.70	3.26	0.17	1.19
D 0.80	7	2.04	0.62	1.02	3.05	-6.86	0.73	-8.06	-5.66	3.10	0.19	2.78	3.42	0.17	1.36
O 0.90	6	2.11	0.57	1.17	3.04	-6.78	0.63	-7.81	-5.76	3.07	0.16	2.81	3.32	0.11	1.47
1.00	6	1.99	0.40	1.34	2.65	-6.95	0.67	-8.04	-5.86	2.98	0.27	2.53	3.43	0.22	1.59
0.0	6	1.99	0.40	1.34	2.65	-6.95	0.67	-8.04	-5.86	2.98	0.27	2.53	3.43	0.0	0.0
0.10	6	2.11	0.62	0.61	3.60	-6.70	0.91	-8.19	-5.21	3.08	0.37	2.48	3.68	0.29	0.29
0.20	7	1.86	0.64	0.81	2.91	-6.93	0.82	-8.27	-5.58	3.08	0.39	2.45	3.72	0.34	0.63
R 0.30	7	2.10	0.73	0.89	3.30	-6.88	1.07	-8.64	-5.11	3.03	0.38	2.41	3.66	0.25	0.88
O 0.40	7	2.29	0.82	0.95	3.63	-6.83	1.21	-8.82	-4.84	2.99	0.38	2.37	3.62	0.20	1.08
T 0.50	7	2.05	0.86	0.63	3.47	-7.11	0.95	-8.67	-5.55	2.97	0.49	2.16	3.78	0.37	1.45
U 0.60	7	2.11	0.86	0.70	3.52	-7.24	0.78	-8.52	-5.97	2.83	0.46	2.06	3.59	0.21	1.66
R 0.70	7	2.14	1.03	0.45	3.83	-7.31	0.97	-8.91	-5.71	2.71	0.49	1.90	3.52	0.14	1.79
N 0.80	7	2.02	0.94	0.48	3.55	-7.15	1.02	-8.82	-5.48	2.74	0.66	1.65	3.83	0.21	2.00
O 0.90	6	1.78	0.75	0.55	3.01	-7.10	0.95	-8.65	-5.54	2.60	0.77	1.35	3.86	0.28	2.28
1.00	6	1.82	0.81	0.49	3.15	-7.18	1.14	-9.06	-5.30	2.57	0.59	1.61	3.54	0.09	2.37

LANDMARK - RT KNEE TOP (20)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	17.85	1.13	16.00	19.71	-4.84	1.56	-7.41	-2.28	9.87	2.39	5.95	13.79	0.0	0.0	0.0	
0.10	7	17.73	1.02	16.05	19.40	-5.14	1.34	-7.34	-2.93	9.77	2.28	6.03	13.52	0.34	0.34	0.34	
F 0.20	7	17.75	0.91	16.26	19.24	-5.16	1.06	-6.90	-3.42	9.78	2.26	6.08	13.48	0.03	0.37	0.71	
O 0.30	7	17.80	0.92	16.28	19.31	-5.14	0.98	-6.75	-3.53	9.84	2.31	6.05	13.64	0.08	0.45	1.16	
R 0.40	7	17.78	1.03	16.08	19.47	-5.12	1.08	-6.88	-3.35	9.87	2.36	6.00	13.73	0.04	0.49	1.65	
W 0.50	7	17.73	1.07	15.98	19.48	-4.99	1.05	-6.72	-3.26	9.91	2.35	6.05	13.77	0.14	0.63	2.28	
A 0.60	7	17.75	1.01	16.09	19.41	-5.04	0.96	-6.62	-3.47	9.93	2.39	6.01	13.86	0.06	0.69	2.97	
O 0.70	7	17.82	0.94	16.29	19.35	-5.02	1.01	-6.67	-3.37	9.90	2.40	5.97	13.84	0.08	0.77	3.74	
D 0.80	7	17.88	0.95	16.32	19.43	-4.97	1.12	-6.81	-3.14	9.87	2.40	5.93	13.81	0.08	0.85	4.59	
O 0.90	7	17.84	0.97	16.24	19.44	-5.05	1.23	-7.07	-3.03	9.83	2.40	5.90	13.76	0.09	0.94	5.53	
1.00	7	17.70	0.83	16.34	19.05	-5.10	1.34	-7.29	-2.91	9.80	2.39	5.88	13.71	0.15	1.10	6.63	
0.0	7	17.70	0.83	16.34	19.05	-5.10	1.34	-7.29	-2.91	9.80	2.39	5.88	13.71	0.0	0.0	0.0	
0.10	7	17.60	0.90	16.12	19.07	-5.11	1.35	-7.33	-2.89	9.76	2.38	5.85	13.66	0.11	0.11	0.11	
0.20	7	17.74	0.93	16.22	19.26	-4.99	1.36	-7.22	-2.76	9.79	2.37	5.91	13.67	0.19	0.30	0.41	
R 0.30	7	17.91	0.76	16.66	19.16	-4.88	1.31	-7.03	-2.73	9.79	2.36	5.93	13.66	0.20	0.50	0.91	
E 0.40	7	17.92	0.64	16.87	18.97	-4.83	1.37	-7.07	-2.58	9.81	2.37	5.92	13.70	0.06	0.56	1.47	
T 0.50	7	17.91	0.95	16.35	19.48	-4.92	1.58	-7.51	-2.33	9.79	2.42	5.82	13.75	0.09	0.65	2.12	
U 0.60	7	17.83	0.88	16.38	19.28	-4.89	1.50	-7.34	-2.43	9.85	2.37	5.96	13.73	0.11	0.76	2.88	
R 0.70	7	17.82	0.92	16.30	19.33	-4.87	1.53	-7.39	-2.36	9.81	2.37	5.99	13.83	0.07	0.83	3.71	
N 0.80	7	17.90	0.87	16.46	19.33	-4.93	1.55	-7.47	-2.39	9.85	2.37	5.97	13.74	0.11	0.94	4.65	
O 0.90	7	17.83	0.91	16.34	19.32	-5.00	1.50	-7.47	-2.54	9.76	2.33	5.94	13.57	0.14	1.08	5.73	
1.00	7	17.85	1.13	16.00	19.71	-4.84	1.56	-7.41	-2.28	9.87	2.39	5.95	13.79	0.20	1.28	7.01	

LANDMARK - RT SHOULDER CENTER (22)

TIME T	SAMPLE SIZE,N	X - CO-ORDINATE				Y - CO-ORDINATE				Z - CO-ORDINATE				DISTANCE			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOVED	CUM	
0.0	7	-13.88	0.64	-14.93	-12.82	-7.87	0.62	-8.89	-6.86	11.57	0.81	10.25	12.90	0.0	0.0	0.0	
0.10	7	-14.45	0.51	-15.28	-13.62	-7.80	0.59	-8.77	-6.82	11.42	0.62	10.41	12.43	0.60	0.60	0.60	
F 0.20	7	-14.40	0.50	-15.22	-13.59	-7.74	0.68	-8.87	-6.62	11.58	0.62	10.57	12.60	0.18	0.78	1.38	
O 0.30	7	-14.07	0.50	-14.88	-13.25	-7.69	0.82	-9.04	-6.34	12.05	0.70	10.89	13.20	0.58	1.35	2.76	
R 0.40	7	-13.55	0.47	-14.32	-12.78	-7.44	1.00	-9.09	-5.80	12.72	0.86	11.31	14.13	0.89	2.24	5.00	
W 0.50	7	-12.59	0.92	-14.11	-11.08	-7.07	1.05	-8.79	-5.35	13.48	0.87	12.06	14.90	1.28	3.51	8.51	
A 0.60	7	-11.88	0.71	-13.05	-10.72	-6.26	1.18	-8.20	-4.32	14.28	0.98	12.68	15.88	1.34	4.85	12.36	
R 0.70	7	-11.06	0.56	-11.98	-10.14	-5.61	1.22	-7.61	-3.62	14.93	1.03	13.23	16.63	1.23	6.09	18.45	
D 0.80	7	-10.31	0.54	-11.20	-9.41	-5.01	1.22	-7.01	-3.00	15.53	0.95	13.97	17.09	1.14	7.22	25.67	
O 0.90	7	-9.93	0.69	-11.07	-8.80	-4.53	1.23	-6.55	-2.52	15.94	0.87	14.48	17.34	0.71	7.94	33.61	
1.00	7	-10.05	0.82	-11.39	-8.70	-4.44	1.11	-6.26	-2.63	15.96	0.81	14.62	17.29	0.15	8.09	41.70	
0.0	7	-10.05	0.82	-11.39	-8.70	-4.44	1.11	-6.26	-2.63	15.96	0.81	14.62	17.29	0.0	0.0	0.0	
0.10	7	-10.79	1.00	-12.42	-9.16	-5.03	0.83	-6.38	-3.67	15.10	0.69	13.97	16.23	1.27	1.27	1.27	
0.20	7	-11.34	1.26	-13.41	-9.27	-5.69	0.81	-7.02	-4.36	14.24	0.74	13.03	15.45	1.22	2.49	2.76	
R 0.30	7	-12.14	1.19	-14.09	-10.19	-6.37	0.53	-7.89	-4.85	13.35	0.82	12.00	14.69	1.38	3.87	6.63	
E 0.40	7	-13.13	0.90	-14.61	-11.65	-6.88	0.87	-8.31	-5.46	12.60	0.85	11.21	13.99	1.34	5.22	12.09	
T 0.50	7	-13.73	0.86	-15.14	-12.32	-7.28	0.59	-8.26	-6.31	12.17	0.75	10.94	13.40	0.84	6.06	18.15	
U 0.60	7	-13.97	0.47	-14.74	-13.19	-7.58	0.73	-8.78	-6.38	11.87	0.78	10.59	13.15	0.48	6.54	24.69	
R 0.70	7	-14.10	0.48	-14.88	-13.32	-7.84	0.64	-8.89	-6.79	11.57	0.82	10.32	13.01	0.35	6.89	31.58	
N 0.80	7	-13.97	0.60	-14.95	-12.99	-8.02	0.59	-8.99	-7.05	11.54	0.85	10.14	12.94	0.25	7.14	38.72	
O 0.90	7	-13.93	0.66	-15.02	-12.84	-8.12	0.56	-9.04	-7.21	11.51	0.86	10.10	12.91	0.11	7.26	45.98	
1.00	7	-13.88	0.64	-14.93	-12.82	-7.87	0.62	-8.89	-6.86	11.57	0.81	10.25	12.90	0.26	7.52	53.50	

MMVT NO. 12140/65

LANDMARK - RT ELBOW CENTER (24)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
																		INCR	CUM
0.0	T	0.85	7	-6.50	0.85	-10.20	0.90	-11.67	-8.73	4.59	1.22	2.59	6.59	0.0	0.0	0.0	0.0	0.0	0.0
0.10	F	0.20	7	-6.77	0.42	-7.46	1.04	-11.94	-8.54	4.70	1.11	2.88	6.51	0.29	0.29	0.29	0.29	0.29	0.29
0.20	R	0.30	7	-6.31	0.48	-7.10	1.12	-11.95	-8.54	5.40	1.15	3.52	7.29	0.85	1.14	0.85	1.14	0.85	1.14
0.30	O	0.30	7	-5.24	0.62	-6.26	1.13	-11.61	-7.92	6.88	1.26	4.80	8.95	1.85	2.99	1.85	2.99	1.85	2.99
0.40	R	0.40	7	-3.76	0.42	-4.45	1.32	-10.71	-6.37	9.09	1.32	6.93	11.26	2.93	5.93	2.93	5.93	2.93	5.93
0.50	W	0.50	7	-2.39	0.68	-3.51	1.28	-9.32	-3.68	11.39	1.32	9.24	13.55	3.37	9.29	3.37	9.29	3.37	9.29
0.60	A	0.60	7	-1.50	0.97	-3.08	1.70	-7.19	-1.63	13.06	1.32	11.30	14.83	2.82	12.11	2.82	12.11	2.82	12.11
0.70	R	0.70	7	-1.04	0.95	-2.59	1.54	-4.92	-1.63	14.21	0.87	12.78	15.63	2.37	14.48	2.37	14.48	2.37	14.48
0.80	D	0.80	7	-0.84	0.90	-2.32	1.23	-2.84	1.18	14.79	0.75	13.57	16.02	1.68	16.16	1.68	16.16	1.68	16.16
0.90		0.90	7	-0.69	0.82	-2.03	0.65	-1.48	1.60	14.96	0.70	13.82	16.11	0.91	17.07	0.91	17.07	0.91	17.07
1.00		1.00	7	-0.62	0.65	-1.69	0.46	-0.91	1.41	14.88	0.77	13.61	16.15	0.22	17.30	0.22	17.30	0.22	17.30
0.0	T	0.65	7	-0.62	0.65	-1.69	0.46	-0.91	1.41	14.88	0.77	13.61	16.15	0.0	0.0	0.0	0.0	0.0	0.0
0.10		0.10	7	-1.10	1.04	-2.80	0.60	-4.91	0.44	13.56	1.32	11.39	15.74	2.86	2.86	2.86	2.86	2.86	2.86
0.20	R	0.30	7	-1.91	1.42	-4.24	0.41	-7.93	-1.78	11.88	1.71	9.08	14.68	3.22	6.08	3.22	6.08	3.22	6.08
0.30	E	0.40	7	-3.00	1.70	-5.79	0.22	-7.23	-1.67	9.92	1.93	6.75	13.08	3.27	9.34	3.27	9.34	3.27	9.34
0.40	T	0.50	7	-4.43	1.73	-7.27	1.59	-9.03	1.25	11.08	1.83	4.97	10.98	3.01	12.35	3.01	12.35	3.01	12.35
0.50	U	0.60	7	-5.81	1.49	-8.26	1.13	-11.91	-8.20	6.55	1.68	3.79	9.30	2.24	14.59	2.24	14.59	2.24	14.59
0.60	R	0.70	7	-6.91	1.17	-8.83	0.99	-10.95	-8.52	4.97	1.54	2.44	7.49	2.13	16.71	2.13	16.71	2.13	16.71
0.70	U	0.80	7	-6.75	0.88	-8.19	0.64	-11.72	-9.50	5.05	1.31	2.89	7.20	0.39	17.10	0.39	17.10	0.39	17.10
0.80	N	0.90	7	-6.50	0.96	-8.20	0.53	-11.61	-9.52	4.76	1.29	2.64	6.88	0.29	17.39	0.29	17.39	0.29	17.39
0.90		0.90	7	-6.63	0.85	-7.89	0.50	-11.46	-9.20	4.53	1.36	2.40	6.85	0.29	17.69	0.29	17.69	0.29	17.69
1.00		1.00	7	-6.50	0.85	-7.89	0.50	-11.67	-8.73	4.59	1.22	2.59	6.59	0.19	17.87	0.19	17.87	0.19	17.87

LANDMARK - RT WRIST CENTER (26)

