ANTHROPOMETRIC SURVEY
OF THE
IMPERIAL IRANIAN ARMED FORCES
VOLUME I
VOLUME I

ANTHROPOMETRIC SURVEY OF THE
IMPERIAL IRANIAN ARMED FORCES,
Volume I.

Data Collection and Analysis.

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COMBAT RESEARCH AND EVALUATION CENTER
IMPERIAL IRANIAN GROUND FORCES
ACKNOWLEDGEMENTS

The authors of this report wish to acknowledge the fine cooperation of the three branches of the Imperial Iranian Armed Forces which enabled the Combat Research and Evaluation Center to collect the essential data for this study. The contribution of the Electronic Computation Center of the Imperial Iranian Armed Forces Comptroller's Department in processing the field data is greatly appreciated.

Special mention is made of the invaluable contribution to this project by Mr. Robert M. White, U.S. Army Natick Laboratories, Natick, Massachusetts, Dr. Edmund Churchill, Consultant, Mr. Herbert W. Kress, Research Triangle Institute Field Party Chief in Iran, and Mr. Walter A. Hendricks, Research Triangle Institute Statistician.
SUMMARY

An anthropometric survey of the Imperial Iranian Armed Forces was undertaken by the Combat Research and Evaluation Center (CREC), at the direction of the Vice Chief of the Supreme Commander's Staff, Lt. General Fereidun Djam, in April, 1968.

The main objective of the survey was to provide the Imperial Iranian Armed Forces a basis for determining how to improve their uniforms and tariffs. At the same time, it would demonstrate the value of CREC as the Iranian center for military-oriented research.

The project officer and research team developed a comprehensive survey plan, which was approved by the Chief of CREC. The team arranged for consultants' services and procured equipment and supplies for the data collection phase of the survey. Data collection began November 20, 1968, and ended March 19, 1969. Of the 9,417 subjects drawn from the three branches of the Imperial Iranian Armed Forces, 3,187 were measured in units located in Tehran and 6,230 in installations in other regions of Iran. This was to obtain, insofar as possible, a broad sample of personnel to represent the various ranges and sizes of ethnic groupings of personnel within the Imperial Iranian Armed Forces.

The data were processed by the Electronic Computation Center of the Imperial Iranian Armed Forces Comptroller's Department, where 47,050 unit record cards were punched and the data transferred to magnetic tape for automated data processing. The statistical analysis includes (1) the mean values, standard deviations, percentiles, and range distributions;
(2) extreme values, and (3) bivariate tables of the data.

Finally, the task of developing recommendations on a standard sizing system, tariffs and pattern designs for the Imperial Iranian Armed Forces has been initiated by the program sponsors, the Advanced Research Projects Agency of the United States Department of Defense, through the United States Army Natick Laboratories.
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The assignment to the Combat Research and Evaluation Center (CREC) of the responsibility for carrying out an anthropometric survey of the Imperial Iranian Armed Forces was undertaken with considerable material support from a team of consultants. Successful accomplishment of the project with this support was judged feasible by the Vice Chief of the Supreme Commander's Staff. The research team developed a methodology for the anthropometric survey, planned and executed the data collection phase, assumed the responsibility for providing the Imperial Iranian Armed Forces with the results of a statistical analysis of the data, and initiated plans for the utilization of the data by the Imperial Iranian Armed Forces.

II. BACKGROUND

The Vice Chief of the Supreme Commander's Staff, being acquainted with and realizing the importance of other anthropometric surveys, believed that an anthropometric survey should be made of the armed forces of Iran. This had never been accomplished before in Iran. He was interested in plans that would revise the present uniforms of the Imperial Iranian Armed Forces, and in issuing ready-made uniforms to officers and noncommissioned officers as well as to recruits and privates. Clothing issued to recruits and privates is manufactured by the IIOF Quartermaster Department Clothing and Boot Factory according to sizing and tariff tables that have been in effect for many years.
The Vice Chief of SCS considered these uniforms below the desired standard of fit, design, and appearance. He desired to improve the present uniform sizing tables and uniform designs, since revised patterns and tariffs were long overdue. He felt that the results of an anthropometric survey of the Imperial Iranian Armed Forces were indispensable to the achievement of this aim.

The mission of performing this research project for the Imperial Iranian Armed Forces was assigned to CREC. At the same time, he recognized that CREC did not have the capability of performing all phases of an anthropometric survey without technical assistance and material support. Reports of previous anthropometric studies were reviewed and a program was designed to meet the needs of Iran. The organization required experience in investigating problems; assistance in the preplanning phase; statistical analysis of the anthropometric data; and development of recommendations addressed to the immediate problems of sizing and tariffs. These services were acquired by assigning consultants experienced in these fields to the CREC team.

III. OBJECTIVES

The objectives of the Anthropometric Survey of the Imperial Iranian Armed Forces were:

a) To provide the Vice Chief, Supreme Commander’s Staff, a basis for decisions related to planned revision of Imperial Iranian Armed Forces uniforms and tariffs.
b) To enhance the capabilities of the Combat Research and Evaluation Center in the planning and execution of military-oriented research projects through the utilization of improved research techniques under a "learning-by-doing" approach.

IV. PROGRAM PLANNING

The Technical Research Plan initially prepared to achieve authorization for the project required more detail before work could proceed efficiently toward the project objectives. Accordingly, some preplanning was necessary for the development of an effective data collection/analysis plan.

A. Preplanning

With the full support of the Chief, ARMISH/MAAG and assisted by the Research Triangle Institute Field Party Chief, Mr. Herbert W. Kress, Mr. Walter A. Hendricks, a Research Triangle Institute senior statistician, undertook a study of the available literature in the United States. He consulted with Mr. Robert M. White, a widely recognized anthropologist at the U.S. Army Natick Laboratories on the development of an Anthropometric Survey of the Imperial Iranian Armed Forces.

Mr. Hendricks traveled to Iran, was introduced to the Chief, CREC and began working with the research officers of CREC who provided pertinent information about the personnel and organizational structure of the Imperial Iranian Armed Forces. On the basis of this preliminary study, a sample design, a list of physical measurements and background data, format of the data recording form, list of anthropometric measuring instruments and equipment, methodology for data collection operations, and data collection instruction manual were developed.
As soon as sufficient information had been accumulated to provide a substantial outline for the data collection phase of the survey, briefings were held for the Vice Chief, Supreme Commander's Staff, and the Chief of the Imperial Iranian Ground Forces Quartermaster Department.

The results of the preplanning study were documented in the form of a proposed research plan in which all essential steps were described and discussed at length. A copy of the plan was coordinated among the consultants for comments and recommendations. Concurrently, Mr. White was engaged to supervise the training of the measuring team personnel in Iran and to advise and assist them at the beginning of data collection operations.

B. Development of Plan

Lt. Col. Dr. Shoja-eddin Noorani was assigned to the anthropometric survey as project officer by the Chief of CREC on May 20, 1968. Dr. Noorani reviewed a recommended approach to developing a comprehensive plan for the entire project. The recommended procedure included a technical research plan and a detailed research plan describing each essential step in the entire study as a task and provided for submission of reports on completion of tasks.

To facilitate the acceptance of these recommendations, a model Technical Research Plan (Appendix A) and Detailed Research Plan (Appendix B) were prepared for the guidance of the project officer. These documents listed tasks and subtasks for which designated individuals would assume responsibility. Incorporated into the plan were the basic steps already accomplished in designing the methodology of the survey and preparing the draft form and manual. Procuring anthropometric instruments and equipment, printing forms and manuals, reducing the data, and providing the results of statistical analysis were tasks assigned to team members. The project officer was responsible for ensuring that the results
of all tasks related to the data collection phase conformed to the needs and circumstances of the Imperial Iranian Armed Forces, preparing and executing the data collection operation, and preparing the final report.

The Chief of CREC approved the plan and directed on September 15, 1968, that it be implemented.

V. DATA COLLECTION PHASE

A. Preparations

1) The Project Officer and the CREC research team reviewed the drafts of the data recording form and data collection instruction manual and modified them in the light of further study. For example, a simple eye test and color blindness check were introduced, the list of civilian occupations was expanded to include "Herdsman", and provision was made to record the number of siblings by sex and age relationship to the subject. As it was found impracticable to prepare a data recording form listing the items in both English and Farsi, separate language versions were prepared and 11,000 copies printed in Farsi and 50 copies in English (Figures 1a, 1b). The Data Collection Instruction Manual (Appendix D) was printed in both languages in parallel format.

2) Ten anthropometers, six small sliding calipers, two spreading calipers, two foot-measuring boxes, two color blindness test booklets, and four dozen steel measuring tapes were procured in the United States and sent to Iran. Three scales, three types of eye test charts, three foot-leveling board kits, and miscellaneous supplies (e.g., pencils, instrument cleaning supplies) were bought in Tehran.
Fig. 1a. Data Recording Form (English) Front
3) On the basis of the design of the sample, the project officer drew up the schedule of units to be visited, indicating dates of travel, periods of measuring operations, and the number and types of subjects requested from each unit (Figure 2).

4) The Project Officer obtained agreement from the Imperial Iranian Ground Forces Medical Department to place seven noncommissioned officers on special duty with CREC to serve as measuring team personnel. The offer of the Medical Department also to provide the services of three medical officers, one from each Army area, was accepted. The Imperial Iranian Ground Forces Quartermaster Department agreed to provide eight noncommissioned officers as team members.

5) The project officer notified the headquarters of the three forces of the schedule of data collection visits.

6) The CREC research team prepared the outline and charts (see Attachment A of the Data Collection Instruction Manual, Appendix D) for briefing installation commanders whose units were scheduled to provide subjects and arranged transportation by aircraft to Birjand, Kerman, Bandar-Pahlavi, Ajabshir, Khorramabad, and Khorramshahr. The project officer obtained clearance for these trips and notified the installation commanders.

7) The project officer prepared the schedule and program for training the measuring team members. Instructional materials included the charts prepared for the briefings and the draft data collection instruction manual.
**Method of Implementation of Anthropometry**

**Plan for Imperial Iranian Armed Forces**

<table>
<thead>
<tr>
<th>Name of Units</th>
<th>Officers</th>
<th>NCOs or Students</th>
<th>Privates or Conscript Students</th>
<th>No. of Companies</th>
<th>Departure Date</th>
<th>Arrival Date</th>
<th>Preparatory Work Days for Measurements</th>
<th>Date of Completion</th>
<th>Return Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>301st Cadre Training Center, Tehran</td>
<td>40</td>
<td>100</td>
<td>990</td>
<td>1130</td>
<td>9</td>
<td>-</td>
<td>Nov 20, 1968</td>
<td>Nov 20, 1968</td>
<td>8</td>
</tr>
<tr>
<td>Doshantappeh Air Base, Tehran</td>
<td>50</td>
<td>700</td>
<td>-</td>
<td>750</td>
<td>-</td>
<td>-</td>
<td>Jan 11, 1969</td>
<td>Jan 11, 1969</td>
<td>5</td>
</tr>
<tr>
<td>Military University, Tehran</td>
<td>19</td>
<td>480</td>
<td>-</td>
<td>499</td>
<td>3</td>
<td>-</td>
<td>Feb 1, 1969</td>
<td>Feb 1, 1969</td>
<td>4</td>
</tr>
<tr>
<td>Pahlavi Brigade No. 2, Tehran</td>
<td>6</td>
<td>160</td>
<td>-</td>
<td>166</td>
<td>1</td>
<td>-</td>
<td>Feb 24, 1969</td>
<td>Feb 24, 1969</td>
<td>2</td>
</tr>
<tr>
<td>Special Forces Unit, Tehran</td>
<td>6</td>
<td>160</td>
<td>-</td>
<td>166</td>
<td>1</td>
<td>-</td>
<td>Mar 1, 1969</td>
<td>Mar 1, 1969</td>
<td>2</td>
</tr>
</tbody>
</table>

Plan Project Officer

Naj. Dr. Shoja-eddin Noorani

November 18, 1968
B. Briefing Visits

Commanders of installations whose units were selected to provide the subjects were briefed in a series of visits in the latter half of October, 1968, by the project officer and CREC Research Team. In sessions attended by unit commanders and staff officers, the project officer outlined the background of the survey, its objectives, methodology of data collection operations, and support to be provided by the installation. During the visits, available facilities were inspected and tentative arrangements were made for measuring space and accommodations.

C. Training of Measuring Team

The three medical officers and the fifteen noncommissioned officers of the Quartermaster and Medical Departments reported to the project officer on November 10, 1968, ten days prior to the beginning of data collection operations. They were instructed on the background and objectives of the survey, familiarized with the measuring instruments and equipment, tentatively assigned to measuring stations, and drilled in the techniques of taking measurements. During the last three days of the training period, instruction and practice sessions were supervised and assisted by Mr. Robert M. White. He continued to work closely with the team during the first three days of actual data collection.

D. Data Collection Visits

The measuring group was accompanied by the CREC Research Team analyst to every measuring site, involving approximately fifty-eight days travel outside Tehran during the four-month data collection period. Special care was taken to maintain the standards set for taking measurements, adhere as closely as possible to the design of the sample, ensure that data recording forms were
properly filled out, and safeguard instruments and forms.