TIME	SAMPLE	SIZE	N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
																		INCR	CUM
0.0	T	2.84	7	2.57	0.42	1.89	3.99	-10.99	0.88	-12.10	-9.88	2.03	5.32	0.0	0.0	0.0	0.0	0.0	0.0
0.10	F	0.20	6	2.71	0.47	1.95	3.48	-8.82	0.65	-11.61	-9.49	4.12	6.72	1.82	1.82	1.82	1.82	1.82	1.82
0.20	O	0.30	6	3.04	0.39	2.41	3.68	-6.20	1.11	-10.64	-7.00	5.76	9.97	3.00	4.82	3.00	4.82	3.00	4.82
0.30	R	0.40	6	3.29	0.31	2.78	3.80	-2.57	2.88	-7.30	-3.37	10.57	13.17	3.86	8.67	3.86	8.67	3.86	8.67
0.40	W	0.50	6	3.80	0.61	2.81	4.79	1.43	3.96	-5.05	7.92	15.82	18.82	4.58	13.25	4.58	13.25	4.58	13.25
0.50	A	0.60	6	3.94	0.57	3.01	4.87	3.04	1.73	0.21	5.87	16.07	18.82	4.68	17.93	4.68	17.93	4.68	17.93
0.60	R	0.70	6	4.54	0.61	3.54	5.53	5.16	1.37	2.91	7.41	16.36	17.62	1.63	19.56	1.63	19.56	1.63	19.56
0.70	D	0.80	6	5.34	0.52	4.48	6.19	6.60	0.79	5.31	7.89	15.52	17.54	2.22	21.78	2.22	21.78	2.22	21.78
0.80		0.90	5	5.79	0.54	4.91	6.87	7.07	0.45	6.34	7.80	16.03	17.14	1.65	23.43	1.65	23.43	1.65	23.43
0.90		1.00	5	5.86	0.65	4.79	6.93	6.97	0.58	6.02	7.91	15.80	16.90	0.71	24.15	0.71	24.15	0.71	24.15
1.00		1.00	5	5.86	0.65	4.79	6.93	6.97	0.58	6.02	7.91	15.80	16.90	0.27	24.41	0.27	24.41	0.27	24.41
0.0	T	5.86	5	5.11	0.73	3.92	6.30	6.97	0.58	6.02	7.91	15.80	16.90	0.0	0.0	0.0	0.0	0.0	0.0
0.10		5.11	5	3.97	0.78	2.69	5.25	4.63	2.15	1.11	8.16	14.70	17.08	2.46	2.46	2.46	2.46	2.46	2.46
0.20	R	0.30	5	3.15	1.02	1.48	4.82	-2.71	3.36	-4.15	6.88	12.15	17.24	3.58	6.04	3.58	6.04	3.58	6.04
0.30	E	0.40	6	2.89	0.89	1.43	4.35	-5.06	3.86	-11.39	6.46	12.81	17.86	4.57	10.60	4.57	10.60	4.57	10.60
0.40	U	0.50	7	2.35	0.98	0.74	3.96	-8.00	2.60	-12.26	-3.73	9.90	15.33	2.63	13.23	2.63	13.23	2.63	13.23
0.50	T	0.60	7	2.21	0.77	0.95	3.47	-9.67	1.85	-12.71	-6.63	8.16	13.52	3.46	16.69	3.46	16.69	3.46	16.69
0.60	R	0.70	7	2.18	0.54	1.30	3.06	-10.63	1.31	-12.77	-8.49	6.51	11.71	2.42	19.11	2.42	19.11	2.42	19.11
0.70	N	0.80	7	2.32	0.66	1.23	3.41	-11.14	0.81	-12.47	-8.80	6.51	9.54	1.82	20.94	1.82	20.94	1.82	20.94
0.80		0.90	7	2.59	0.70	1.44	3.73	-11.16	0.52	-12.02	-10.31	4.25	7.38	1.45	22.38	1.45	22.38	1.45	22.38
0.90		1.00	7	2.84	0.70	1.69	3.99	-10.99	0.68	-12.10	-9.88	3.68	5.32	1.04	23.43	1.04	23.43	1.04	23.43
1.00		1.00	7	2.84	0.70	1.69	3.99	-10.99	0.68	-12.10	-9.88	3.68	5.32	0.66	24.08	0.66	24.08	0.66	24.08

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +7.0, +10.0, +5.0 TO PANEL CONTROLLER AT +10.0, +10.0, +15.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +7.0, -10.0, +5.0.

MOTION NUMBER - 22240
 BACK ANGLE - 65

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.50	0.14	0.40 TO 0.80 SECS.
LEFT REV	0.46	0.16	0.20 TO 0.70 SECS.

LANDMARK - NASION (1)

TIME T	SAMPLE SIZE, N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOV	CUM	
0.0	7	-17.62	1.00	-19.25	-15.98	1.78	0.90	0.31	3.25	20.41	0.78	19.12	21.69	0.0	0.0	0.0	
0.10	7	-17.50	0.96	-19.07	-15.93	1.67	0.85	0.28	3.07	20.42	0.76	19.17	21.68	0.16	0.16	0.16	
F 0.20	7	-17.38	0.94	-18.92	-15.83	1.63	0.77	0.37	2.90	20.42	0.79	19.13	21.72	0.13	0.29	0.35	
O 0.30	7	-17.38	1.02	-19.05	-15.71	1.64	0.74	0.42	2.85	20.46	0.82	19.11	21.81	0.04	0.33	0.68	
R 0.40	7	-17.42	1.06	-19.16	-15.69	1.72	0.80	0.42	3.05	20.50	0.84	19.13	21.87	0.10	0.43	1.01	
W 0.50	7	-17.41	0.93	-18.94	-15.88	1.77	0.92	0.26	3.28	20.47	0.77	19.20	21.73	0.06	0.49	1.50	
A 0.60	7	-17.34	0.90	-18.83	-15.86	1.73	0.90	0.26	3.20	20.34	0.82	19.00	21.68	0.15	0.64	2.14	
R 0.70	7	-17.36	0.98	-18.97	-15.75	1.72	0.87	0.30	3.14	20.34	0.81	19.00	21.67	0.02	0.66	2.80	
D 0.80	7	-17.39	1.05	-19.11	-15.66	1.75	0.82	0.41	3.10	20.36	0.81	19.03	21.69	0.05	0.71	3.51	
O 0.90	7	-17.41	1.03	-19.10	-15.72	1.81	0.74	0.60	3.02	20.39	0.84	19.01	21.76	0.07	0.78	4.29	
1.00	7	-17.46	0.98	-19.07	-15.85	1.80	0.79	0.49	3.10	20.42	0.87	19.00	21.84	0.06	0.84	5.13	
0.0	7	-17.46	0.98	-19.07	-15.85	1.80	0.79	0.49	3.10	20.42	0.87	19.00	21.84	0.0	0.0	0.0	
0.10	7	-17.45	0.96	-19.03	-15.88	1.76	0.84	0.38	3.14	20.38	0.75	19.10	21.66	0.05	0.05	0.05	
0.20	7	-17.45	0.95	-19.01	-15.89	1.78	0.86	0.37	3.18	20.35	0.75	19.12	21.58	0.03	0.09	0.14	
R 0.30	7	-17.50	0.99	-19.12	-15.87	1.80	0.84	0.43	3.18	20.38	0.80	19.07	21.70	0.07	0.15	0.29	
E 0.40	7	-17.57	1.01	-19.23	-15.90	1.78	0.85	0.38	3.18	20.40	0.81	19.06	21.73	0.07	0.23	0.52	
T 0.50	7	-17.52	1.10	-19.34	-15.71	1.80	0.82	0.45	3.15	20.38	0.81	19.06	21.71	0.05	0.28	0.80	
U 0.60	7	-17.50	1.11	-19.33	-15.68	1.77	0.81	0.43	3.10	20.38	0.78	19.10	21.66	0.04	0.32	1.12	
R 0.70	7	-17.52	0.99	-19.14	-15.89	1.73	0.83	0.37	3.08	20.38	0.78	19.11	21.66	0.04	0.36	1.48	
N 0.80	7	-17.51	0.90	-19.00	-16.03	1.72	0.86	0.31	3.13	20.39	0.73	19.20	21.59	0.01	0.37	1.85	
O 0.90	7	-17.57	0.92	-19.08	-16.06	1.73	0.89	0.27	3.19	20.41	0.73	19.21	21.60	0.06	0.43	2.28	
1.00	7	-17.62	1.00	-19.25	-15.98	1.78	0.90	0.31	3.25	20.41	0.78	19.12	21.69	0.07	0.50	2.78	

LANDMARK - CERVICALE (2)

TIME T	SAMPLE SIZE, N	-----X-----				-----Y-----				-----Z-----				-----			
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	MOV	CUM	
0.0	7	-18.87	0.34	-19.43	-18.32	-0.14	2.61	-4.43	4.14	12.96	0.98	11.36	14.57	0.0	0.0	0.0	
0.10	7	-18.83	0.28	-19.30	-18.36	-0.45	2.36	-4.32	3.41	13.03	0.65	11.96	14.10	0.32	0.32	0.32	
F 0.20	7	-18.75	0.22	-19.11	-18.39	-0.69	2.45	-4.70	3.32	13.06	0.59	12.10	14.02	0.25	0.57	0.89	
O 0.30	7	-18.69	0.23	-19.07	-18.30	-0.74	2.51	-4.86	3.38	13.07	0.66	11.98	14.15	0.08	0.65	1.54	
R 0.40	7	-18.69	0.33	-19.22	-18.15	-0.62	2.36	-4.49	3.25	13.05	0.64	12.01	14.09	0.12	0.78	2.32	
W 0.50	7	-18.92	0.47	-19.70	-18.14	-0.63	2.30	-4.40	3.13	13.23	0.62	12.21	14.25	0.29	1.07	3.39	
A 0.60	7	-18.90	0.48	-19.69	-18.11	-0.57	2.50	-4.66	3.53	13.30	0.87	11.87	14.74	0.10	1.17	4.56	
R 0.70	7	-18.74	0.46	-19.50	-17.99	-0.59	2.43	-4.58	3.40	13.20	0.83	11.85	14.56	0.18	1.35	5.91	
D 0.80	7	-18.70	0.49	-19.50	-17.90	-0.51	2.30	-4.28	3.26	13.15	0.73	11.96	14.35	0.11	1.46	7.37	
O 0.90	7	-18.96	0.40	-19.61	-18.31	-0.24	2.28	-3.93	3.51	13.10	0.57	12.17	14.03	0.38	1.84	9.21	
1.00	7	-19.17	0.54	-20.06	-18.29	0.02	2.53	-4.13	4.16	13.05	0.54	12.16	13.94	0.33	2.17	11.38	
0.0	7	-19.17	0.54	-20.06	-18.29	0.02	2.53	-4.13	4.16	13.05	0.54	12.16	13.94	0.0	0.0	0.0	
0.10	7	-19.03	0.52	-19.88	-18.17	0.02	2.45	-4.01	4.04	12.96	0.63	11.93	14.00	0.17	0.17	0.17	
0.20	7	-18.87	0.58	-19.82	-17.92	0.07	2.39	-3.84	3.99	12.90	0.71	11.72	14.07	0.18	0.35	0.52	
R 0.30	7	-18.92	0.41	-19.59	-18.24	0.06	2.48	-4.00	4.12	12.90	0.76	11.65	14.14	0.05	0.40	0.92	
E 0.40	7	-19.06	0.41	-19.74	-18.38	0.03	2.70	-4.39	4.46	12.96	0.78	11.69	14.24	0.16	0.55	1.47	
T 0.50	7	-19.02	0.47	-19.79	-18.25	0.05	2.81	-4.55	4.65	13.00	0.79	11.71	14.30	0.05	0.61	2.08	
U 0.60	7	-18.83	0.49	-19.64	-18.03	0.00	2.72	-4.46	4.47	12.99	0.74	11.77	14.21	0.19	0.80	2.88	
R 0.70	7	-18.74	0.59	-19.71	-17.77	-0.03	2.69	-4.43	4.37	13.00	0.83	11.64	14.37	0.10	0.90	3.78	
N 0.80	7	-18.78	0.57	-19.71	-17.85	-0.10	2.65	-4.45	4.24	13.07	0.85	11.68	14.46	0.11	1.01	4.79	
O 0.90	7	-18.83	0.39	-19.47	-18.19	-0.13	2.60	-4.40	4.13	13.03	0.87	11.60	14.47	0.07	1.08	5.87	
1.00	7	-18.87	0.34	-19.43	-18.32	-0.14	2.61	-4.43	4.14	12.96	0.98	11.36	14.57	0.08	1.17	7.04	

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	-----X-----					-----Y-----					-----Z-----					-----					DISTANCE	MOVED
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR	CUM
0.0	7	-14.95	0.97	-16.53	-13.36		-14.95	0.33	-16.32	2.97		13.91	0.40	13.25	14.57		13.91	0.41	13.22	14.56		0.0	0.0
0.10	7	-14.87	1.01	-16.52	-13.22		-14.87	0.23	-16.32	2.97		13.89	0.41	13.22	14.56		13.89	0.41	13.22	14.56		0.13	0.13
F 0.20	7	-14.76	1.07	-16.52	-13.01		-14.76	0.15	-16.32	2.97		13.81	0.40	13.25	14.57		13.81	0.40	13.25	14.57		0.26	0.26
O 0.30	7	-14.75	1.07	-16.50	-13.00		-14.75	0.10	-16.32	2.97		13.81	0.47	13.25	14.57		13.81	0.47	13.25	14.57		0.05	0.31
R 0.40	7	-14.78	1.01	-16.43	-13.12		-14.78	0.18	-16.32	2.97		13.88	0.56	12.97	14.67		13.88	0.56	12.97	14.67		0.09	0.40
W 0.50	7	-14.79	0.98	-16.39	-13.18		-14.79	0.32	-16.32	2.97		13.84	0.46	13.08	14.66		13.84	0.46	13.08	14.66		0.13	0.54
A 0.60	7	-14.75	1.03	-16.45	-13.06		-14.75	0.32	-16.32	2.97		13.84	0.44	13.08	14.61		13.84	0.44	13.08	14.61		0.05	0.59
R 0.70	7	-14.74	1.08	-16.52	-12.97		-14.74	0.23	-16.32	2.97		13.88	0.44	13.16	14.60		13.88	0.44	13.16	14.60		0.09	0.68
D 0.80	7	-14.78	1.12	-16.61	-12.95		-14.78	0.20	-16.32	2.97		13.91	0.43	13.23	14.60		13.91	0.43	13.23	14.60		0.06	0.74
0.90	7	-14.87	1.14	-16.73	-13.00		-14.87	0.24	-16.32	2.97		13.89	0.43	13.18	14.60		13.89	0.43	13.18	14.60		0.10	0.83
1.00	7	-14.89	1.15	-16.78	-13.00		-14.89	0.28	-16.32	2.97		13.86	0.48	13.08	14.64		13.86	0.48	13.08	14.64		0.06	0.89
0.0	7	-14.89	1.15	-16.78	-13.00		-14.89	0.28	-16.32	2.97		13.86	0.48	13.08	14.64		13.86	0.48	13.08	14.64		0.0	0.0
0.10	7	-14.98	0.83	-16.34	-13.62		-14.98	0.11	-16.32	2.97		13.84	0.49	13.05	14.64		13.84	0.49	13.05	14.64		0.19	0.19
0.20	7	-15.07	0.92	-16.58	-13.56		-15.07	0.00	-16.32	2.97		13.85	0.49	13.04	14.66		13.85	0.49	13.04	14.66		0.15	0.33
R 0.30	7	-15.21	1.07	-16.97	-13.45		-15.21	-0.01	-16.32	2.97		13.89	0.52	13.05	14.74		13.89	0.52	13.05	14.74		0.15	0.48
E 0.40	7	-15.16	1.19	-17.11	-13.20		-15.16	0.11	-16.32	2.97		13.95	0.47	13.18	14.71		13.95	0.47	13.18	14.71		0.15	0.63
T 0.50	7	-14.90	1.15	-16.80	-13.01		-14.90	0.31	-16.32	2.97		13.93	0.43	13.22	14.64		13.93	0.43	13.22	14.64		0.32	0.95
U 0.60	7	-14.80	1.02	-16.48	-13.12		-14.80	0.35	-16.32	2.97		13.91	0.38	13.28	14.54		13.91	0.38	13.28	14.54		0.12	1.06
R 0.70	7	-14.80	1.11	-16.62	-12.98		-14.80	0.34	-16.32	2.97		13.91	0.35	13.33	14.49		13.91	0.35	13.33	14.49		0.01	1.07
N 0.80	7	-14.86	1.17	-16.77	-12.94		-14.86	0.28	-16.32	2.97		13.91	0.37	13.31	14.53		13.91	0.37	13.31	14.53		0.09	1.16
0.90	7	-14.90	1.06	-16.77	-13.16		-14.90	0.29	-16.32	2.97		13.91	0.38	13.28	14.54		13.91	0.38	13.28	14.54		0.05	1.20
1.00	7	-14.95	0.97	-16.53	-13.36		-14.95	0.33	-16.32	2.97		13.91	0.40	13.25	14.57		13.91	0.40	13.25	14.57		0.06	1.27

LANDMARK - LT ACRGION (5)