1. **Scope**

Data collection commenced November 20, 1968, and ended March 19, 1969. In accordance with the design of the sample, subjects were drawn from the Imperial Iranian Ground Forces, Imperial Iranian Air Force, and Imperial Iranian Navy and from units stationed in different parts of the country with the aim of securing a broad representation of regional and ethnic types. Of the total of 9,417 subjects, 3,187 were measured in units located in Tehran and 6,230 in installations in other regions of Iran. A translation of the official report of the Chief of CREC upon completion of the data collection visits is attached as Appendix C.

2. **Operations**

The procedures set forth in the Data Collection Instruction Manual (Appendix D) were followed faithfully except in the points noted below under "E. Deviations from the Plan." The project officer worked closely with the liaison officers to ensure a steady flow of subjects to the measuring sites. He checked the measuring team and support personnel at the beginning of each day's operations and made necessary adjustments in duty assignments. Assisted by the three medical officers, the project officer made spot checks of performance by all personnel. As predicted by Mr. White, the measuring team members became highly proficient during the first week of operations and performed very well throughout the survey.
E. Deviations from the Plan

1. Schedule
   a) The original schedule was drawn up on the assumption that military air transportation would be utilized for the trips to Birjand, Kerman, and Khorramabad. Uncertain weather conditions and flight plan cancellations made it necessary to travel to these installations by bus and rail. However, measuring operations proceeded on schedule except at Birjand, where they were begun one day late.
   b) The Air Force base in Shiraz was added to the schedule in order to include flying personnel, since the Imperial Iranian Air Force Headquarters at Doshan Tappeh, Tehran, was unable to provide subjects in this category.

2. Operations
   a) On the recommendation of Mr. White, physical measurement No. 34 (Maximum Forearm-Forearm Breadth) was deleted. It was so nearly a duplication of physical measurement No. 33 (Elbow-Elbow Breadth) that he considered it superfluous. Therefore, the measurer was instructed to omit it and the recorder was instructed to fill the spaces on the data recording from with zeros.
   b) The instructions for taking physical measurement No. 41 (Intereye Maximum) specified the distance between the two scye points. Owing to the difficulty in identifying scye points after the arms were extended forward, this measurement was changed on Mr. White's recommendation to represent the distance between the armpits.
c) The instructions for taking physical measurement No. 69 (Instep Length) specified the distance from the widest part of foot (from the bony protrusion behind the big toe marking the ball of foot) to heel. The measurement was actually taken from the point immediately behind this bony protrusion.

d) Utilization of military serial number, although planned, was not implemented.

e) It was found that some control over the flow of subjects was required by the local units. An unofficial "Station 11" was set up using support personnel to keep a roster of subjects whose forms were completed.

3. Reports

With the exception of the description of the sample, schedule of visits, and report of completion of data collection, reports to the Chief of CREC were informal rather than written as called for in the Detailed Research Plan. The final task of the anthropometric survey data collection and analysis phases is completed with the submission and approval of this report.

F. Lessons Learned and Difficulties Encountered

1) The preparation, review, and approval of planning documents is essential to a project's success.

2) Oral reports and discussions are not legitimate substitutes for formal reporting.

3) Personal contacts were required to gain planning information and to ensure reasonable prompt response to written requests for cooperation. This is a vital part of project management.
4) It was sometimes difficult to arrange the facilities provided for the measuring operations for efficient flow of subjects. The problems of light and heat were serious in a few instances, but workable solutions were found, even where discomfort could not be avoided.

5) Although the measuring team personnel were well-trained and had developed considerable skill in taking measurements, it was inevitable that some instruments became inoperative due to wear and accidental dropping. Enough extra equipment was taken along to ensure that this did not cause any delay.

VI. DATA PROCESSING PHASE

A. Preliminary Data Processing in Iran

1. Negotiations

Upon request, Brig. Gen. Ghofranian, Chief of the Electronic Computation Center of the Imperial Iranian Armed Forces Comptroller's Department, agreed that his organization would perform the preliminary data processing of the anthropometric survey data and prepare them for transmission to the United States. He directed the supervisor of the Electronic Computation Center to cooperate with the CREC team by punching unit record cards from the data recording forms, writing programs for editing and modifying the data as required, and transferring all data to magnetic tape.

2. Processing

The first batch of data recording forms was delivered to the Electronic Computation Center January 19, 1969. Card-punching from all forms was
completed April 26, 1969. Nine computer programs were written by the Electronics Computation Center supervisor to accomplish the processing and transfer to tape, and the tape was processed to develop the required statistics.

B. Statistical Analyses

Four sets of tabulated data have been completed. They are general characteristics of subjects, Summary Statistics and Frequency Tables, Extreme Value Statistics, and Bivariate Frequency Tables. These tabulated results will form the basis for developing master patterns specifying clothing sizes and for determining the relative quantities of sizes to be manufactured.

1. General Characteristics of Subjects

Seventeen tables have been prepared giving the percentage distribution among various categories for subjects examined in the survey. These tables cover variables one through four and six in Figure 1b. In addition, variables five through seventeen in Figure la are included making a total of ninety-seven variables. Note that number of siblings, marital status, languages spoken, and years of school completed allow four, two, three, and five values respectively.

2. Summary Statistics and Frequency Tables

Four sets of tables (Army, Air Force, Navy, and total) have been prepared which provide statistical information on each of sixty-nine body measurements. These measurements are identified as items five and seven through seventy-four in Figure 1b. For each variable there is a mean value, standard deviation, symmetry, kurtosis, and coefficient of variation. In addition, the percentiles and frequencies distribution is given for the sample of subjects. Tabulated results of these calculations can be found in Volume II, Part II. Values are in English system as well as the metric system.
3. Extreme Value Statistics

The extreme values for each of the ninety-seven variables are given in Volume II, Part III. The values are given in metric system only. They represent the ten largest and ten smallest subjects in the sample.

4. Bivariate Frequency Tables

The tables included in Volume II, Part IV represent the frequency relationship between two measurements as indicated for each table. Generally, these body measurements have been correlated to height and weight. In addition, they have been grouped by trunk (weight and height), head, foot, and hand. See the Table of Contents for Part IV for various parameters which have been correlated.

VII. DISCUSSION OF DATA APPLICATION PHASE

Statistical data presented in Volume II will provide the necessary information for developing standards for uniform sizes (number of sizes and dimensions) and tariffs (quantities of each size for procurement). The measurement data would also be available for other human engineering or human factor applications in military research and development. Although this phase is not part of the work completed, it is desirable to discuss the application of the data to the project objectives so as to gain a better understanding of their utility. The statistical data will form the basis for uniform master pattern development in Phase III of this project. No written information is available on the procedures for using the statistical data to make these patterns. This process requires practical, experienced, and considerable personal judgment rather than the application of specific mathematical formulas or procedures.
A. Uniform Standards

1. A Standard Design and Pattern for the Uniform

The design of the uniform should be standardized in all details and a master pattern developed which represents that design. Copies of this master pattern in the form of ozalid reproductions could then be furnished to tailors to control their cutting, or to garment contractors. From this master pattern they could grade other sizes. (Ultimately, all size patterns should be controlled).

2. Standardize Tariffs of Sizes

From the master pattern and the graded patterns for other sizes, tariffs of sizes for use in procuring balanced stocks should be developed. These can be based upon anthropometric data as related to the standard patterns.

3. Standards of Color

A standard piece of fabric for each uniform color should be set under government control. It should be approved as the standard and samples cut off from it to furnish to contractors making the fabric, for matching of shade. It should be carefully preserved from moths or other insects and from dust and dirt. No one should be allowed to cut off pieces except for shade matching. When it is used up, another piece which matches it as closely as possible, should be selected to replace it.

4. Standards of Fabric

Standard fabrics should be selected, preferably fabrics that can readily be made in the textile industry of several countries. Specifications should be prepared which describe these fabrics exactly, with adequate provisions for quality control.
5. **Standard Inspection Practices**

Procedures for inspection should be developed, and facilities for conducting basic tests provided to insure that the specification requirements are met. This will necessitate the use of a small laboratory. The Institute of Standard & Industrial Research textile laboratory is suggested as a possible candidate to accomplish this work.

B. **Technical Control**

Technical competence to carry out development of uniforms should be developed within the Imperial Iranian Armed Forces. The task of standardizing the technical control of the development, production and procurement of uniforms for the Imperial Iranian Armed Forces should be centralized in one agency for efficiency and cost effectiveness.

VIII. **CONCLUSIONS**

The completion of the data collection and analysis phases of the anthropometric survey by the Combat Research and Evaluation Center was successful. This project demonstrates the ability of this organization to develop a detailed research plan and carry it through to completion. It has provided an excellent opportunity to gain data collection and technical analysis experience.

The statistical data developed under this project will prove valuable in developing pattern standards for any revisions to the uniforms of the Imperial Iranian Armed Forces. Moreover, they will prove useful to human engineering tasks associated with the development of equipments and facilities to be used by military personnel.
IX. RECOMMENDATIONS

It is recommended that Phase III involving the utilization of this anthropometric data to standardize uniform sizes and tariffs be completed as soon as possible. Further, that the data be utilized in developing a human engineering data handbook specifically designed to meet the needs of the Imperial Iranian Armed Forces.
APPENDIX A

Technical Research Plan
TECHNICAL RESEARCH PLAN

Anthropometric Survey

of the

Imperial Iranian Armed Forces

by

Major Doctor Shoja-edin Noorani

August 26, 1968
I. REFERENCES

A. Memorandum from the Vice Chief, Supreme Commander's Staff (SCS), to the Advisory Staff (AHI/MAAG), 11 April 1967.

B. Representation approved 2 May 1968 by His Imperial Majesty the Shahanshah Arya Lehr.

C. Memorandum from the Director, J-8 Division, ARINSH/MAAG, to the Chief, Combat Research and Evaluation Organization, 12 March 1968.


II. OBJECTIVE

To conduct an anthropometric survey of the Imperial Iranian Armed Forces that will provide a body of comprehensive data which will serve the immediate purpose of developing standard sizes for ready-made uniforms and which will also be available for any human engineering studies that may be undertaken in the future.

III. BACKGROUND

The officers and NCOs of the Imperial Iranian Army do not receive ready-made uniforms issued by the Quartermaster Department; the uniforms manufactured and stocked by the Quartermaster Department are provided only to private soldiers. It was decided that provision of ready-made uniforms to officers and NCOs should be made contingent upon the establishing of a standard for uniform sizes, which is essential to a program of designing, manufacturing, and distributing individual clothing. There is not at present any such standard in the Imperial Iranian Army.

The experience of other countries indicates that an anthropometric survey of the armed forces provides the necessary data base for such a program. These surveys customarily comprise a greater number and variety of body measurements than those that are required only for the determination of standard uniform sizes; however, these data have many other applications in human engineering and can be included in an anthropometric survey with little additional effort.
In response to the request of the Vice Chief, Supreme Commander’s
Staff, the Advisory Department arranged to have the Research Triangle
Institute bring a consultant to Iran to make a preliminary study of an
anthropometric survey of the Imperial Iranian Armed Forces to be
carried out by the Combat Research and Evaluation Organization. The
consultant, Mr. Walter A. Hendricks, Senior Statistician of the Research
Triangle Institute, arrived in Tehran March 29, 1968. Mr. Hendricks
surveyed the available literature on the subject, gathered pertinent
data on the composition of the Imperial Iranian Armed Forces, and devised
a recommended approach to the accomplishment of the project. He also
outlined the support which the Research Triangle Institute was to offer
to the Combat Research and Evaluation Organization to supplement its
resources and thereby assure the attainment of its objective. Mr.
Hendricks’ report, entitled “Technical Research Plan, Anthropometric
Survey of Imperial Iranian Armed Forces”, is attached hereto as Appendix A.

This project was assigned to the Combat Research and Evaluation Orga-
nization and given high priority by the order of the Vice Chief, the
Supreme Commander’s Staff.

IV. WORK STATEMENT

TASK I. To develop a detailed research plan for accomplishing Tasks
I through XVI as outlined below and submit this plan to the Chief, Combat
Research and Evaluation Organization, for review and approval.

TASK II. To determine the design of the sample to be surveyed from
among the three forces. This task is to be performed by Mr. Walter A.
Hendricks in coordination with the Project Officer. The design is
subject to review and possible modification upon recommendation of the
Project Officer.

TASK III. To determine the types of data to be collected. This task
is to be performed by Mr. Hendricks. His list will be carefully reviewed
by the Project Officer in consultation with his colleagues to assure that
no items which might be particularly pertinent in Iran have been neglected.

TASK IV. To design and print the recording form. The design is to
be drafted by Mr. Hendricks. After review and approval by the Project
Officer, arrangements will be made by RTI, in cooperation with the Combat
Research and Evaluation Organization, to have the required number of copies
printed, either in Tehran or in the United States.