TIME T	SAMPLE SIZE,N	-----X-----					-----Y-----					-----Z-----					-----					DISTANCE	MOVED
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR	CUM
0.0	6	-17.23	0.91	-18.72	-15.74		-17.23	0.41	-18.72	8.61		11.55	0.59	10.69	12.61		11.55	0.59	10.69	12.61		0.0	0.0
0.10	6	-17.38	0.61	-18.37	-16.38		-17.38	0.50	-18.37	8.61		11.41	0.44	10.69	12.13		11.41	0.44	10.69	12.13		0.30	0.30
F 0.20	6	-17.46	0.37	-18.08	-16.85		-17.46	0.55	-18.08	8.61		11.16	0.36	10.57	11.74		11.16	0.36	10.57	11.74		0.27	0.57
O 0.30	7	-17.39	0.38	-18.03	-16.76		-17.39	0.62	-18.03	8.61		11.09	0.42	10.48	11.71		11.09	0.42	10.48	11.71		0.21	0.78
R 0.40	7	-17.22	0.60	-18.19	-16.24		-17.22	0.63	-18.19	8.61		11.15	0.42	10.45	11.85		11.15	0.42	10.45	11.85		0.19	0.96
W 0.50	7	-17.08	0.63	-18.10	-16.05		-17.08	0.64	-18.10	8.61		11.25	0.31	10.69	11.81		11.25	0.31	10.69	11.81		0.20	1.16
A 0.60	7	-16.87	0.59	-17.84	-15.90		-16.87	0.52	-17.84	8.61		11.29	0.31	10.77	11.80		11.29	0.31	10.77	11.80		0.21	1.37
R 0.70	7	-16.69	0.43	-17.39	-15.99		-16.69	0.70	-17.39	8.61		11.37	0.36	10.78	11.96		11.37	0.36	10.78	11.96		0.20	1.57
D 0.80	6	-16.58	0.32	-17.10	-16.05		-16.58	0.43	-17.10	8.61		11.45	0.44	10.72	12.18		11.45	0.44	10.72	12.18		0.14	1.71
0.90	6	-16.17	0.67	-17.28	-15.06		-16.17	0.85	-17.28	8.61		11.52	0.55	10.61	12.42		11.52	0.55	10.61	12.42		0.49	2.20
1.00	6	-15.70	1.25	-17.75	-13.66		-15.70	1.79	-17.75	10.17		11.58	0.67	10.47	12.68		11.58	0.67	10.47	12.68		0.52	2.72
0.0	6	-15.70	1.25	-17.75	-13.66		-15.70	1.79	-17.75	10.17		11.58	0.67	10.47	12.68		11.58	0.67	10.47	12.68		0.0	0.0
0.10	6	-16.07	0.75	-17.30	-14.85		-16.07	1.03	-17.30	9.19		11.52	0.62	10.64	12.64		11.52	0.62	10.64	12.64		0.45	0.45
0.20	6	-16.41	0.44	-17.13	-15.68		-16.41	0.40	-17.13	8.48		11.54	0.55	10.76	12.54		11.54	0.55	10.76	12.54		0.47	0.92
R 0.30	6	-16.66	0.55	-17.56	-15.77		-16.66	0.37	-17.56	8.54		11.63	0.45	10.89	12.37		11.63	0.45	10.89	12.37		0.27	1.19
E 0.40	6	-16.86	0.65	-17.93	-15.79		-16.86	0.45	-17.93	8.56		11.64	0.42	10.95	12.32		11.64	0.42	10.95	12.32		0.23	1.43
T 0.50	6	-16.97	0.72	-18.16	-15.79		-16.97	0.39	-18.16	8.45		11.62	0.41	10.95	12.29		11.62	0.41	10.95	12.29		0.11	1.54
U 0.60	6	-16.88	0.65	-17.95	-15.82		-16.88	0.41	-17.95	8.41		11.58	0.43	10.87	12.29		11.58	0.43	10.87	12.29		0.11	1.65
R 0.70	6	-16.78	0.62	-17.80	-15.77		-16.78	0.49	-17.80	8.55		11.55	0.44	10.84	12.27		11.55	0.44	10.84	12.27		0.11	1.76
N 0.80	6	-16.85	0.65	-17.92	-15.79		-16.85	0.57	-17.92	8.65		11.55	0.44	10.84	12.27		11.55	0.44	10.84	12.27		0.08	1.84
0.90	6	-17.05	0.74	-18.27	-15.83		-17.05	0.50	-18.27	8.62		11.51	0.49	10.81	12.41		11.51	0.49	10.81	12.41		0.22	2.06
1.00	6	-17.23	0.91	-18.72	-15.74		-17.23	0.41	-18.72	8.61		11.55	0.59	10.69	12.61		11.55	0.59	10.69	12.61		0.23	2.29

LANDMARK - LT GRIP CENTER (17)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
			-----X-----	CO-ORDINATE-----	-----Y-----	CO-ORDINATE-----	-----Z-----	CO-ORDINATE-----	-----5 PCT-----	95 PCT-----	-----5 PCT-----	95 PCT-----	-----5 PCT-----	95 PCT-----	INCR	CUM
0.0	4	4	5.28	1.75	2.42	8.15	11.31	0.71	10.14	12.48	5.89	0.40	5.23	6.55	0.0	0.0
0.10	4	4	5.28	0.98	3.67	6.89	10.79	0.77	9.53	12.05	7.20	0.84	5.83	8.58	1.41	1.41
F 0.20	7	7	5.54	0.49	4.74	6.35	10.56	0.73	9.36	11.76	9.85	3.09	4.77	14.92	2.66	4.07
0 0.30	7	7	5.27	0.37	4.67	5.87	10.25	0.62	9.23	11.27	11.57	2.52	7.44	15.69	1.77	5.84
R 0.40	7	7	5.02	0.42	4.33	5.81	10.11	0.45	9.37	10.85	13.25	2.15	9.72	16.77	1.70	7.55
W 0.50	7	7	5.19	0.39	4.55	5.73	10.19	0.32	9.67	10.71	14.30	1.89	11.19	17.40	1.07	8.61
A 0.60	7	7	5.82	0.64	4.77	6.87	10.30	0.34	9.73	10.86	14.90	1.72	12.08	17.71	0.88	9.49
R 0.70	7	7	6.68	0.63	5.63	7.72	10.42	0.40	9.77	11.08	15.17	1.39	12.90	17.44	0.91	10.40
D 0.80	7	7	7.42	0.64	6.37	8.47	10.57	0.53	9.71	11.44	15.33	1.12	13.48	17.17	0.78	11.17
0 0.90	6	6	7.66	0.49	6.85	8.47	10.72	0.74	9.51	11.92	15.34	0.89	13.58	16.49	0.40	11.58
1.00	6	6	8.05	0.58	7.10	9.00	10.97	0.93	9.44	12.53	14.88	0.78	13.60	16.17	0.49	12.06
0.0	6	6	8.05	0.58	7.10	9.00	10.97	0.93	9.44	12.53	14.88	0.78	13.60	16.17	0.0	0.0
0.10	5	5	7.34	0.86	5.93	8.75	10.84	0.91	9.35	12.32	14.20	0.97	12.61	15.79	0.99	0.99
0.20	6	6	6.71	0.98	5.10	8.32	10.57	0.77	9.30	11.83	13.82	1.21	11.85	15.80	0.79	1.78
R 0.30	6	6	5.97	0.80	4.67	6.78	10.45	0.74	9.24	11.67	12.80	1.03	11.10	14.49	1.27	3.04
E 0.40	6	6	5.63	0.83	4.26	6.99	10.50	0.74	9.29	11.71	11.57	0.87	10.14	13.01	1.27	4.32
T 0.50	6	6	5.65	1.04	3.94	7.36	10.62	0.82	9.28	11.96	10.23	0.68	9.12	11.35	1.34	5.66
U 0.60	6	6	5.85	1.30	3.71	7.99	10.86	0.81	9.53	12.18	8.95	0.43	8.26	9.65	1.32	6.98
R 0.70	6	6	5.88	1.43	3.54	8.22	11.01	0.74	9.80	12.22	7.81	0.30	7.33	8.30	1.15	8.13
N 0.80	6	6	5.89	1.53	3.39	8.40	11.15	0.69	10.02	12.28	6.35	0.41	6.18	7.52	0.98	9.10
0 0.90	4	4	5.25	1.56	2.70	7.80	11.20	0.75	9.97	12.42	6.46	0.34	5.90	7.02	0.75	9.86
1.00	4	4	5.28	1.75	2.42	8.15	11.31	0.71	10.14	12.48	5.89	0.40	5.23	6.55	0.58	10.44

LANDMARK - LT TROCHANTER (19)

TIME	SAMPLE	SIZE,N	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	DISTANCE	MOVED
			-----X-----	CO-ORDINATE-----	-----Y-----	CO-ORDINATE-----	-----Z-----	CO-ORDINATE-----	-----5 PCT-----	95 PCT-----	-----5 PCT-----	95 PCT-----	-----5 PCT-----	95 PCT-----	INCR	CUM
0.0	6	6	1.15	0.52	0.29	2.01	7.10	1.26	5.04	9.17	2.88	0.55	1.97	3.79	0.0	0.0
0.10	6	6	1.58	0.48	0.79	2.37	6.88	0.85	5.48	8.28	2.91	0.54	2.03	3.79	0.49	0.49
F 0.20	7	7	1.76	0.87	0.34	3.18	6.63	0.64	5.58	7.68	3.30	0.48	2.21	3.79	0.32	0.81
0 0.30	6	6	1.94	0.72	0.76	3.13	6.55	0.82	5.20	7.90	2.94	0.47	2.17	3.72	0.21	1.02
R 0.40	6	6	1.81	0.73	0.61	3.01	6.68	0.85	5.29	8.07	2.91	0.45	2.18	3.64	0.20	1.21
W 0.50	6	6	1.51	0.79	0.41	3.01	6.67	0.87	5.24	8.09	2.38	0.44	2.16	3.59	0.10	1.31
A 0.60	6	6	1.54	0.69	0.51	2.77	6.55	0.79	5.25	7.94	2.85	0.47	2.08	3.61	0.14	1.46
R 0.70	6	6	1.61	0.54	0.73	2.50	6.47	0.86	5.05	7.88	2.84	0.42	2.15	3.53	0.09	1.54
D 0.80	6	6	1.58	0.54	0.78	2.57	6.48	0.80	5.17	7.78	2.87	0.39	2.23	3.51	0.07	1.61
0 0.90	6	6	1.76	0.75	0.53	3.00	6.49	0.61	5.48	7.50	2.93	0.43	2.22	3.63	0.10	1.72
1.00	6	6	1.82	1.07	0.07	3.58	6.45	0.72	5.27	7.63	2.96	0.52	2.10	3.82	0.08	1.79
0.0	6	6	1.82	1.07	0.07	3.58	6.45	0.72	5.27	7.63	2.96	0.52	2.10	3.82	0.0	0.0
0.10	6	6	1.75	0.88	0.30	3.20	6.61	0.79	5.31	7.91	2.91	0.55	2.01	3.80	0.18	0.18
0.20	6	6	1.66	0.84	0.29	3.04	6.77	0.88	5.32	8.22	2.89	0.50	2.08	3.71	0.18	0.36
R 0.30	6	6	1.55	0.74	0.34	2.76	6.80	0.79	5.51	8.13	2.90	0.41	2.23	3.57	0.12	0.48
F 0.40	6	6	1.59	0.61	0.59	2.58	6.86	0.66	5.78	7.94	2.86	0.44	2.15	3.58	0.08	0.56
T 0.50	6	6	1.89	0.56	0.76	2.62	6.87	0.69	5.73	8.03	2.87	0.45	2.14	3.61	0.10	0.66
U 0.60	6	6	1.57	0.70	0.41	2.72	6.87	0.71	5.71	8.04	2.91	0.47	2.15	3.68	0.13	0.80
R 0.70	6	6	1.23	1.12	-0.61	3.06	7.13	0.87	5.30	8.56	2.93	0.51	2.09	3.77	0.43	1.22
N 0.80	6	6	1.18	0.89	-0.28	2.63	7.10	1.09	5.30	8.89	2.90	0.53	2.09	3.82	0.07	1.29
0 0.90	6	6	1.16	0.63	0.12	2.20	7.08	1.26	5.01	9.14	2.97	0.59	2.01	3.93	0.03	1.32
1.00	6	6	1.15	0.52	0.29	2.01	7.10	1.26	5.04	9.17	2.88	0.55	1.97	3.79	0.09	1.41

LANDMARK - LT ELBOW CENTER (25)

TIME T	SAMPLE SIZE,N	-----X-----	CO-ORDINATE-----	-----Y-----	CO-ORDINATE-----	-----Z-----	CO-ORDINATE-----	DISTANCE	MOVED
		MEAN	SE 5 PCT 95 PCT	MEAN	SE 5 PCT 95 PCT	MEAN	SE 5 PCT 95 PCT	INCR	CUM
0.0	7	-7.26	1.17 -9.17 -5.35	13.01	0.56 12.09 13.93	5.33	1.42 3.00	7.65	0.0
0.10	7	-7.07	0.66 -8.16 -5.99	12.54	0.85 11.14 13.94	5.53	1.37 3.29	7.77	0.0
0.20	7	-6.90	0.39 -7.54 -6.26	12.34	0.87 10.92 13.77	5.73	1.28 3.63	7.84	0.55
0.30	7	-6.84	0.37 -7.25 -6.03	12.31	0.81 10.99 13.63	6.42	1.37 4.17	8.68	0.88
0.40	7	-6.39	0.32 -6.91 -5.87	12.43	0.64 10.98 13.49	6.96	1.41 4.65	9.27	1.62
0.50	7	-5.90	0.33 -6.44 -5.35	12.48	0.47 11.70 13.26	7.93	1.58 5.34	10.52	2.23
A 0.60	7	-5.55	0.27 -6.00 -5.10	12.37	0.42 11.68 13.07	8.56	1.59 5.95	11.17	3.31
R 0.70	7	-4.93	0.61 -5.92 -3.93	12.25	0.37 11.63 12.86	9.56	1.79 6.63	12.50	4.04
0.80	7	-4.74	0.21 -5.08 -4.39	12.08	0.37 11.47 12.68	9.83	1.51 7.35	12.31	5.23
0.90	6	-4.43	0.19 -4.74 -4.12	11.86	0.29 11.39 12.32	10.47	1.45 8.09	12.85	5.60
1.00	6	-4.12	0.21 -4.47 -3.77	11.69	0.29 11.21 12.17	10.85	1.42 8.53	13.18	6.34
0.0	6	-4.12	0.21 -4.47 -3.77	11.69	0.29 11.21 12.17	10.85	1.42 8.53	13.18	0.0
0.10	6	-4.48	0.38 -5.11 -3.85	11.96	0.56 11.04 12.88	9.98	1.43 7.63	12.33	0.99
0.20	6	-4.90	0.59 -5.86 -3.93	12.36	0.77 11.10 13.62	9.00	1.45 6.61	11.38	1.13
0.30	7	-5.55	0.55 -6.45 -4.65	12.83	0.44 12.11 13.55	7.78	1.22 5.77	9.78	1.47
0.40	7	-6.18	0.63 -7.22 -5.14	13.06	0.40 12.41 13.72	6.97	1.27 4.89	9.05	1.05
0.50	7	-6.64	0.71 -7.80 -5.48	13.15	0.47 12.39 13.92	6.28	1.38 4.02	8.54	0.84
0.60	7	-6.72	0.76 -7.97 -5.48	13.18	0.55 12.28 14.09	5.97	1.44 3.61	8.33	0.32
R 0.70	7	-6.80	0.79 -8.10 -5.51	13.21	0.64 12.16 14.26	5.73	1.52 3.24	8.22	0.26
0.80	7	-6.96	0.87 -8.39 -5.53	13.16	0.67 12.06 14.05	5.56	1.53 3.05	8.06	0.24
0.90	7	-7.13	1.00 -8.77 -5.49	13.07	0.59 12.10 14.05	5.45	1.47 3.04	7.87	0.22
1.00	7	-7.26	1.17 -9.17 -5.35	13.01	0.56 12.09 13.93	5.33	1.42 3.00	7.65	0.19

LANDMARK - LT WRIST CENTER (27)

TIME T	SAMPLE SIZE,N	-----X-----	CO-ORDINATE-----	-----Y-----	CO-ORDINATE-----	-----Z-----	CO-ORDINATE-----	DISTANCE	MOVED
		MEAN	SE 5 PCT 95 PCT	MEAN	SE 5 PCT 95 PCT	MEAN	SE 5 PCT 95 PCT	INCR	CUM
0.0	3	3.16	1.62 0.51 5.81	12.21	0.66 11.12 13.29	5.84	0.13 5.62	6.06	0.0
0.10	3	2.87	1.57 0.30 5.45	11.74	0.23 11.36 12.13	6.54	0.86 5.22	8.06	0.97
0.20	4	2.47	1.41 0.15 4.78	11.44	0.39 10.80 12.07	7.99	1.76 5.10	10.89	1.45
0.30	4	2.69	1.22 0.68 4.69	11.22	0.25 10.81 11.63	9.76	1.78 6.84	12.68	1.79
R 0.40	4	3.22	1.01 1.57 4.87	11.25	0.24 10.86 11.64	11.54	2.00 8.25	14.82	1.86
0.50	5	3.45	0.84 2.07 4.83	11.09	0.40 10.42 11.75	11.16	2.28 7.41	14.90	0.47
A 0.60	5	3.89	0.84 2.51 5.26	11.24	0.45 10.49 11.98	12.13	1.98 8.89	15.37	1.08
R 0.70	5	4.33	0.64 3.28 5.37	11.43	0.59 10.46 12.40	12.78	1.81 9.82	15.75	0.81
0.80	5	4.78	0.59 3.81 5.74	11.59	0.75 10.36 12.81	13.31	1.70 10.53	16.09	0.71
0.90	5	5.11	0.60 4.11 6.10	11.65	0.90 10.18 13.12	13.57	1.74 10.72	16.42	0.42
1.00	5	5.36	0.47 4.58 6.13	11.70	1.04 10.00 13.41	13.16	1.02 11.49	14.83	0.48
0.0	5	5.36	0.47 4.58 6.13	11.70	1.04 10.00 13.41	13.16	1.02 11.49	14.83	0.0
0.10	4	4.85	0.27 4.40 5.30	11.61	1.05 9.89 13.33	12.14	1.01 10.48	13.81	1.14
0.20	4	4.26	0.36 3.66 4.85	11.67	1.00 10.02 13.31	11.21	0.91 9.72	12.70	1.11
R 0.30	4	3.82	0.51 2.98 4.66	11.66	1.05 9.93 13.39	10.27	0.85 8.88	11.67	1.04
E 0.40	4	3.53	0.69 2.40 4.65	11.59	1.21 9.60 13.58	9.33	0.89 7.87	10.79	0.99
T 0.50	4	3.23	0.96 1.67 4.80	11.52	1.40 9.22 13.81	8.39	1.02 6.71	10.07	0.99
U 0.60	3	3.13	1.25 1.08 5.17	12.08	0.17 11.80 12.35	8.04	0.86 6.62	9.45	0.67
R 0.70	3	2.95	1.37 0.71 5.20	11.97	0.21 11.63 12.31	7.39	0.73 6.20	8.58	0.68
0.80	3	2.93	1.45 0.54 5.31	11.97	0.43 11.27 12.68	6.82	0.53 5.95	7.69	0.57
N 0.90	3	3.04	1.52 0.55 5.53	12.09	0.54 11.21 12.97	6.33	0.24 5.94	6.72	0.52
1.00	3	3.16	1.62 0.51 5.81	12.21	0.66 11.12 13.29	5.84	0.13 5.62	6.06	0.52

MOVEMENT: RIGHT HAND MOVES FROM SIDE-ARM CONTROLLER AT +7.0, -10.0, +5.0 TO HATCH RELEASE CONTROLLER AT -5.0, -13.0, +15.0 AND RETURNS. LEFT HAND REMAINS AT THROTTLE CONTROLLER AT +7.0, +10.0, +5.0.

MOTION NUMBER - 12160
 BACK ANGLE - 65

SUB-MOVEMENT	TIME DATA		
	MEAN	STD DEV	RANGE
RIGHT FWD	0.84	0.13	0.70 TO 1.00 SECS.
RIGHT REV	0.83	0.13	0.70 TO 1.00 SECS.

LANDMARK - NASION (1)

TIME T	SAMPLE SIZE,N	(-----X-----) MEAN	(-----X-----) SE	(-----X-----) 5 PCT	(-----X-----) 95 PCT	(-----Y-----) MEAN	(-----Y-----) SE	(-----Y-----) 5 PCT	(-----Y-----) 95 PCT	(-----Z-----) MEAN	(-----Z-----) SE	(-----Z-----) 5 PCT	(-----Z-----) 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-17.16	1.09	-18.95	-15.38	-2.17	1.65	-4.88	0.54	20.66	0.60	19.68	21.65	0.0	0.0
0.10	7	-16.94	1.01	-18.60	-15.29	-2.09	1.48	-4.52	0.34	20.77	0.76	19.53	22.01	0.26	0.26
0.20	7	-17.04	1.11	-18.86	-15.22	-2.28	1.57	-4.85	0.30	20.71	0.76	19.47	21.96	0.22	0.48
0.30	7	-17.00	1.14	-18.87	-15.13	-2.46	1.58	-5.06	0.13	20.64	0.73	19.43	21.84	0.21	0.69
0.40	7	-17.24	1.22	-19.24	-15.24	-2.47	1.51	-4.79	0.01	20.51	0.77	19.35	21.88	0.24	0.93
0.50	7	-17.17	1.12	-19.00	-15.33	-2.32	1.50	-4.79	0.14	20.56	0.76	19.31	21.81	0.17	1.09
0.60	7	-17.10	1.14	-18.98	-15.23	-2.41	1.48	-4.84	0.02	20.54	0.76	19.36	21.86	0.12	1.21
0.70	7	-17.06	1.00	-18.66	-15.42	-2.51	1.52	-5.00	-0.02	20.54	0.78	19.27	21.81	0.13	1.34
0.80	7	-17.07	1.04	-18.77	-15.36	-2.55	1.52	-5.05	-0.05	20.59	0.76	19.34	21.84	0.07	1.41
0.90	7	-17.12	1.17	-19.03	-15.21	-2.56	1.74	-5.41	0.30	20.58	0.74	19.36	21.79	0.06	1.47
1.00	7	-17.19	1.07	-18.94	-15.44	-2.47	1.58	-5.06	0.11	20.52	0.80	19.31	21.94	0.11	1.58
0.0	7	-17.19	1.07	-18.94	-15.44	-2.47	1.58	-5.06	0.11	20.52	0.80	19.31	21.94	0.0	0.0
0.10	7	-16.95	0.98	-18.56	-15.33	-2.41	1.68	-5.17	0.35	20.50	0.82	19.26	21.94	0.25	0.25
0.20	7	-17.08	1.07	-18.84	-15.32	-2.38	1.54	-4.91	0.15	20.54	0.82	19.29	21.99	0.14	0.39
0.30	7	-17.04	1.08	-18.80	-15.27	-2.28	1.51	-4.75	0.19	20.54	0.84	19.27	22.02	0.11	0.50
0.40	7	-17.05	1.16	-18.95	-15.15	-2.24	1.45	-4.62	0.13	20.54	0.82	19.30	21.97	0.04	0.53
0.50	7	-16.97	0.91	-18.46	-15.48	-2.23	1.51	-4.71	0.26	20.58	0.76	19.44	21.92	0.09	0.63
0.60	7	-17.08	1.07	-18.83	-15.33	-2.16	1.64	-4.84	0.52	20.59	0.68	19.57	21.81	0.13	0.76
0.70	7	-16.96	0.94	-18.51	-15.41	-2.21	1.51	-4.70	0.27	20.58	0.68	19.57	21.80	0.14	0.90
0.80	7	-17.06	1.04	-18.76	-15.36	-2.19	1.52	-4.68	0.31	20.51	0.66	19.53	21.69	0.13	1.02
0.90	7	-17.01	0.98	-18.62	-15.39	-2.20	1.62	-4.86	0.46	20.54	0.73	19.45	21.83	0.07	1.09
1.00	7	-17.16	1.09	-18.95	-15.38	-2.17	1.65	-4.88	0.54	20.56	0.60	19.68	21.65	0.16	1.25

LANDMARK - CERVICALE (2)

TIME T	SAMPLE SIZE,N	(-----X-----) MEAN	(-----X-----) SE	(-----X-----) 5 PCT	(-----X-----) 95 PCT	(-----Y-----) MEAN	(-----Y-----) SE	(-----Y-----) 5 PCT	(-----Y-----) 95 PCT	(-----Z-----) MEAN	(-----Z-----) SE	(-----Z-----) 5 PCT	(-----Z-----) 95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-18.39	0.72	-19.57	-17.20	-0.15	1.83	-3.15	2.84	13.36	0.69	12.23	14.49	0.0	0.0
0.10	7	-18.04	0.49	-18.85	-17.24	-0.17	1.56	-2.74	2.40	13.32	0.70	12.18	14.47	0.35	0.35
0.20	7	-18.01	0.66	-19.09	-16.94	-0.26	1.58	-2.84	2.32	13.32	0.76	12.08	14.56	0.09	0.44
0.30	7	-18.32	0.56	-19.25	-17.40	-0.51	1.63	-3.19	2.16	13.27	0.75	12.04	14.50	0.40	0.85
0.40	7	-18.26	0.58	-19.21	-17.31	-0.29	1.44	-2.66	2.08	13.34	0.73	12.14	14.55	0.24	1.09
0.50	7	-18.25	0.50	-19.07	-17.44	0.01	1.56	-2.55	2.57	13.38	0.70	12.24	14.52	0.30	1.39
0.60	7	-18.20	0.55	-19.10	-17.30	-0.12	1.57	-2.70	2.46	13.41	0.63	12.37	14.45	0.14	1.53
0.70	7	-18.23	0.68	-19.35	-17.12	-0.33	1.40	-2.63	1.97	13.49	0.73	12.28	14.69	0.22	1.75
0.80	7	-18.09	0.66	-19.18	-17.01	0.03	1.74	-2.82	2.88	13.57	0.81	12.35	15.00	0.43	2.18
0.90	7	-18.12	0.55	-19.02	-17.23	-0.20	1.50	-2.66	2.25	13.33	0.66	12.25	14.42	0.41	2.59
1.00	7	-18.10	0.52	-18.95	-17.25	-0.02	1.60	-2.64	2.60	13.58	0.80	11.97	14.58	0.19	2.78
0.0	7	-18.10	0.52	-18.95	-17.25	-0.02	1.60	-2.64	2.60	13.58	0.80	11.97	14.58	0.0	0.0
0.10	7	-18.24	0.55	-19.14	-17.34	-0.16	1.44	-2.52	2.19	13.26	0.70	12.12	14.41	0.20	0.20
0.20	7	-18.35	0.45	-19.09	-17.61	-0.09	1.35	-2.30	2.12	13.42	0.76	12.18	14.66	0.21	0.41
0.30	7	-18.01	0.71	-19.17	-16.85	-0.03	1.54	-2.55	2.49	13.33	0.70	12.18	14.47	0.35	0.76
0.40	7	-17.95	0.46	-18.71	-17.19	-0.35	1.45	-2.73	2.02	13.32	0.67	12.22	14.42	0.33	1.09
0.50	7	-18.19	0.66	-19.28	-17.11	-0.40	1.55	-2.94	2.14	13.35	0.61	12.36	14.34	0.25	1.34
0.60	7	-18.25	0.52	-19.11	-17.40	-0.27	1.72	-3.09	2.56	13.63	0.85	12.34	15.02	0.31	1.65
0.70	7	-18.19	0.44	-18.91	-17.47	-0.30	1.42	-2.63	2.03	13.41	0.65	12.34	14.47	0.23	1.88
0.80	7	-18.33	0.66	-19.40	-17.25	-0.20	1.43	-2.55	2.15	13.35	0.60	12.37	14.34	0.18	2.06
0.90	7	-18.20	0.53	-19.07	-17.34	-0.12	1.52	-2.62	2.37	13.43	0.71	12.26	14.59	0.16	2.23
1.00	7	-18.39	0.72	-19.57	-17.20	-0.15	1.83	-3.15	2.84	13.36	0.69	12.23	14.49	0.20	2.42

LANDMARK - SUPRASTERNALE (3)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-14.54	0.78	-15.82	-13.26	-0.28	0.57	-1.22	0.66	14.48	14.08	14.48	0.25	14.08	14.89	0.0	0.0
0.10	7	-14.42	0.58	-15.37	-13.47	-0.28	0.51	-1.11	0.56	14.59	14.12	14.59	0.29	14.12	15.07	0.16	0.16
0.20	7	-14.38	0.56	-15.30	-13.47	-0.40	0.58	-1.35	0.55	14.49	13.60	14.49	0.54	13.60	15.38	0.17	0.33
0.30	7	-14.36	0.61	-15.36	-13.36	-0.59	0.64	-1.65	0.66	14.40	13.53	14.40	0.53	13.53	15.27	0.21	0.54
0.40	7	-14.56	0.58	-15.51	-13.62	-0.45	0.56	-1.37	0.47	14.33	14.02	14.33	0.19	14.02	14.65	0.26	0.79
0.50	7	-14.43	0.69	-15.56	-13.43	-0.19	0.63	-1.22	0.83	14.32	13.83	14.32	0.28	13.83	14.81	0.29	1.09
0.60	7	-14.46	0.63	-15.50	-13.43	-0.42	0.63	-1.45	0.61	14.42	13.96	14.42	0.28	13.96	14.89	0.25	1.34
0.70	7	-14.36	0.66	-15.44	-13.27	-0.45	0.55	-1.35	0.45	14.31	13.61	14.31	0.43	13.61	15.01	0.16	1.50
0.80	7	-14.48	0.69	-15.62	-13.35	-0.49	0.49	-1.28	0.31	14.40	13.87	14.40	0.32	13.87	14.93	0.16	1.65
0.90	7	-14.51	0.81	-15.83	-13.18	-0.48	0.52	-1.33	0.37	14.35	13.71	14.35	0.39	13.71	15.00	0.05	1.70
1.00	7	-14.42	0.59	-15.39	-13.45	-0.55	0.65	-1.62	0.53	14.32	13.61	14.32	0.43	13.61	15.02	0.11	1.82
0.0	7	-14.42	0.59	-15.39	-13.45	-0.55	0.65	-1.62	0.53	14.32	13.61	14.32	0.43	13.61	15.02	0.0	0.0
0.10	7	-14.44	0.72	-15.62	-13.26	-0.30	0.72	-1.48	0.88	14.30	13.85	14.30	0.34	13.85	14.95	0.26	0.26
0.20	7	-14.48	0.72	-15.66	-13.29	-0.34	0.48	-1.13	0.45	14.41	13.75	14.41	0.40	13.75	15.07	0.05	0.31
0.30	7	-14.36	0.65	-15.43	-13.29	-0.35	0.51	-1.19	0.49	14.43	13.60	14.43	0.50	13.60	15.26	0.12	0.43
0.40	7	-14.37	0.67	-15.46	-13.27	-0.40	0.50	-1.23	0.42	14.45	13.87	14.45	0.35	13.87	15.03	0.06	0.49
0.50	7	-14.40	0.73	-15.60	-13.20	-0.40	0.53	-1.26	0.46	14.44	13.72	14.44	0.44	13.72	15.15	0.04	0.52
0.60	7	-14.32	0.72	-15.50	-13.14	-0.35	0.60	-1.34	0.64	14.45	13.89	14.45	0.34	13.89	15.00	0.10	0.62
0.70	7	-14.34	0.64	-15.39	-13.28	-0.42	0.48	-1.22	0.37	14.48	13.84	14.48	0.39	13.84	15.12	0.08	0.71
0.80	7	-14.38	0.71	-15.54	-13.22	-0.32	0.61	-1.32	0.67	14.48	13.87	14.48	0.37	13.87	15.10	0.11	0.82
0.90	7	-14.40	0.85	-15.79	-13.01	-0.15	0.58	-1.10	0.80	14.51	13.86	14.51	0.40	13.86	15.16	0.18	0.99
1.00	7	-14.54	0.78	-15.82	-13.26	-0.28	0.57	-1.22	0.66	14.48	14.08	14.48	0.25	14.08	14.89	0.19	1.19