TASK V. To prepare an instruction manual for the measuring team.
This task is to be performed by Research Triangle Institute specialists,
with assistance from the Project Officer and other Combat Research and
Evaluation Organization personnel.
TASK VI. To determine the special instruments needed for anthropometric measurements and to plan for their procurement. This task is to be performed by Mr. Hendricks.

TASK VII: To determine, on the basis of the strengths of the various military installations to be visited, the exact number of personnel to be measured at each installation and the exact designation of the particular administrative units to be selected. This task will be performed by the Project Officer.

TASK VIII. To determine the composition of the measuring team and provide for recruiting its members. This will be accomplished by the Project Officer in consultation with Mr. Hendricks.

TASK IX. To communicate with the appropriate headquarters of the Imperial Iranian Armed Forces, announcing the anthropometric survey project and outlining the cooperation and support that will be required by the Combat Research and Evaluation Organization in accomplishing it.

TASK X. To schedule the visits of the measuring team to each installation and make provision for transportation and accommodations. This task will be performed by the Project Officer.

TASK XI. To brief commanders of installations to be visited and prepare the facilities that will be required by the team. This task will be performed by the Project Officer, accompanied by Major Dr. Radmanesh and an RTI analyst.

TASK XII. To train the measuring team. This will be accomplished by the Project Officer, possibly with the assistance of Major Dr. Radmanesh and of Research Triangle Institute specialists, as required.

TASK XIII. To take the measuring team to each of the selected installations and supervise the measuring and recording of measurements of all subjects in the sample. This task will be performed by the Project Officer with the assistance of Major Dr. Radmanesh and a Research Triangle Institute specialist.

TASK XIV. To determine the extent to which the preparation of the data for processing by electronic equipment can be accomplished in Tehran and the accomplishment of that part of the preparation which is found feasible. The data will then be forwarded to the Research Triangle Institute. This task will be performed by the Project Officer with the cooperation of a Research Triangle Institute analyst working with the Combat Research and Evaluation Organization.
TASK XV. To process the anthropometric data and prepare appropriate statistical tables. This task will be performed by the Research Triangle Institute in the United States.

TASK XVI. To prepare and submit the final report. This task will be performed by the Project Officer and the RET CREO Team representative, acknowledging the assistance supplied by cooperating agencies and individuals.

V. PRINCIPAL RECOMMENDATIONS

A. To attain the objective, it is necessary that support be provided by the three forces.

B. Cooperation of the Research Triangle Institute in developing recommendations and processing the data is essential, since CREO lacks the experience and technical knowledge required.

VI. ADMINISTRATIVE CONSIDERATIONS

A. The commanders of installations where subjects are to be measured will be required to provide assistance such as facilities where measuring can be done, furniture, and personnel to assist the measuring team.

B. The project officer will be absent from Tehran on the Survey approximately sixty days and will require travel authorization for the team to visit six military installations (Ajabshir, Birjand, Kerman, Khorramabad, Bandar Pahlavi, and Khorramshahr.)

C. Since this project was assigned after the beginning of the current year, a supplemental allocation of funds to the Combat Research and Evaluation Organization will be required for the execution of the research.
APPENDIX B

Detailed Research Plan
IMPERIAL IRANIAN ARMY
COMBAT RESEARCH AND EVALUATION ORGANIZATION

Detailed Research Plan

Anthropometric Survey
of the
Imperial Iranian Armed Forces

by

Major Doctor Sh. ja-eddin Noorani
This Detailed Research Plan represents the accomplishment of Task I of the Technical Research Plan for the anthropometric survey of the Imperial Iranian Armed Forces dated August 26, 1968.

**TASK II**

To determine the design of the sample to be surveyed from among the three forces of the Imperial Iranian Army.

**SUBTASK A.** To review the literature available on anthropometric surveys of armed forces personnel carried out in other countries to acquire background information on the design of samples utilized in them. This subtask is to be performed by Mr. Walter A. Hendricks, Senior Statistician of the Research Triangle Institute.

**SUBTASK B.** To survey the literature available and to collect data on the ethnic, educational, linguistic, and occupational composition of the Iranian population from which the personnel of the armed forces are drawn. This subtask is to be performed by Mr. Hendricks in cooperation with officers of the Combat Research and Evaluation Organization.

**SUBTASK C.** To collect data on the structure of the Imperial Iranian Army and on the disposition of units in order to determine the parameters to be considered in selecting the sample. This subtask is to be performed by Mr. Hendricks.

**SUBTASK D.** To formulate a design of the sample to be surveyed on the basis of statistical principles applied to the data assembled under Subtasks A through C. This subtask is to be performed by Mr. Hendricks.

**SUBTASK E.** To review the sampling plan formulated under Subtask D from the standpoint of technical adequacy and operational practicality and recommend modifications that may be necessary or desirable. This subtask will be accomplished by the Project Officer in coordination with the RTI CREO Team representative.

**SUBTASK F.** To submit the design of the sample to the Chief, Combat Research and Evaluation Organization, for approval.
TASK III

To determine the types of data to be collected on each subject in the sample.

SUBTASK A. To review the literature available on anthropometric surveys of armed forces personnel carried out in other countries to acquire background information on the types of data which were found appropriate for the attainment of their objectives. This subtask is to be performed by Mr. Hendricks.

SUBTASK B. To consult available specialists who have had experience in designing and carrying out anthropometric survey plans. This subtask is to be performed by Mr. Hendricks.

SUBTASK C. To formulate the list of data to be included in the survey. This subtask is to be performed by Mr. Hendricks and carefully reviewed by the Project Officer in consultation with his colleagues to insure that items of particular pertinence in Iran have not been neglected.

SUBTASK D. To submit the list of types of data to the Chief, Combat Research and Evaluation Organization, for approval.

TASK IV

To design and print the form for recording the data to be collected on each subject in the sample.

SUBTASK A. To review the literature available on anthropometric surveys of armed forces personnel carried out in other countries and analyze the recording forms to determine features applicable to the survey in Iran. This subtask will be performed by Mr. Hendricks and the Project Officer.

SUBTASK B. To design a form for recording the data to be taken by the measuring team. This task will be performed by Mr. Hendricks, subject to review and approval by the Project Officer.

SUBTASK C. To determine the recording form printing requirements: number of pages, size of form, size of print, weight of paper, number of forms needed, and color of paper. This subtask will be performed by the Project Officer with the assistance of the Research Triangle Institute Team representative.
SUBTASK D. To submit the design of the recording form to the Chief, Combat Research and Evaluation Organization, for review and approval.

SUBTASK E. To arrange for the printing of the recording forms. This task will be performed by the Research Triangle Institute with the cooperation of the Project Officer, either in Tehran or the United States.