LANDMARK - RT ACROMION (4)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-17.45	1.58	-20.04	-14.85	-8.40	1.52	-10.90	-5.90	11.63	10.54	11.63	0.67	10.54	12.72	0.0	0.0
0.10	7	-17.67	0.50	-18.49	-16.86	-7.87	0.78	-9.14	-6.59	11.54	10.57	11.54	0.65	10.57	12.71	0.58	0.58
0.20	7	-17.97	0.42	-18.66	-17.29	-7.76	0.71	-8.92	-6.60	11.58	10.44	11.58	0.69	10.44	12.71	0.32	0.90
0.30	7	-18.04	0.43	-18.74	-17.34	-7.90	0.73	-9.10	-6.70	11.42	10.21	11.42	0.74	10.21	12.64	0.21	1.11
0.40	7	-18.19	0.38	-18.82	-17.57	-7.92	0.86	-9.32	-6.51	11.34	10.08	11.34	0.77	10.08	12.60	0.17	1.29
0.50	7	-18.28	0.46	-19.03	-17.53	-7.66	0.87	-9.09	-6.23	11.29	10.26	11.29	0.63	10.26	12.33	0.28	1.56
0.60	7	-18.19	0.62	-19.21	-17.18	-7.77	0.72	-8.95	-6.58	11.24	10.15	11.24	0.67	10.15	12.34	0.15	1.71
0.70	7	-18.10	0.56	-19.01	-17.19	-7.82	0.63	-8.85	-6.79	11.21	10.09	11.21	0.69	10.09	12.34	0.12	1.82
0.80	7	-18.04	0.55	-18.94	-17.14	-7.87	0.74	-9.09	-6.66	11.35	10.06	11.35	0.79	10.06	12.65	0.16	1.99
0.90	6	-18.19	0.43	-18.89	-17.48	-8.05	0.73	-9.26	-6.85	11.22	9.94	11.22	0.78	9.94	12.49	0.27	2.26
1.00	6	-18.10	0.52	-18.95	-17.26	-7.91	0.68	-9.02	-6.81	11.25	10.04	11.25	0.74	10.04	12.46	0.17	2.42
0.0	6	-18.10	0.52	-18.95	-17.26	-7.91	0.68	-9.02	-6.81	11.25	10.04	11.25	0.74	10.04	12.46	0.0	0.0
0.10	6	-18.02	0.40	-18.68	-17.36	-8.02	0.91	-9.51	-6.52	11.25	9.95	11.25	0.79	9.95	12.54	0.13	0.13
0.20	7	-17.90	0.56	-18.81	-16.99	-7.88	0.61	-8.89	-6.87	11.33	10.20	11.33	0.69	10.20	12.46	0.20	0.33
0.30	7	-17.74	0.60	-18.72	-16.75	-7.77	0.82	-9.10	-6.43	11.44	10.18	11.44	0.77	10.18	12.70	0.22	0.56
0.40	7	-17.73	0.61	-18.73	-16.74	-7.86	0.69	-8.99	-6.73	11.53	10.23	11.53	0.79	10.23	12.83	0.13	0.68
0.50	7	-17.56	0.57	-18.49	-16.64	-7.99	0.65	-9.06	-6.91	11.59	10.33	11.59	0.77	10.33	12.86	0.22	0.91
0.60	7	-17.32	0.69	-18.46	-16.19	-8.05	0.85	-9.44	-6.66	11.52	10.33	11.52	0.72	10.33	12.70	0.26	1.17
0.70	7	-17.09	0.69	-18.22	-15.97	-8.04	0.78	-9.32	-6.76	11.52	10.52	11.52	0.67	10.52	12.72	0.25	1.42
0.80	7	-17.01	0.73	-18.22	-15.81	-8.08	0.72	-9.27	-6.89	11.51	10.56	11.51	0.64	10.56	12.65	0.09	1.51
0.90	7	-16.82	0.64	-17.87	-15.76	-8.06	0.78	-9.33	-6.78	11.53	10.54	11.53	0.67	10.54	12.72	0.20	1.71
1.00	7	-17.45	1.58	-20.04	-14.85	-8.40	1.52	-10.90	-5.90	11.53	10.54	11.53	0.67	10.54	12.72	0.72	2.43

LANDMARK - RT GRIP CENTER (16)

TIME T	SAMPLE SIZE N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
0.0	7	MEAN 6.43 SE 0.63 95 PCT 7.46	MEAN -11.18 SE 0.18 95 PCT -10.89	MEAN 4.55 SE 0.31 95 PCT 4.03	0.0	0.0
0.10	7	4.28 2.34 6.21	-10.75 1.39 -13.03	4.55 0.31 4.03	0.0	0.0
F 0.20	7	1.28 2.11 4.74	-9.91 2.77 -14.45	6.79 1.75 3.92	3.14	3.14
R 0.30	7	-2.49 2.41 6.45	-9.65 3.84 -15.95	10.23 2.80 5.64	4.64	7.78
R 0.40	7	-5.80 2.22 9.44	-10.54 4.42 -16.64	13.06 3.28 7.68	4.72	12.50
W 0.50	7	-7.10 1.64 9.79	-11.58 4.42 -16.64	14.80 2.63 10.48	3.84	16.34
A 0.60	7	-7.24 1.26 9.30	-12.72 4.42 -16.64	15.38 1.77 12.47	1.77	18.11
R 0.70	7	-6.41 0.98 8.01	-13.74 4.95 -15.29	15.24 1.09 13.45	1.15	19.26
D 0.80	7	-5.93 0.72 7.10	-14.53 4.89 -15.99	14.14 0.50 13.31	1.51	20.77
O 0.90	7	-5.69 0.55 6.59	-14.34 4.84 -15.71	14.16 0.49 13.35	0.99	21.77
1.00	7	-6.17 1.05 7.89	-13.49 4.46 -15.89	14.29 0.62 13.28	0.31	22.07
0.0	7	-6.17 1.05 7.89	-13.49 4.46 -15.89	14.29 0.62 13.28	0.0	0.0
0.10	7	-6.79 0.67 7.88	-11.70 1.78 14.62	14.84 0.68 13.73	1.97	1.97
0.20	7	-6.52 1.02 8.19	-12.15 1.35 15.18	15.18 1.22 13.17	1.82	3.79
R 0.30	7	-4.44 1.88 7.52	-10.23 0.82 16.60	16.60 1.49 12.16	2.41	6.20
E 0.40	7	-4.68 2.41 4.63	-11.04 1.03 17.65	17.65 2.31 8.82	10.48	16.68
T 0.50	7	2.94 2.87 1.78	-13.37 1.82 18.37	18.37 2.66 5.49	4.28	20.96
U 0.60	7	4.02 1.01 2.36	-12.75 1.20 19.79	19.79 1.64 5.40	4.65	25.61
R 0.70	7	5.09 0.84 3.70	-11.07 0.78 20.34	20.34 1.22 4.40	2.12	27.73
N 0.80	7	5.78 0.81 4.45	-11.18 0.49 21.38	21.38 0.85 4.11	2.01	29.74
O 0.90	7	6.14 0.68 5.03	-11.19 0.35 22.37	22.37 0.53 4.19	0.57	30.31
1.00	7	6.43 0.63 5.39	-11.18 0.18 23.37	23.37 0.31 4.03	0.59	30.90

LANDMARK - RT TROCHANTER (18)

TIME T	SAMPLE SIZE N	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE INCR	MOVED CUM
0.0	7	MEAN 2.16 SE 0.88 95 PCT 3.61	MEAN -6.86 SE 0.80 95 PCT -5.55	MEAN 3.17 SE 0.86 95 PCT 1.75	0.0	0.0
0.10	7	2.05 0.74 3.26	-6.27 0.59 -8.23	3.05 0.76 1.80	0.44	0.44
F 0.20	7	1.90 0.73 3.11	-7.32 0.46 -8.07	2.98 0.68 1.86	0.17	0.61
D 0.30	7	1.83 0.92 3.34	-7.40 0.55 -8.29	2.94 0.61 1.94	0.11	0.72
R 0.40	7	2.02 1.00 3.38	-7.31 0.74 -8.53	2.87 0.54 1.99	0.22	0.94
W 0.50	7	2.14 0.93 3.67	-7.22 0.68 -8.34	2.88 0.63 1.85	0.15	1.09
A 0.60	7	2.07 0.69 3.45	-7.32 0.65 -8.39	2.92 0.71 1.76	0.13	1.22
R 0.70	7	2.09 0.84 3.46	-7.45 0.39 -8.10	2.97 0.75 1.74	0.14	1.36
D 0.80	7	1.88 0.69 3.02	-7.41 0.57 -8.35	2.84 0.69 1.71	0.25	1.61
O 0.90	7	1.86 0.69 3.02	-7.35 0.65 -8.42	2.87 0.74 1.66	0.07	1.68
1.00	7	1.86 0.71 3.03	-7.38 0.36 -8.42	2.93 0.74 1.72	0.07	1.75
0.0	7	1.86 0.71 3.03	-7.38 0.36 -8.42	2.93 0.74 1.72	0.0	0.0
0.10	7	2.09 0.97 3.69	-7.34 0.63 -8.38	2.93 0.74 1.72	0.25	0.25
0.20	7	2.10 1.11 3.93	-8.37 0.66 -8.37	2.91 0.73 1.71	0.08	0.33
R 0.30	7	2.12 0.61 3.63	-7.22 0.62 -8.24	2.96 0.72 1.78	0.10	0.43
E 0.40	7	1.91 0.84 3.29	-7.38 0.35 -7.95	2.98 0.68 1.87	0.26	0.69
T 0.50	7	1.84 0.79 3.14	-7.15 0.43 -7.86	2.94 0.64 1.86	0.33	1.02
U 0.60	7	1.78 1.10 3.57	-7.27 0.63 -8.30	2.87 0.61 1.89	0.21	1.23
R 0.70	7	1.98 0.81 3.31	-7.33 0.54 -8.21	2.89 0.61 1.89	0.19	1.42
N 0.80	7	2.45 1.02 4.13	-7.57 1.24 -9.60	2.77 0.57 1.83	0.54	1.97
O 0.90	7	1.93 1.03 3.62	-7.06 0.66 -8.14	2.77 0.57 1.83	0.74	2.71
1.00	7	2.16 0.88 3.61	-6.86 0.80 -8.18	3.17 0.86 1.75	0.41	3.11

LANDMARK - RT KNEE TOP (20)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	INCR
0.0	7	17.48	0.91	15.98	18.98	0.0
0.10	7	17.69	0.85	16.29	19.08	0.29
0.20	7	17.71	0.90	16.23	19.19	0.32
0.30	7	17.74	0.91	16.25	19.23	0.35
0.40	7	17.63	0.93	16.11	19.15	0.52
0.50	7	17.64	1.02	15.97	19.32	0.68
0.60	7	17.62	0.95	16.06	19.19	0.83
0.70	7	17.72	0.98	16.11	19.32	0.98
0.80	7	17.71	0.98	16.11	19.31	1.02
0.90	7	17.64	0.92	16.13	19.16	1.11
1.00	7	17.71	0.93	16.18	19.23	1.26
0.0	7	17.71	0.93	16.18	19.23	0.0
0.10	7	17.73	0.94	16.18	19.27	0.07
0.20	7	17.69	0.93	16.16	19.22	0.12
0.30	7	17.61	0.96	16.03	19.19	0.22
0.40	7	17.64	1.02	15.97	19.30	0.34
0.50	7	17.68	0.97	16.09	19.28	0.58
0.60	7	17.62	0.94	16.07	19.17	0.67
0.70	7	17.63	0.94	16.10	19.17	0.78
0.80	7	17.65	0.97	16.07	19.23	0.90
0.90	7	17.70	0.91	16.21	19.19	1.01
1.00	7	17.48	0.91	15.98	18.98	1.24

LANDMARK - RT SHOULDER CENTER (22)

TIME	SAMPLE	(-----X - CO-ORDINATE-----)	(-----Y - CO-ORDINATE-----)	(-----Z - CO-ORDINATE-----)	DISTANCE	MOVED
T	SIZE,N	MEAN	SE	5 PCT	95 PCT	INCR
0.0	7	-15.37	0.74	-15.59	-13.15	0.0
0.10	7	-15.03	0.51	-15.86	-14.20	0.68
0.20	7	-15.30	0.53	-16.18	-14.43	0.95
0.30	7	-15.37	0.56	-16.28	-14.46	1.02
0.40	7	-15.73	0.52	-16.58	-14.89	1.38
0.50	7	-16.03	0.56	-16.95	-15.11	1.73
0.60	7	-15.90	0.83	-17.26	-14.53	1.99
0.70	7	-15.79	0.53	-16.66	-14.93	2.20
0.80	7	-15.74	0.63	-16.76	-14.71	2.29
0.90	7	-15.68	0.49	-16.48	-14.88	2.48
1.00	7	-15.48	0.79	-16.77	-14.18	2.82
0.0	7	-15.48	0.79	-16.77	-14.18	0.0
0.10	7	-15.38	0.54	-16.26	-14.49	0.12
0.20	7	-15.41	0.71	-16.58	-14.24	0.27
0.30	7	-15.22	0.79	-16.53	-13.92	0.49
0.40	7	-15.04	0.80	-16.35	-13.72	0.68
0.50	7	-14.96	0.77	-16.23	-13.69	0.83
0.60	7	-14.73	0.73	-15.93	-13.53	0.99
0.70	7	-14.52	0.88	-15.96	-13.07	1.06
0.80	7	-14.23	0.77	-15.50	-12.97	1.30
0.90	7	-14.14	0.63	-15.18	-13.10	1.59
1.00	7	-14.37	0.74	-15.59	-13.15	1.94

MMVT NO. 121A0/65

LANDMARK - RT ELBOW CENTER (24)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	7	-6.31	0.51	-7.15	-5.47	-10.33	0.83	-11.69	-8.98	4.73	1.28	2.63	6.83	0.0	0.0		
0.10	7	-7.73	0.84	-9.10	-6.35	-10.96	1.16	-12.87	-9.05	4.38	1.18	2.45	6.31	1.59	1.59		
F 0.20	7	-8.52	1.08	-10.29	-6.75	-11.23	1.62	-13.89	-8.58	4.24	1.09	2.45	6.02	2.44	2.44		
D 0.30	7	-8.82	1.19	-10.77	-6.87	-11.32	1.81	-14.29	-8.35	4.20	1.18	2.26	6.14	0.31	2.75		
R 0.40	7	-9.11	1.07	-10.87	-7.36	-11.34	1.85	-14.38	-8.30	4.20	1.25	2.16	6.25	0.30	3.05		
W 0.50	7	-9.27	1.09	-11.05	-7.49	-11.33	1.93	-14.50	-8.17	4.04	1.18	2.10	5.98	0.22	3.27		
A 0.60	7	-9.68	1.18	-11.62	-7.74	-11.54	1.88	-14.63	-8.46	3.77	1.06	2.04	5.50	0.53	3.81		
R 0.70	7	-9.75	1.29	-11.80	-7.56	-11.60	1.68	-14.37	-8.48	3.49	0.88	2.05	4.93	0.28	4.09		
D 0.80	7	-9.78	1.43	-12.10	-7.40	-11.71	1.79	-14.64	-8.78	3.53	0.95	1.98	5.08	0.13	4.22		
0.90	7	-9.89	1.49	-12.32	-7.45	-11.79	1.78	-14.71	-8.88	3.47	0.89	2.01	4.94	0.17	4.39		
1.00	7	-9.84	1.33	-12.02	-7.66	-11.57	1.76	-14.47	-8.68	3.42	0.98	1.82	5.02	0.23	4.62		
0.0	7	-9.84	1.33	-12.02	-7.66	-11.57	1.76	-14.47	-8.68	3.42	0.98	1.82	5.02	0.0	0.0		
0.10	7	-9.61	1.28	-11.72	-7.51	-11.46	1.82	-14.44	-8.48	3.51	0.89	2.05	4.96	0.27	0.27		
0.20	7	-9.45	1.17	-11.36	-7.53	-11.55	1.64	-14.24	-8.86	3.50	0.86	2.19	5.01	0.21	0.47		
R 0.30	7	-9.20	1.08	-10.97	-7.44	-11.48	1.68	-14.24	-8.73	3.74	0.94	2.20	5.28	0.29	0.77		
E 0.40	7	-8.92	0.73	-10.12	-7.72	-11.44	1.62	-14.10	-8.78	3.86	0.94	2.31	5.41	0.31	1.07		
T 0.50	7	-8.37	0.59	-9.33	-7.41	-11.04	1.48	-13.46	-8.62	3.82	0.88	2.39	5.26	0.68	1.75		
U 0.60	7	-7.93	0.31	-8.43	-7.42	-10.97	1.12	-12.81	-9.13	3.96	1.05	2.24	5.68	0.47	2.22		
R 0.70	7	-7.40	0.59	-8.37	-6.42	-10.88	0.97	-12.48	-9.29	4.09	1.12	2.25	5.93	0.55	2.78		
N 0.80	7	-6.85	0.76	-8.10	-5.61	-10.62	0.86	-12.03	-9.21	4.32	1.22	2.32	6.31	0.65	3.42		
0.90	7	-6.42	0.77	-7.68	-5.15	-10.44	0.84	-11.82	-9.06	4.50	1.32	2.43	6.76	0.55	3.97		
1.00	7	-6.31	0.51	-7.15	-5.47	-10.33	0.83	-11.69	-8.98	4.73	1.28	2.63	6.83	0.20	4.17		