TASK V

To prepare an instruction manual for the measuring team.

SUBTASK A. To design the instruction manual on the basis of the data to be collected and recorded. This subtask will be performed by Mr. Hendricks with the assistance of the Project Officer and other Combat Research and Evaluation Organization personnel.

SUBTASK B. To determine the format of the instruction manual, the manner of reproducing it, and the number of copies required. This subtask will be performed by the Project Officer with the assistance of the Research Triangle Institute Team representative.

SUBTASK C. To submit the draft instruction manual to the Chief, Combat Research and Evaluation Organization, for approval.

SUBTASK D. To arrange for the reproduction of the instruction manual. This subtask will be performed by the Research Triangle Institute with the cooperation of the Project Officer, either in Tehran or the United States.

TASK VI

To determine the special instruments needed for anthropometric measurements and to plan for their procurement.

SUBTASK A. To review the literature available on anthropometric surveys of armed forces personnel carried out in other countries and to consult with available specialists who have had experience in planning and executing anthropometric surveys. This subtask will be performed by Mr. Hendricks.

SUBTASK B. To determine the requirements for special instruments in this survey of the Imperial Iranian Armed Forces. This subtask will be performed by Mr. Hendricks.

SUBTASK C. To procure and ship to Iran the special instruments determined under Subtask B to be required. This subtask will be performed by the Research Triangle Institute.
TASK VII

To determine, on the basis of the strengths of the various military installations to be visited, the exact number of personnel to be measured at each installation and the exact designation of the particular administrative units to be selected.

SUBTASK A. To ascertain the number of personnel that will be stationed at each of the installations to be visited at the time of the visit of the measuring team. This subtask will be performed by the Project Officer.

SUBTASK B. To compute, based on the total number of trainees and the part of the sample to be taken from training centers, the percentage of the personnel at each training center that will be measured. This subtask will be performed by the Project Officer and the Research Triangle Institute Team representative.

SUBTASK C. To compute the exact number of subjects to be measured in each training center to be visited, specifying the number of trainees and commissioned and noncommissioned officers by rank. This subtask will be performed by the Project Officer with the assistance of the Research Triangle Institute Team representative.

SUBTASK D. To determine, on the basis of the exact number of personnel to be furnished and on the organization of each installation, the particular units that will provide the subjects for measurement. This subtask will be performed by the Project Officer.

SUBTASK E. To submit the detailed plan for designating the units and exact number of personnel to be measured in each unit to the Chief, Combat Research and Evaluation Organization, for approval.

TASK VIII.

To determine the composition of the measuring team and provide for recruiting its members.

SUBTASK A. To determine, on the basis of the technique for taking and recording the measurements, the number of personnel required to make up the measuring team and their qualifications. This subtask will be performed by the Project Officer with the assistance of Mr. Hendricks.

SUBTASK B. To determine the method of recruiting and arranging to train the measuring team members. This subtask will be performed by the Project Officer in consultation with the Research Triangle Institute Team representative.
SUBTASK C. To submit the report of the composition of the measuring team and proposed recruiting plan to the Chief, Combat Research and Evaluation Organization, for approval.

TASK IX

To communicate with the appropriate headquarters of the Imperial Iranian Armed Forces, announcing the anthropometric survey project and outlining the cooperation and support that will be required from them to accomplish it.

SUBTASK A. To determine the specific actions which will be required on the part of other headquarters of the Imperial Iranian Armed Forces. This subtask will be performed by the Project Officer.

SUBTASK B. To draft the appropriate communication informing the headquarters of the three forces of the required cooperation and support. This subtask will be performed by the Project Officer.

SUBTASK C. To submit the draft communication to the Chief, Combat Research and Evaluation Organization, for approval and transmission.

TASK X

To schedule the visits of the measuring team to each installation and make provision for transportation and accommodations.

SUBTASK A. To determine the number of days that will be required at each specific installation for the accomplishment of the measuring. This subtask will be performed by the Project Officer.

SUBTASK B. To determine the means of travel for the measuring team to visit each specific installation, the amount of travel time required for each trip, the accommodations required en route to each installation, and the costs involved. This subtask will be performed by the Project Officer with the assistance of the Administrative Division.

SUBTASK C. To formulate the schedule of visits by the measuring team to each installation, specifying dates, times of arrival and departure, means of transportation, stops en route, plan for scheduling groups of personnel, and accommodations required for team members. This subtask will be performed by the Project Officer.

SUBTASK D. To submit the schedule to the Chief, Combat Research and Evaluation Organization, for approval.

SUBTASK E. To inform the appropriate headquarters of the schedule of visits.
TASK XI

To brief commanders of installations to be visited and prepare the facilities that will be required by the team. This task will be performed by the Project Officer, accompanied by Major Dr. Radmanesh and the Research Triangle Institute Team representative.

SUBTASK A. To design a format for briefing the commanders of the installations selected for the survey team visits. This will include a description of the objectives and background of the project, a description of the cooperation required from the installation commander in the measuring phase, and possibly a demonstration of the measuring procedure. If feasible, it will include preliminary instruction of the data recording personnel. This subtask will be performed by the Project Officer.

SUBTASK B. To draw up a list of actions required of each installation commander to assist the measuring team in its mission. This will include the provision of data recording personnel, facilities for measuring, transportation of personal and equipment where necessary, and accommodations for the team members. This subtask will be performed by the Project Officer.

SUBTASK C. To schedule the visits to the installation commanders for briefing and making preliminary preparations of the measuring sites. This subtask will be performed by the Project Officer.

SUBTASK D. To submit the briefing plan and schedule of visits to the Chief, Combat Research and Evaluation Organization, for approval.

SUBTASK E. To make the necessary travel arrangements for the Project Officer, Major Dr. Radmanesh, and the Research Triangle Institute Team representative. This subtask will be performed by the Project Officer.

SUBTASK F. To inform the appropriate headquarters of the schedule for the briefings. This subtask will be performed by the Project Officer.

SUBTASK G. To carry out the briefings according to the approved schedule.

SUBTASK H. To report to the Chief, Combat Research and Evaluation Organization, the results of the mission.
TASK XII

To train the measuring team.

SUBTASK A. To outline the plan of instruction to be followed in training the members of the measuring team. This will include an introduction to the background and objectives of the survey, study of the instruction manual, familiarization with the recording form and anthropometric measuring instruments, and practice in measuring subjects. The outline will specify the individuals who will accomplish each phase of the instruction and the time allotted for each phase. This subtask will be performed by the Project Officer with the assistance of Major Dr. Radmanesh and the Research Triangle Institute Team representative.