LANDMARK - RT WRIST CENTER (26)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	DISTANCE INCR	MOVED CUM
0.0	6	2.98	0.57	2.04	3.92	-10.40	0.43	-11.11	-9.69	4.33	0.64	3.29	5.37	0.0	0.0		
0.10	6	0.78	1.34	-1.41	2.97	-10.44	1.36	-12.67	-8.21	6.43	1.22	4.43	8.44	3.04	3.04		
F 0.20	7	-1.41	1.61	-4.05	1.23	-10.03	2.22	-13.67	-6.40	8.90	2.16	5.35	12.45	3.33	6.37		
D 0.30	7	-4.25	1.86	-7.31	-1.20	-9.90	2.95	-14.73	-5.06	10.95	2.72	6.49	15.40	3.50	9.87		
R 0.40	7	-6.81	2.10	-10.25	-3.37	-10.40	2.92	-15.20	-5.61	12.14	2.24	8.47	15.80	2.87	12.74		
W 0.50	7	-7.79	2.02	-11.11	-4.48	-10.92	2.34	-14.76	-7.07	12.38	1.44	10.02	14.74	1.13	13.87		
A 0.60	7	-8.18	1.43	-10.53	-5.83	-11.73	1.72	-14.56	-8.91	12.23	0.85	10.84	13.62	0.92	14.79		
R 0.70	7	-8.05	0.98	-9.66	-6.45	-12.60	1.30	-14.74	-10.47	11.80	0.63	10.76	12.84	0.98	15.77		
D 0.80	7	-7.86	0.82	-9.21	-6.51	-13.08	1.20	-15.05	-11.12	11.72	0.43	11.01	12.42	0.52	16.30		
0.90	7	-7.63	0.60	-8.61	-6.66	-13.22	1.11	-15.04	-11.39	11.64	0.39	10.99	12.29	0.28	16.57		
1.00	7	-7.52	0.33	-8.06	-6.99	-12.58	1.40	-14.87	-10.28	11.55	0.67	10.45	12.64	0.65	17.23		
0.0	7	-7.52	0.33	-8.06	-6.99	-12.58	1.40	-14.87	-10.28	11.55	0.67	10.45	12.64	0.0	0.0		
0.10	7	-7.60	0.62	-8.62	-6.57	-11.29	1.24	-13.33	-9.26	11.77	0.66	10.69	12.84	1.30	1.30		
0.20	7	-6.75	1.08	-8.53	-4.98	-10.05	1.04	-11.74	-8.35	11.89	0.94	10.35	13.43	1.51	2.82		
R 0.30	7	-6.90	1.34	-7.09	-2.71	-9.03	0.93	-10.56	-7.50	11.55	1.55	9.00	14.09	2.14	4.95		
E 0.40	7	-2.79	1.45	-5.17	-0.41	-9.25	0.93	-10.78	-7.72	10.13	1.89	7.03	13.24	2.55	7.51		
T 0.50	7	-0.69	1.11	-2.50	1.13	-10.00	1.02	-11.68	-8.32	8.26	1.86	5.21	11.30	2.92	10.42		
U 0.60	7	1.05	0.49	0.25	1.85	-10.68	0.74	-11.90	-9.46	6.40	1.47	3.99	8.80	2.63	13.06		
R 0.70	7	2.21	0.94	0.67	3.75	-10.89	0.60	-11.87	-9.92	5.00	1.29	2.88	7.12	1.83	14.88		
N 0.80	7	2.39	0.69	1.27	3.52	-10.51	0.53	-11.38	-9.64	4.89	0.86	3.48	6.29	0.44	15.32		
0.90	6	2.95	0.67	1.86	4.05	-10.42	0.45	-11.16	-9.68	4.67	0.67	3.57	5.76	0.61	15.93		
1.00	6	2.98	0.57	2.04	3.92	-10.40	0.43	-11.11	-9.69	4.33	0.64	3.29	5.37	0.34	16.27		

MOVEMENT: LEFT HAND MOVES FROM THROTTLE CONTROLLER AT +7.0, +10.0, +5.0 TO HATCH RELEASE CONTROLLER AT -5.0, -13.0, +15.0 AND RETURNS. RIGHT HAND REMAINS AT SIDE-ARM CONTROLLER AT +7.0, -10.0, +5.0.

MOTION NUMBER - 22260
BACK ANGLE - 65

SUB-MOUMENT	TIME DATA		
	MEAN	STD DEV	RANGE
LEFT FWD	0.69	0.09	0.60 TO 0.80 SECS.
LEFT REV	0.73	0.26	0.50 TO 1.30 SECS.

LANDMARK - NASION (1)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	DISTANCE INCR	MOVED CUM
0.0	7	-17.35	0.86	-18.76	-15.95	-17.35	0.87	-1.64	-1.83	-17.35	0.87	1.64	-1.83	-17.35	0.87	20.36	0.76	19.30	21.81	20.36	0.0	0.0
0.10	7	-17.78	1.13	-19.63	-15.94	-17.78	0.86	2.41	-4.81	-17.78	0.86	2.41	-4.81	-17.78	0.86	20.40	0.58	19.44	21.36	20.40	1.78	1.78
0.20	7	-17.71	1.40	-20.00	-15.42	-17.71	1.40	3.05	-6.59	-17.71	1.40	3.05	-6.59	-17.71	1.40	20.29	0.57	19.36	21.23	20.29	0.75	2.53
0.30	7	-17.52	1.30	-19.65	-15.38	-17.52	1.30	2.97	-6.51	-17.52	1.30	2.97	-6.51	-17.52	1.30	20.17	0.59	19.21	21.13	20.17	0.24	2.76
0.40	7	-17.79	1.27	-19.88	-15.71	-17.79	1.27	2.88	-6.65	-17.79	1.27	2.88	-6.65	-17.79	1.27	20.12	0.70	18.97	21.26	20.12	0.40	3.17
0.50	7	-18.03	1.26	-20.09	-15.97	-18.03	1.26	2.82	-6.88	-18.03	1.26	2.82	-6.88	-18.03	1.26	20.09	0.83	18.73	21.46	20.09	0.42	3.58
0.60	7	-17.91	1.23	-19.92	-15.89	-17.91	1.23	2.74	-6.74	-17.91	1.23	2.74	-6.74	-17.91	1.23	20.02	0.78	18.73	21.30	20.02	0.15	3.73
0.70	7	-17.94	1.40	-20.25	-15.64	-17.94	1.40	2.94	-7.31	-17.94	1.40	2.94	-7.31	-17.94	1.40	20.09	0.64	19.03	21.14	20.09	0.25	3.98
0.80	7	-17.95	1.32	-20.11	-15.79	-17.95	1.32	2.88	-7.30	-17.95	1.32	2.88	-7.30	-17.95	1.32	20.12	0.79	18.82	21.42	20.12	0.09	4.07
0.90	7	-17.94	1.35	-20.14	-15.73	-17.94	1.35	2.81	-7.37	-17.94	1.35	2.81	-7.37	-17.94	1.35	20.13	0.85	18.74	21.52	20.13	0.19	4.26
1.00	7	-18.20	1.32	-20.37	-16.03	-18.20	1.32	2.70	-7.42	-18.20	1.32	2.70	-7.42	-18.20	1.32	20.10	0.78	18.83	21.38	20.10	0.35	4.61
0.0	7	-18.20	1.32	-20.37	-16.03	-18.20	1.32	2.70	-7.42	-18.20	1.32	2.70	-7.42	-18.20	1.32	20.10	0.78	18.83	21.38	20.10	0.0	0.0
0.10	7	-17.79	1.19	-19.75	-15.84	-17.79	1.19	2.41	-6.16	-17.79	1.19	2.41	-6.16	-17.79	1.19	20.30	0.74	19.09	21.52	20.30	0.90	0.90
0.20	7	-17.50	1.05	-19.22	-15.78	-17.50	1.05	2.25	-5.04	-17.50	1.05	2.25	-5.04	-17.50	1.05	20.45	0.73	19.25	21.65	20.45	0.92	1.82
0.30	7	-17.33	0.80	-18.65	-16.02	-17.33	0.80	2.35	-4.81	-17.33	0.80	2.35	-4.81	-17.33	0.80	20.48	0.75	19.25	21.70	20.48	0.43	2.25
0.40	7	-17.53	0.78	-18.81	-16.26	-17.53	0.78	2.39	-4.52	-17.53	0.78	2.39	-4.52	-17.53	0.78	20.55	0.76	19.30	21.79	20.55	0.41	2.66
0.50	7	-17.52	0.86	-18.92	-16.11	-17.52	0.86	2.25	-3.83	-17.52	0.86	2.25	-3.83	-17.52	0.86	20.64	0.78	19.35	21.92	20.64	0.36	3.02
0.60	7	-17.38	0.94	-18.92	-15.84	-17.38	0.94	2.02	-3.34	-17.38	0.94	2.02	-3.34	-17.38	0.94	20.57	0.74	19.36	21.78	20.57	0.28	3.30
0.70	7	-17.34	0.80	-18.65	-16.03	-17.34	0.80	2.01	-3.00	-17.34	0.80	2.01	-3.00	-17.34	0.80	20.53	0.65	19.45	21.60	20.53	0.33	3.63
0.80	7	-17.20	0.69	-18.34	-16.07	-17.20	0.69	1.73	-2.19	-17.20	0.69	1.73	-2.19	-17.20	0.69	20.45	0.66	19.37	21.52	20.45	0.38	4.01
0.90	7	-17.21	0.77	-18.47	-15.94	-17.21	0.77	1.64	-1.85	-17.21	0.77	1.64	-1.85	-17.21	0.77	20.48	0.65	19.41	21.54	20.48	0.19	4.20
1.00	7	-17.35	0.86	-18.76	-15.95	-17.35	0.86	1.64	-1.83	-17.35	0.86	1.64	-1.83	-17.35	0.86	20.56	0.76	19.30	21.81	20.56	0.17	4.37

LANDMARK - CERVICALE (2)

TIME T	SAMPLE SIZE,N	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	MEAN	SE	5 PCT	95 PCT	CO-ORDINATE	DISTANCE INCR	MOVED CUM
0.0	7	-18.82	0.74	-20.04	-17.61	-18.82	0.76	2.01	-4.06	-18.82	0.76	2.01	-4.06	-18.82	0.76	13.23	0.17	12.96	13.51	13.23	0.0	0.0
0.10	7	-18.88	0.26	-19.30	-18.45	-18.88	0.26	2.21	-4.88	-18.88	0.26	2.21	-4.88	-18.88	0.26	13.26	0.37	12.65	13.87	13.26	0.51	0.51
0.20	7	-18.69	0.40	-19.35	-18.03	-18.69	0.40	2.29	-5.14	-18.69	0.40	2.29	-5.14	-18.69	0.40	13.23	0.44	12.51	13.94	13.23	0.22	0.73
0.30	7	-18.46	0.59	-19.43	-17.48	-18.46	0.59	2.21	-4.94	-18.46	0.59	2.21	-4.94	-18.46	0.59	13.15	0.42	12.46	13.84	13.15	0.26	0.99
0.40	7	-18.57	0.50	-19.39	-17.76	-18.57	0.50	2.24	-5.18	-18.57	0.50	2.24	-5.18	-18.57	0.50	13.20	0.36	12.62	13.79	13.20	0.22	1.21
0.50	7	-18.58	0.68	-19.69	-17.46	-18.58	0.68	2.46	-5.70	-18.58	0.68	2.46	-5.70	-18.58	0.68	13.34	0.32	12.81	13.86	13.34	0.22	1.43
0.60	7	-18.46	0.68	-19.58	-17.34	-18.46	0.68	2.57	-5.84	-18.46	0.68	2.57	-5.84	-18.46	0.68	13.54	0.32	13.02	14.06	13.54	0.24	1.67
0.70	7	-18.49	0.52	-19.35	-17.63	-18.49	0.52	2.61	-5.95	-18.49	0.52	2.61	-5.95	-18.49	0.52	13.76	0.36	13.17	14.35	13.76	0.23	1.90
0.80	7	-18.64	0.79	-19.94	-17.33	-18.64	0.79	2.49	-5.83	-18.64	0.79	2.49	-5.83	-18.64	0.79	13.87	0.51	13.04	14.71	13.87	0.20	2.09
0.90	7	-18.69	0.97	-20.28	-17.10	-18.69	0.97	2.49	-5.94	-18.69	0.97	2.49	-5.94	-18.69	0.97	13.96	0.55	13.06	14.85	13.96	0.14	2.24
1.00	7	-18.57	1.07	-20.32	-16.81	-18.57	1.07	2.40	-5.77	-18.57	1.07	2.40	-5.77	-18.57	1.07	13.97	0.40	13.32	14.62	13.97	0.12	2.36
0.0	7	-18.57	1.07	-20.32	-16.81	-18.57	1.07	2.40	-5.77	-18.57	1.07	2.40	-5.77	-18.57	1.07	13.97	0.40	13.32	14.62	13.97	0.0	0.0
0.10	7	-18.62	0.78	-19.90	-17.34	-18.62	0.78	2.44	-5.82	-18.62	0.78	2.44	-5.82	-18.62	0.78	13.85	0.40	13.20	14.51	13.85	0.13	0.13
0.20	7	-18.51	0.52	-19.37	-17.65	-18.51	0.52	2.50	-5.92	-18.51	0.52	2.50	-5.92	-18.51	0.52	13.55	0.36	13.06	14.24	13.55	0.23	0.36
0.30	7	-18.38	0.45	-19.11	-17.64	-18.38	0.45	2.50	-5.85	-18.38	0.45	2.50	-5.85	-18.38	0.45	13.48	0.25	13.07	13.89	13.48	0.23	0.59
0.40	7	-18.50	0.42	-19.19	-17.80	-18.50	0.42	2.45	-5.60	-18.50	0.42	2.45	-5.60	-18.50	0.42	13.42	0.26	13.00	13.85	13.42	0.21	0.80
0.50	7	-18.62	0.52	-19.47	-17.76	-18.62	0.52	2.26	-5.33	-18.62	0.52	2.26	-5.33	-18.62	0.52	13.44	0.43	12.70	14.13	13.44	0.13	0.92
0.60	7	-18.52	0.56	-19.44	-17.59	-18.52	0.56	2.31	-5.29	-18.52	0.56	2.31	-5.29	-18.52	0.56	13.55	0.43	12.85	14.24	13.55	0.21	1.13
0.70	7	-18.50	0.39	-19.14	-17.80	-18.50	0.39	2.30	-4.83	-18.50	0.39	2.30	-4.83	-18.50	0.39	13.41	0.34	12.36	13.97	13.41	0.46	1.59
0.80	7	-18.67	0.47	-19.45	-17.90	-18.67	0.47	2.14	-4.28	-18.67	0.47	2.14	-4.28	-18.67	0.47	13.12	0.27	12.67	13.56	13.12	0.45	2.04
0.90	7	-18.78	0.60	-19.76	-17.79	-18.78	0.60	2.06	-4.05	-18.78	0.60	2.06	-4.05	-18.78	0.60	13.10	0.23	12.72	13.47	13.10	0.15	2.19
1.00	7	-18.82	0.74	-20.04	-17.61	-18.82	0.74	2.01	-4.06	-18.82	0.74	2.01	-4.06	-18.82	0.74	13.23	0.17	12.96	13.51	13.23	0.17	2.35

LANDMARK - SUPRATERNALE (3)													
TIME	SAMPLE	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			DISTANCE		
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	MOVED	CUM
0.0	7	-14.76	1.02	-16.44	-13.09	0.13	-2.40	13.95	0.43	13.25	14.65	0.0	0.0
0.10	7	-14.80	1.19	-16.74	-12.85	-0.03	-2.61	14.35	0.36	13.45	14.64	0.19	0.19
F 0.20	7	-14.67	1.19	-16.62	-12.73	-0.08	-2.68	14.03	0.40	13.38	14.68	0.14	0.33
O 0.30	7	-14.61	0.94	-16.16	-13.07	-0.08	-2.71	13.96	0.50	13.13	14.79	0.09	0.42
O 0.40	7	-14.66	0.84	-16.04	-13.28	-0.17	-2.99	13.99	0.46	13.23	14.74	0.10	0.52
W 0.50	7	-14.71	0.96	-16.29	-13.13	-0.32	-2.30	14.08	0.44	13.35	14.80	0.18	0.70
R 0.60	7	-14.74	0.78	-16.01	-13.47	-0.54	-2.92	14.28	0.58	13.33	15.23	0.30	1.01
A 0.70	7	-14.74	0.86	-16.15	-13.33	-0.79	-3.31	14.32	0.56	13.41	15.23	0.26	1.26
D 0.80	7	-14.91	1.15	-16.80	-13.03	-1.18	-3.96	14.39	0.51	13.55	15.23	0.43	1.69
O 0.90	7	-15.28	1.49	-17.72	-12.84	-1.69	-4.85	14.44	0.40	13.78	15.11	0.63	2.32
1.00	7	-15.42	1.40	-17.73	-13.12	-1.65	-4.47	14.43	0.29	13.96	14.90	0.15	2.47
0.0	7	-15.42	1.40	-17.73	-13.12	-1.65	-4.47	14.43	0.29	13.96	14.90	0.0	0.0
0.10	7	-15.05	1.09	-16.83	-13.27	-1.32	-3.70	14.29	0.49	13.48	15.09	0.52	0.52
0.20	7	-14.70	1.11	-16.52	-12.88	-1.02	-3.62	14.11	0.56	13.19	15.04	0.49	1.01
R 0.30	7	-14.54	0.90	-16.01	-13.07	-0.85	-3.67	14.00	0.43	13.29	14.71	0.27	1.27
E 0.40	7	-14.68	0.87	-16.10	-13.25	-0.67	-3.48	13.96	0.45	13.22	14.70	0.23	1.50
T 0.50	7	-14.69	0.98	-16.29	-13.09	-0.49	-3.20	14.04	0.38	13.41	14.67	0.20	1.70
U 0.60	7	-14.64	0.99	-16.26	-13.02	-0.27	-2.71	14.03	0.40	13.36	14.69	0.22	1.92
R 0.70	7	-14.50	0.65	-15.57	-13.43	0.10	-1.91	13.95	0.41	13.27	14.63	0.41	2.33
N 0.80	7	-14.62	0.83	-15.93	-13.26	0.26	-2.07	13.86	0.46	13.11	14.62	0.22	2.55
O 0.90	7	-14.68	0.90	-16.15	-13.20	0.19	-2.29	13.92	0.43	13.21	14.62	0.10	2.65
1.00	7	-14.76	1.02	-16.44	-13.09	0.13	-2.40	13.95	0.43	13.25	14.65	0.11	2.77

LANDMARK - LT ACROMION (5)													
TIME	SAMPLE	X - CO-ORDINATE			Y - CO-ORDINATE			Z - CO-ORDINATE			DISTANCE		
T	SIZE,N	MEAN	SE	5 PCT	MEAN	SE	5 PCT	MEAN	SE	5 PCT	INCR	MOVED	CUM
0.0	7	-17.23	0.96	-18.80	-15.66	7.99	7.18	11.76	0.59	10.79	12.72	0.0	0.0
0.10	7	-17.54	0.65	-18.61	-16.47	7.79	7.22	11.54	0.43	10.83	12.24	0.43	0.43
F 0.20	7	-17.53	0.52	-18.39	-16.67	7.70	6.93	11.48	0.48	10.70	12.27	0.11	0.53
O 0.30	7	-17.18	0.47	-17.95	-16.41	7.71	7.00	11.62	0.56	10.70	12.54	0.37	0.90
R 0.40	7	-16.78	0.66	-17.86	-15.70	7.73	6.76	11.98	0.61	10.98	12.98	0.54	1.45
W 0.50	7	-16.57	0.93	-18.10	-15.05	7.60	6.68	12.46	0.83	11.10	13.82	0.54	1.99
A 0.60	7	-16.32	0.86	-17.73	-14.91	7.50	6.38	13.14	1.00	11.49	14.78	0.73	2.71
R 0.70	7	-15.91	1.03	-17.59	-14.22	7.34	6.24	14.04	1.46	11.65	16.43	1.01	3.72
D 0.80	7	-15.75	1.04	-17.46	-14.06	7.21	5.85	14.37	1.49	11.92	16.82	0.39	4.11
O 0.90	7	-15.81	1.07	-17.56	-14.04	7.01	5.55	14.26	1.10	12.45	16.07	0.24	4.34
1.00	7	-15.84	1.01	-17.50	-14.17	6.79	5.23	14.35	0.95	12.79	15.92	0.24	4.59
0.0	7	-15.84	1.01	-17.50	-14.17	6.79	5.23	14.35	0.95	12.79	15.92	0.0	0.0
0.10	7	-16.12	0.78	-17.40	-14.85	6.92	5.80	13.83	0.79	12.53	15.13	0.61	0.61
0.20	7	-16.33	1.04	-17.56	-15.19	7.06	5.82	13.25	0.69	12.12	14.38	0.65	1.26
R 0.30	7	-16.33	1.04	-18.04	-14.63	6.94	5.48	12.77	0.60	11.78	13.76	0.49	1.75
E 0.40	7	-16.95	1.24	-18.98	-14.91	7.34	6.34	12.40	0.57	11.47	13.34	0.82	2.57
T 0.50	7	-17.21	1.08	-18.98	-15.43	7.50	6.40	12.16	0.52	11.31	13.02	0.39	2.96
U 0.60	7	-17.37	0.97	-18.96	-15.79	7.52	6.51	11.93	0.53	11.07	12.80	0.28	3.25
R 0.70	7	-17.45	0.90	-18.93	-15.98	7.66	6.97	11.83	0.49	11.03	12.63	0.19	3.43
N 0.80	7	-17.39	0.96	-18.97	-15.81	7.79	6.82	11.77	0.53	10.91	12.63	0.16	3.59
O 0.90	7	-17.32	1.09	-19.11	-15.53	7.80	6.85	11.79	0.52	10.94	12.63	0.07	3.66
1.00	7	-17.23	0.96	-18.80	-15.66	7.99	7.18	11.76	0.59	10.79	12.72	0.21	3.87

LANDMARK - LT GRIP CENTER (17)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE		MOVED CUM
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT	INCR			
0.0	6	4.97	1.57	2.40	7.54	10.97	0.83	9.61	12.33	5.78	0.63	4.75	6.81	0.0	0.0				
0.10	6	4.85	0.97	3.25	6.44	8.87	1.06	7.13	10.62	8.57	1.07	6.92	10.42	3.57	0.0				
0.20	7	4.25	0.91	2.76	5.74	5.83	2.16	2.29	9.38	11.86	1.08	10.09	13.62	4.44	8.02				
0.30	7	2.69	1.66	-0.04	5.42	1.31	3.47	-4.38	7.00	14.82	1.18	12.88	16.76	5.63	13.64				
0.40	6	0.61	2.48	-3.46	4.68	-3.21	5.51	-12.24	5.82	16.95	2.20	13.35	20.55	5.41	19.06				
0.50	5	-0.60	0.84	-1.98	0.77	-4.82	2.07	-8.21	-1.43	16.63	0.23	16.25	17.01	2.04	21.10				
0.60	2	-1.19	0.98	-2.79	0.41	-6.73	2.93	-11.53	-1.93	16.57	0.46	15.92	17.43	2.00	23.10				
0.70	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.10				
0.80	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.10				
0.90	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.10				
1.00	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.10				
0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
0.10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
0.20	2	-0.53	1.59	-3.13	2.07	-6.62	1.71	-9.42	-3.82	17.28	2.38	13.38	21.19	0.0	0.0				
0.30	3	0.27	2.00	-3.02	3.55	-0.25	3.71	-6.33	0.25	16.44	1.65	13.74	19.14	3.62	3.62				
0.40	6	1.47	1.93	-1.69	4.63	-0.25	3.71	-6.33	0.25	16.44	1.65	13.74	19.14	3.56	7.18				
0.50	7	2.58	1.94	-0.61	5.76	3.04	4.71	-4.68	10.77	13.34	1.91	10.20	16.48	3.79	10.97				
0.60	7	3.57	1.88	-0.49	6.64	6.51	5.27	-2.15	15.16	11.32	2.99	6.43	16.22	4.13	15.09				
0.70	7	4.18	1.85	1.15	7.20	8.30	2.86	3.62	12.99	9.90	1.86	6.85	12.95	2.37	17.47				
0.80	7	4.60	1.76	1.71	7.49	10.10	1.70	7.32	12.88	8.14	1.40	5.84	10.43	2.55	20.02				
0.90	7	4.75	1.71	1.95	7.56	11.00	1.35	8.78	13.21	6.56	1.23	4.64	8.69	1.73	21.75				
1.00	6	4.97	1.57	2.40	7.54	10.97	0.83	9.61	12.33	5.78	0.63	4.75	6.81	0.91	22.65				

LANDMARK - LT TROCHANTER (19)

TIME T	SAMPLE SIZE,N	-----X - CO-ORDINATE-----					-----Y - CO-ORDINATE-----					-----Z - CO-ORDINATE-----					DISTANCE				MOVED
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		INCR				
0.0	4	1.47	1.12	-0.37	3.30	7.05	1.02	5.37	8.73	2.94	0.47	2.16	3.72	0.0	0.0						
0.10	4	1.37	1.04	-0.33	3.08	7.07	1.24	5.03	9.10	2.94	0.45	2.21	3.68	0.10	0.0						
0.20	5	1.57	0.88	0.13	3.01	6.89	1.04	5.18	8.59	2.86	0.41	2.19	3.53	0.28	0.38						
0.30	6	1.74	0.81	0.40	3.07	6.92	0.72	5.73	8.10	2.82	0.35	2.25	3.39	0.17	0.55						
0.40	6	1.60	0.89	0.14	3.05	6.84	0.69	5.71	7.97	2.82	0.36	2.24	3.41	0.16	0.78						
0.50	6	1.56	1.02	-0.12	3.24	6.81	0.83	5.46	8.17	2.77	0.36	2.18	3.36	0.07	0.78						
0.60	6	1.73	1.01	0.09	3.38	6.89	1.02	5.22	8.57	2.85	0.38	2.24	3.47	0.21	0.99						
0.70	6	1.86	1.01	0.21	3.51	6.76	0.96	5.18	8.34	2.93	0.38	2.30	3.56	0.20	1.19						
0.80	6	1.83	1.06	0.09	3.58	6.62	0.82	5.27	7.96	2.97	0.38	2.34	3.60	0.15	1.34						
0.90	6	1.95	1.14	0.08	3.81	6.68	0.81	5.35	8.01	2.98	0.40	2.33	3.63	0.13	1.46						
1.00	6	1.93	1.25	-0.12	3.98	6.89	1.10	5.09	8.69	2.94	0.42	2.26	3.62	0.22	1.68						
0.0	6	1.93	1.25	-0.12	3.98	6.89	1.10	5.09	8.69	2.94	0.42	2.26	3.62	0.0	0.0						
0.10	6	1.91	0.90	0.43	3.39	6.76	0.87	5.32	8.19	2.84	0.41	2.18	3.51	0.17	0.17						
0.20	6	1.80	0.98	0.19	3.40	6.72	0.77	5.46	7.97	2.82	0.40	2.16	3.47	0.12	0.29						
0.30	6	1.99	0.90	0.51	3.47	6.73	0.75	5.51	7.95	2.86	0.42	2.18	3.54	0.20	0.49						
0.40	6	1.82	1.01	0.16	3.48	6.65	0.69	5.51	7.79	2.86	0.45	2.12	3.60	0.19	0.68						
0.50	6	1.77	1.02	0.11	3.44	6.72	0.77	5.47	7.98	2.89	0.40	2.23	3.54	0.09	0.77						
0.60	6	1.80	0.99	0.18	3.41	6.75	0.83	5.39	8.11	2.88	0.43	2.18	3.58	0.04	0.80						
0.70	5	1.72	0.84	0.34	3.10	7.13	1.07	5.37	8.90	2.99	0.44	2.27	3.70	0.41	1.21						
0.80	5	1.60	0.90	0.23	3.07	7.11	0.99	5.49	8.74	3.02	0.52	2.17	3.87	0.13	1.34						
0.90	4	1.60	1.12	-0.23	3.44	7.00	1.11	5.17	8.83	2.90	0.45	2.17	3.63	0.16	1.50						
1.00	4	1.47	1.12	-0.37	3.30	7.05	1.02	5.37	8.73	2.94	0.47	2.16	3.72	0.15	1.65						

[illegible]

LANDMARK - LT SHOULDER CENTER (23)																		
TIME T	SAMPLE SIZE-N	-----X-----					-----Y-----					-----Z-----					DISTANCE INCR	MOVED CUM
		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT		MEAN	SE	5 PCT	95 PCT			
0.0	7	-14.88	0.98	-16.48	-13.27	8.27	0.46	7.53	9.02	11.47	0.44	10.74	12.19	0.0	0.0			
0.10	7	-15.00	0.57	-15.93	-14.07	8.02	0.41	7.34	8.69	11.20	0.40	10.55	11.86	0.38	0.38			
0.20	7	-14.80	0.57	-15.74	-13.87	7.93	0.56	7.01	8.86	11.13	0.46	10.37	11.88	0.22	0.61			
0.30	7	-14.36	0.70	-15.51	-13.21	7.97	0.44	7.25	8.70	11.26	0.51	10.42	12.09	0.46	1.07			
0.40	7	-14.01	0.75	-15.24	-12.78	7.81	0.55	6.90	8.72	11.55	0.57	10.72	12.59	0.55	1.63			
0.50	7	-13.57	0.94	-15.12	-12.02	7.70	0.70	6.55	8.85	12.15	0.67	11.55	13.25	0.67	2.30			
0.60	7	-13.09	0.96	-14.67	-11.51	7.27	0.81	5.95	8.59	12.70	0.84	11.34	14.07	0.85	3.15			
0.70	7	-12.74	1.27	-14.82	-10.66	6.91	0.85	5.52	8.31	13.18	0.99	11.56	14.79	0.99	3.84			
0.80	7	-12.67	1.12	-14.51	-10.83	6.54	0.99	4.92	8.16	13.51	1.03	11.82	15.21	0.51	4.34			
0.90	7	-12.68	0.83	-14.05	-11.31	6.44	1.09	4.35	7.92	13.74	0.97	12.15	15.34	0.47	4.81			
1.00	7	-13.00	0.73	-14.21	-11.80	6.23	1.02	4.55	7.90	13.83	0.80	12.51	15.15	0.35	5.16			
2.0	7	-13.00	0.73	-14.21	-11.80	6.23	1.02	4.55	7.90	13.83	0.80	12.51	15.15	0.0	0.0			
3.0	7	-13.26	0.60	-14.24	-12.27	6.38	0.72	5.21	7.56	13.43	0.65	12.36	14.51	0.50	0.50			
4.0	7	-13.46	0.65	-14.52	-12.39	6.78	0.70	5.63	7.94	12.88	0.55	11.98	13.78	0.72	1.21			
5.0	7	-13.61	0.87	-15.04	-12.18	7.20	0.71	6.04	8.35	12.35	0.51	11.53	13.18	0.68	1.93			
6.0	7	-13.97	1.05	-15.61	-12.33	7.48	0.58	6.54	8.43	12.10	0.52	11.24	12.96	0.53	2.42			
7.0	7	-14.37	1.23	-16.38	-12.35	7.66	0.59	6.59	8.73	11.90	0.57	10.96	12.83	0.48	2.90			
8.0	7	-14.77	1.26	-16.83	-12.70	7.74	0.58	6.80	8.69	11.69	0.58	10.74	12.64	0.45	3.36			
9.0	7	-15.09	1.03	-16.79	-13.40	7.95	0.51	7.12	8.78	11.62	0.51	10.79	12.45	0.40	3.75			
10.0	7	-14.98	0.93	-16.50	-13.46	8.26	0.51	7.43	9.09	11.42	0.53	10.56	12.28	0.38	4.14			
11.0	7	-14.90	0.91	-16.39	-13.41	8.29	0.50	7.80	8.77	11.41	0.46	10.65	12.17	0.08	4.22			
12.0	7	-14.88	0.98	-16.48	-13.27	8.27	0.46	7.53	9.02	11.47	0.44	10.74	12.19	0.07	4.28			