SUBTASK B. To schedule the training session and make arrangements for any necessary transportation and billeting of the members of the training group. This subtask will be performed by the Project Officer.

SUBTASK C. To submit the plan of instruction and schedule to the Chief, Combat Research and Evaluation Organization, for approval.

SUBTASK D. To carry out the course of instruction, evaluating the capabilities of the members of the training group in order to choose the best-qualified man to be team leader and to eliminate from the group any who prove to be unsuited to the mission. This subtask will be performed by the Project Officer with the assistance of Major Dr. Radmanesh and the Research Triangle Institute Team representative.

SUBTASK E. To report the accomplishment of the training, listing the personnel who qualify as team members and their functions, if specified. This subtask will be performed by the Project Officer.

TASK XIII

To take the measuring team to each of the selected installations and supervise the measuring and recording of measurements of all subjects in the sample. This task will be performed by the Project Officer with the assistance of Major Dr. Radmanesh and a Research Triangle Institute specialist. The subtasks to be accomplished on each visit of the survey group are outlined below:

SUBTASK A. To assemble the members of the survey group at the point of departure (Combat Research and Evaluation Organization Office, railway station, airport, bus station, billets, etc.) and determine that all are present, assure that the anthropometric measuring instruments and equipment are on hand, verify that each measuring team member is properly outfitted for the travel and duty involved, make certain that transportation is available, supervise the group while traveling, report the group to the installation commander upon arrival, provide for the members of the group to check into their assigned quarters, and issue orders to the group specifying the time and place to report for duty. This task will be performed by the Project Officer.
SUBTASK B. To make all preparations for organizing the measuring effort, such as arranging the measuring stations; instructing the data recording personnel; verifying the schedule for bringing subjects to the measuring site; and issuing all necessary instructions to ensure orderly and efficient performance of the work. This subtask will be performed by the Project Officer.

SUBTASK C. To supervise all data-measuring operations, checking for accuracy and thoroughness of performance. This subtask will be performed by the Project Officer, Dr. Radmanesh, and the Research Triangle Institute specialist.

SUBTASK D. To collect all recorded data at the end of each work day and provide for the safekeeping of the records, instruments, and equipment. This subtask will be supervised by the Project Officer.

SUBTASK E. To assemble the members of the measuring team after each work day to offer suggestions, praise, criticism, and recommendations related to their performance and to issue instructions for the following day. This subtask will be performed by the Project Officer.

SUBTASK F. Upon completion of all measuring at the installations, to call upon the installation commander to express thanks for his cooperation and assistance and for the cooperation and assistance of the personnel under his command, to assure that all administrative matters are completed for departure from the installation, and to bid farewell. This subtask will be performed by the Project Officer, accompanied by appropriate members of the group.

SUBTASK G. To report by telegraphic means to the Chief, Combat Research and Evaluation Organization, the completion of the visit and any pertinent information about the survey group. The report should include the time of departure from the installation and expected time of arrival at the next destination. This subtask will be performed by the Project Officer.

TASK XIV

To determine the extent to which the preparation of the data for processing by electronic equipment can be accomplished in Tehran and the accomplishment of that part of the preparation which is found feasible, then to forward the measurement data to the Research Triangle Institute for processing and analysis.

SUBTASK A. To determine the feasibility of entering the data on punched cards and subsequently transferring them from punched cards to magnetic tape in Tehran for forwarding to the Research Triangle Institute. This subtask will be performed by the Research Triangle Institute Team representative with the cooperation of the Project Officer.
SUBTASK B. To report to the Chief, Combat Research and Evaluation Organization, and to the Research Triangle Institute in North Carolina the method selected for preparing the data for transmission to the Research Triangle Institute. This subtask will be performed by the Project Officer and the Research Triangle Institute Team representative.

SUBTASK C. To prepare and transmit the data to the Research Triangle Institute by the best practicable means. This subtask will be performed by the Research Triangle Institute Team representative.

TASK XV.

To process the anthropometric data and prepare appropriate statistical tables.

This entire task is to be the responsibility of the Research Triangle Institute in North Carolina.

TASK XVI.

To prepare and submit the final report.

This task will be performed by the Project Officer and the Research Triangle Institute Team representative, acknowledging the assistance supplied by cooperating agencies and individuals.
APPENDIX C

Preliminary Data Collection Report
1. Introduction.

For the purpose of collecting complete data on body dimensions of the officers, NCOs, and subjects of the IIA to make standard sizes of ready-made uniforms and also for the use of the data collected in human engineering, the Anthropometric Survey Group under the supervision of Dr. Shoja-eddin Noorani, as Project Officer, Mr. Clarence Dillard, RTI Advisor, three physicians and seventeen NCOs from the Quartermaster and Medical Departments of the IIA Ground Forces have finished the mentioned project with the designated units in the time-phase scheduled.

2. Manner of Execution of the Project.

According to the attached detailed appendix, 9,417 persons have been measured in the Imperial Iranian Armed Forces.

<table>
<thead>
<tr>
<th>Officers</th>
<th>NCOs</th>
<th>Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Measurement of officers has been done up to the level of colonel, inclusive, NCOs, and privates as follows:

A. Imperial Iranian Ground Forces. A total of 7,884 men in the training centers and other selected units have been measured.

(1) Conscript Training Centers--total 6,590 subjects

<table>
<thead>
<tr>
<th>Training Center</th>
<th>Officers</th>
<th>NCOs</th>
<th>Trainees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tehran Cadre Training Center, No. 301</td>
<td>31</td>
<td>93</td>
<td>1,018</td>
<td>1,142</td>
</tr>
<tr>
<td>Khorramabad Training Center, No. 302</td>
<td>76</td>
<td>171</td>
<td>1,403</td>
<td>1,650</td>
</tr>
</tbody>
</table>
OFFICERS  NCOS  TRAINEES  TOTAL

Ajabshir Training Center,
No. 303

42  176  1,450  1,668

Birjand Training Center,
No. 304

39  110  1,058  1,207

Kerman Training Center,
No. 305

32  89  802  923

(2) Selected units stationed in Tehran—total 1,294 subjects

OFFICERS  NCOS AND PRIVATES  TOTAL

Central Combat Support Group

33  516  579

Military Academy

35  317  382

2nd Pahlavi Brigade

6  161  167

Special Airborne Unit

7  159  166

B. Imperial Iranian Air Force. A total of 790 men in Doshan Tappeh and the 50th Transportation Station in Shiraz have been measured.

OFFICERS  NCOS AND PRIVATES  TOTAL

73  717  790

C. Imperial Iranian Navy. A total of 743 men of the First Navy District of Mazandaran (Bandar-Pahlavi) and the Second Fleet at the Persian and Oman Gulf have been measured.