LANDMARK - LT ELBOW CENTER (25)

TIME	SAMPLE SIZE,N	-----X - CO-ORDINATE-----				-----Y - CO-ORDINATE-----				-----Z - CO-ORDINATE-----				DISTANCE				MOVED
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	5 PCT	INCR	0.0		
0.0	7	-7.86	1.00	-9.49	-6.23	13.10	0.78	11.81	14.38	1.23	3.25	5.27	7.29	0.0	0.0			
0.10	7	-7.06	0.61	-8.06	-6.07	11.98	0.33	11.44	12.51	1.22	3.53	5.52	7.52	1.40	1.40			
0.20	7	-6.15	0.77	-7.25	-5.06	11.06	0.70	9.91	12.21	1.20	4.35	8.29	1.52	2.06	4.98			
0.30	7	-5.18	0.64	-6.40	-3.97	10.03	1.14	8.17	11.90	1.09	6.04	9.61	2.06	4.98	7.78			
0.40	7	-4.46	0.80	-5.78	-3.15	8.14	1.60	5.51	10.77	0.76	8.36	11.16	2.80	7.78	10.44			
0.50	7	-4.06	1.01	-5.72	-2.40	6.13	1.92	2.98	9.29	11.46	1.14	9.60	13.33	2.66	10.44			
0.60	7	-4.43	0.68	-5.55	-3.32	4.32	2.97	-0.55	9.20	12.27	1.56	9.71	14.84	2.02	12.46			
0.70	6	-4.69	0.87	-6.11	-3.27	4.06	1.44	1.70	6.42	12.74	0.80	11.42	14.06	0.59	13.05			
0.80	4	-4.79	0.76	-6.03	-3.54	4.29	0.90	2.82	5.76	12.54	0.50	11.73	13.36	0.32	13.37			
0.90	4	-4.45	1.25	-6.51	-6.40	3.34	1.17	1.42	5.26	12.73	0.46	11.97	13.49	1.03	14.40			
1.00	4	-4.56	1.12	-6.39	-2.73	2.98	1.24	0.95	5.01	12.89	0.44	12.18	13.60	0.40	14.80			
0.0	4	-4.56	1.12	-6.39	-2.73	2.98	1.24	0.95	5.01	12.89	0.44	12.18	13.60	0.0	0.0			
0.10	4	-4.19	1.23	-6.21	-2.17	3.82	0.85	2.42	5.22	12.49	0.49	11.84	13.15	1.00	1.00			
0.20	6	-3.85	0.84	-5.22	-2.47	5.09	0.94	3.55	6.63	11.55	1.58	12.52	1.61	2.62	2.62			
0.30	6	-3.99	0.55	-6.90	-3.08	7.40	1.25	5.35	9.45	10.12	0.92	8.62	11.63	2.72	5.34			
0.40	6	-4.81	1.25	-6.87	-2.75	9.15	1.62	6.50	11.81	8.95	1.30	6.81	11.08	2.26	7.60			
0.50	7	-5.85	1.51	-8.33	-3.37	11.34	2.10	7.89	14.80	7.37	1.84	4.35	10.40	2.89	10.50			
0.60	7	-6.49	1.84	-9.51	-3.47	11.81	1.19	9.85	13.77	6.89	1.31	4.75	9.03	0.93	11.42			
0.70	7	-7.12	1.38	-9.38	-4.87	12.42	0.82	11.07	13.77	6.19	1.21	4.20	8.17	1.13	12.55			
0.80	7	-7.68	1.29	-8.79	-5.57	12.91	0.81	11.58	14.24	5.52	1.25	3.47	7.58	1.00	13.54			
0.90	7	-7.89	1.22	-9.89	-5.90	13.03	0.73	11.84	14.52	5.32	1.23	3.25	7.39	0.31	13.86			
1.00	7	-7.86	1.00	-9.49	-6.23	13.10	0.78	11.81	14.38	5.27	1.23	3.25	7.29	0.09	13.95			

LANDMARK - LT WRIST CENTER (27)

TIME	SAMPLE	-----X-----				-----Y-----				-----Z-----				DISTANCE		MOVES
		MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	MEAN	SE	5 PCT	95 PCT	INCR	DECR	
0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.20	1	-2.21	0.0	-2.21	-0.21	-5.06	0.0	-5.06	14.52	0.0	14.52	14.52	0.0	0.0	0.0	0.0
0.30	1	-0.14	0.0	-0.14	-0.14	-2.21	0.0	-2.21	13.95	0.0	13.95	13.95	3.57	3.57	0.0	0.0
0.40	2	0.30	1.03	-0.19	1.99	4.03	3.99	-2.51	10.57	12.26	1.14	10.40	6.48	6.48	10.04	0.0
0.50	4	0.16	1.11	-1.66	1.97	5.47	4.79	-2.39	13.33	11.51	2.20	7.90	15.12	1.63	11.68	0.0
0.60	5	0.50	1.26	-1.56	2.56	7.11	4.12	0.35	13.87	10.52	2.29	6.77	14.28	1.95	13.62	0.0
0.70	4	1.01	1.22	-0.99	3.00	9.69	2.83	5.05	14.33	8.50	1.37	6.36	10.84	3.26	16.88	0.0
0.80	3	0.99	1.36	-1.24	3.23	11.37	1.87	8.30	14.44	7.25	1.16	5.36	9.15	2.15	19.03	0.0
0.90	4	1.98	1.67	-0.76	4.71	11.70	1.12	9.85	13.54	6.38	0.48	5.59	7.17	1.35	20.39	0.0
1.00	4	2.11	1.29	-0.00	4.22	12.14	0.73	10.95	13.34	5.72	0.28	5.26	6.19	0.81	21.19	0.0

References

- Alexander, M., and Clauser, C. E., The Anthropometry of Common Working Positions, AMRL-TR-65-73, Aerospace Medical Research Laboratory, Wright-Patterson AFB, Ohio, AD #632241, 1965.
- Amar, J., The Human Motor, E. P. Dutton, New York, 1920.
- Ayoub, M. A., Ayoub, M. M., and Walvekar, A. G., A Biomechanical Model for the Upper Extremity Using Optioninzation Techniques, Human Factors, Vol. 16, No. 16, December 1974, pp. 585-594.
- Ayoub, M. M., Effects of weight and distance travelled on body member acceleration and velocity for three-dimensional moves, Int. J. Prod. Res., 1966, 5, 3.
- Ayoub, M. M., Human movement recording for biomedical analysis, Int. J. Prod. Res., 1972, 10(1), 35-51.
- Beggs, W. D. A., and Howarth, C. I., The Movement of the Hand Towards a Target, Qthy. Jr. of Exp. Psychology Vol. 24, 1972, pp. 448-453.
- Bernstein, N. General Biomechanics (Moscow: Central Institute of Work) (In Russian), 1926.
- Boeing Company, The, (various authors), Cockpit Geometry Evaluation, Vol. I through V, The Boeing Company, Seattle, Washington, 1970.
- Braune, W., Der Gangdes Menschen, Abh. sachs. Akad. Wiss. Math-phys. K., 1895, 21, 153.
- Brewer, R. K., Close Range Photogrammetry - Useful tool in Motion Study, Photogrammetric Engineering, Vol, 28, 1962.
- Chafee, J. W., Andrometry: A Practical Application of Coordinate Anthropometry in Human Engineering, General Dynamics Corporation, Ft. Worth, Texas, FZY-012, April 1961.
- Contini, R., and Drillis, Rudolfs J., Biomechanics, Appl. Mech. Rev., 1954, 7, 49.
- Covert, R. P., The electronic position indicator, J. Ind. Engng, 1965, 26, 225.

- Deivanayagam, S., Ayoub, M. M., and Kennedy, K. W., Paths of Movement of Body Members in Aircrafts Cockpits, Proceedings, Human Factors Society 18th Annunal Meeting, October 1974, Hunstville, Alabama.
- Dempster, W. T., Space Requirements of the Seated Operator, WADC-TR-55-159, Wright Air Development Center, Wright-Patterson, AFB, Ohio, July 1955.
- Dempster, W. T., Gabel, W. C., and Felts, W. J. L., Anthropometry of Manual Work Space for the Seated Subject, American Jr. of Physical Anthropology, Vol. 17, 1959, pp. 289-317.
- Drillis, Rudolfs, J., Chronocyclographische Arbeitsstudien, Psychophysiologische Arbeiten, Vol. 1A (Riga, U.S.S.R.); 1959, The use of gliding cyclograms in the biomechanical analysis of movements, Hum. Factors, 1930, 1, 1.
- Duchenne, G. B., Physiology of Motion, Translated by E. B. Kaphlan and J. B. Lippincott, 1949.
- Eberhart, H., and Inman, V., Fundamental studies of human locomotion and other information related to design of artificial limbs, Rep. natn. Res. Coun. Berkeley 1 (University of California, Berkeley: College of Engineering), 1947, pp. 1-6.
- Fischer, O., Theoretische Grundlagen fur eine Mechanik der Lebenden Korper mit speziellen Anwendungen auf den Menschen, sowie auf einige Bewegungsvorgange an Mashinen (Theoretical Fundamentals for the Mechanics of Living Bodies with Special Application to Man, as well as to some Processes of Motion in Machines), (Leipzig and Berlin: B. G. Teubner), 1906.
- Garrett, J. W., and Kennedy, K. W., A Collation of Anthropometry, AMRL-TR-68-1, Aerospace Medical Research Laboratory Wright-Patterson Air Force Uase, Ohio, 1971.
- Gilbreth, F. B., and Gilbreth, L. M. Applied Motion Study (New York: The MacMillan Co.), 1917.
- Goldman, Jay, Development and Testing of an Electronic Method for Determing Acceleration, Constant Velocity and Deceleration of Body Motions. Ph.D., Dissertation, Washington University.

- Gutewort, W., Die digitale Erfassung Kinematischer Parameter der menschlichen Bewegung, Biomechanics I, edited by J. Wartenweiler and E. Jokl, (New York: Karger, Basel), 1968, pp. 53-60.
- Inman, V. T., De, J. B., Saunders, C. M., and Abbott, L. C., Observations on the function of the shoulder, Jr. Bone & Joint Surgery, Vol. XXVI, No. 1, January 1944.
- Karas, V., and Stapleton, A., Application of the theory of the motion system in the analysis of gymnastic motions, Biomechanics I, edited by J. Wartenweiler and E. Jokl (New York: Karger, Basel), 1968, pp. 192-195.
- Karpovich, P. E., and Herden, E. L., Electro-goniometric study of joints, U. S. Arm, Forces med. J., 1960, 11, 424.
- Kennedy, K. W., Reach Capability of the USAF Population, AMRL-TDR-64-59, Aerospace Medical Research Laboratory, Wright-Patterson AFB, Ohio, 1964.
- Krause, H. E. and Bogner F. K., Recommendations for the Development of a Computerized Biomechanical Man-Model (Combiman), UDR1-TR-71-39, University of Dayton, Dayton, Ohio, 1971.
- Kroemer, K. H. E., Combiman - Computerized Biomechanical Man-Model, AMRL-TR-72-16, Aerospace Medical Research Laboratory Wright-Patterson AFB, Ohio, April 1973.
- Krogman, W. M. and Johnston, E. F., Human Mechanics, Four Monographs Abridged, AMRL-TR-63-123, Aerospace Medical Research Laboratory Wright-Patterson AFB, Ohio, April 1973.
- Liberson, W. T., Une nouvelle application due quartz piezo-electrique: piezoelectricgraphic de la marche at des mouvements volontaires, Le Travail Humain, 1936, 4, 56-61.
- Marey, E. J., Movement (London: Wm Heinemann); 1902, The History of Chronophotography (Washington, D.E.: Smithsonian Institute).
- Merritt, F. S., Mathematics Manual, McGraw Hill Book Co., Inc., New York, 1962.
- Nakamura, J., and Tamura, M., A method of stereophotography for human engineering research, J. Fac. Engng Chiba Univ., 1966, 17,29 (In Japanese).

- Nubar, Y., and Contini, R., A minimal principle in biomechanics, Bull. math. Biophys., 1961, 23, 377.
- Petruno, M. J., A Model for the Motion of the Upper Extremity in Three-Dimensional Space, May, 1973.
- Preston, T. A., Chronocyclography with a pinhole polaroid camera, Photogramm. Engng, 1968, 33, 318.
- Plagenhoef, S. C., Methods for Obtaining Kinetic Data to Analyze Human Motions, The Research Quarterly, Vol. 37, No. 1, March, 1966, pp. 103-112.
- Polnauer, F., Biomechanics, a new approach to music education, J. Franklin Inst., 1952, 254, 24.
- Popova, T., Mogilyanskaya, A., and Bernstein, N., Technics of Investigation of Movements (Moscow) (In Russian), 1934.
- Ramsey, J. D., The quantification of human effort and motion for the upper limbs, Int. J. Prod. Res., 1968, 7, 47.
- Rashevshy, N., A note on energy expenditure in walking on level ground and uphill, Bull. math. Biophys., 1962, 24, 217.
- Raheja, B. G., Effect of Pace on Velocity and Acceleration Patterns of Body Member Motions, Unpublished Master's Thesis, Texas Tech University, Lubbock, Texas, 1966.
- Sinnett, J. M. and Edgington, L. N., Advanced Fighter Concepts Incorporation High Acceleration Cockpits, AMRL-TR-72-117, Aerospace Medical Research Laboratory, Wright-Patterson AFB, Ohio, Vol. V - Crew Station Concept, July 1973.
- Slote, L., and Stone, G., Biomechanical Power Generated by Forearm Flexion, "Human Factors," Vol. 4, No. 5, October, 1963.
- Steindler, A., Kinesiology, C. C. Thomas, Publishers, Springfield, Illinois, 1970.
- Taylor, C. L., and Blaschke, H. C., A method for kinematic analysis of motions of the shoulder, arm and hand complex, Annals of the New York Academy of Science, 1951, 5, 1251-1265.

- Thordsen, M. L., Kroemer, K. H. E., and Laubach, L. L., Human Force Exertions in Aircraft Control Locations, AMRL-TR-71-119, Aerospace Medical Research Laboratory, Wright-Patterson, AFB, Ohio, February, 1972.
- Van Cott, H. P., and Kinkade, R. G., Human Engineering Guide to Equipment Design, McGraw-Hill Company, New York, 1972.
- Von Beckhl, H. J., Protective Tilting Aircraft Seats, NADC-72-063-CS, March, 1972.
- Vukobratovic, N., and Juricic, D., Note on a way of moving the artificial upper extremity, I.E.E.E. Trans. biomed. Engng, 1969, 16.
- Williams, M., and Lisner, H., Biomechanics of Human Motion, W. R. Saunders Co., Philadelphia, 1962.
- Zeller, M., Stereophotogrammetry and studies of movements, Photogramm. Engng, 1953, 29. 654.