OFFICERS  NCOS AND PRIVATES  TOTAL

Bandar-Pahlavi

39  252  291

Khorramshahr

8  444  452

The Navy installation at Khorramshahr could not send more officers for measuring as they were engaged in maneuvers.
The List of IIA Personnel who have been measured by the Anthropometric Group.

<table>
<thead>
<tr>
<th>Name of the Units</th>
<th>No. of Officers</th>
<th>No. of NCOs &amp; Students</th>
<th>No. of Trainees at the Training Centers</th>
<th>Total No. planned</th>
<th>Total No. measured</th>
<th>Total shortage No.</th>
<th>Total extra No.</th>
<th>Extra Nos. measured which were not planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tehran, 301 Cadre Training Center</td>
<td>40</td>
<td>31</td>
<td>9 -</td>
<td>100</td>
<td>93</td>
<td>7</td>
<td>990</td>
<td>1018 - 28</td>
</tr>
<tr>
<td>Birjand, 304 Training Center</td>
<td>40</td>
<td>39</td>
<td>1 -</td>
<td>100</td>
<td>110</td>
<td>10</td>
<td>1000</td>
<td>1058 - 58</td>
</tr>
<tr>
<td>II Navy Force</td>
<td>50</td>
<td>47</td>
<td>3 -</td>
<td>600</td>
<td>696</td>
<td>96</td>
<td>650</td>
<td>743 - 96</td>
</tr>
<tr>
<td>Military Academy</td>
<td>13</td>
<td>35</td>
<td>22 -</td>
<td>320</td>
<td>347</td>
<td>27</td>
<td>333</td>
<td>382 - 49</td>
</tr>
<tr>
<td>Ajabshir, 303 Training Center</td>
<td>56</td>
<td>42</td>
<td>14 -</td>
<td>140</td>
<td>176</td>
<td>36</td>
<td>1400</td>
<td>1450 - 50</td>
</tr>
<tr>
<td>II Air Force</td>
<td>50</td>
<td>73</td>
<td>23 -</td>
<td>700</td>
<td>717</td>
<td>17</td>
<td>750</td>
<td>790 - 40</td>
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<tr>
<td>Kerman, 305 Training Center</td>
<td>32</td>
<td>32</td>
<td>- -</td>
<td>80</td>
<td>89</td>
<td>9</td>
<td>800</td>
<td>802 - 2</td>
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<tr>
<td>Combat Support Training Group</td>
<td>19</td>
<td>33</td>
<td>14 -</td>
<td>480</td>
<td>546</td>
<td>66</td>
<td>499</td>
<td>579 - 80</td>
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<tr>
<td>Ahvaz, 302 Training Center</td>
<td>56</td>
<td>76</td>
<td>20 -</td>
<td>140</td>
<td>171</td>
<td>31</td>
<td>1400</td>
<td>1405 - 3</td>
</tr>
<tr>
<td>2d Pahlavi Brigade</td>
<td>6</td>
<td>6</td>
<td>- -</td>
<td>160</td>
<td>161</td>
<td>1</td>
<td>166</td>
<td>167 - 1</td>
</tr>
<tr>
<td>Special Airborne Unit</td>
<td>6</td>
<td>7</td>
<td>1 -</td>
<td>160</td>
<td>159</td>
<td>1</td>
<td>166</td>
<td>166 - 1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>360</strong></td>
<td><strong>421</strong></td>
<td><strong>27 80</strong></td>
<td><strong>2980</strong></td>
<td><strong>3265</strong></td>
<td><strong>8 293</strong></td>
<td><strong>5590</strong></td>
<td><strong>5731</strong> - 141</td>
</tr>
</tbody>
</table>
3. Time-Phasing for Execution of the Project.

The program was executed according to the designated time-phasing without any delay. It started on November 20, 1968, and was completed on March 20, 1969. After New Ruz holidays of this year, the team spent two days in preparing its report. On March 13, 1969, it was reported to the Ground Forces that the officers and NCOs who were assigned to CREO have finished their missions.


According to the plan, there were ten stations at each installation to complete the recording form for each subject. Seventy-four different measurements with various kinds of special instruments have been taken from the selected persons. After completion of the forms, they were handed to Mr. Clarence Billard, the advisor concerned. In accordance with arrangements made by RTI, the completed forms will be sent to the IIA Electronic Computer Center for recording on punched cards and transfer to magnetic tape. The tape will then be sent to the U.S.A. for analysis by specialists. The result of the analysis related to ready-made standard uniforms will be forwarded to the IIA. It should be noted that the team by its constant effort not only finished its mission according to the time-phased schedule, but also measured a total of 479 persons more than the estimate of personnel to be measured in order to obtain a better result for ready-made standard uniforms in the IIA. This included 53 officers, 285 NCOs, and 141 trainees.

5. Results.

The Anthropometric Survey has been finished by CREO in the IIA.

The completed forms have been sent to the IIA J-7, Electronic Center, by RTI to be punched and recorded on magnetic tape.
The advisors concerned are waiting now to receive the tape and send it to the United States for analysis and to transmit the results to the IIA.

Further actions will be taken by CREO and the final report will then be forwarded.

Chief of CREO

Brigadier General Sdaify
APPENDIX D

Data Collection Instruction Manual
سازمان تحقیقات و آزمایش‌های نظامی‌ساز میراث ایران

دستور العمل جمع آوری اطلاعات

سرکرد دکتر شجاعالدین نورانی

والتفر هندریکس

کلارنس ن. دیلارد

(1347)

IMPERIAL IRANIAN ARMED FORCES

COMBAT RESEARCH AND EVALUATION ORGANIZATION

ANTHROPOMETRIC SURVEY OF IMPERIAL IRANIAN ARMED FORCES

DATA COLLECTION INSTRUCTION MANUAL

Major Dr. Shoja-Eddin Noorani
Walter F. Hendricks
Clarence N. Dillard, Jr.

(1968-1969)

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<td>Station 6</td>
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<td>Station 7</td>
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<td>Station 8</td>
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<tr>
<td>Station 9</td>
</tr>
<tr>
<td>Station 10</td>
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<tr>
<td>Appendix A: Briefing Charts</td>
</tr>
<tr>
<td>Appendix B: Data Recording Form</td>
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ANTHROPOMETRIC SURVEY OF IMPERIAL IRANIAN ARMY

DATA COLLECTION INSTRUCTION MANUAL

Introduction

The purpose of this Anthropometric Survey is to obtain data on body dimensions and related information from a sample of personnel of the Imperial Iranian Armed Forces. The results of the survey will be used in determining standard sizes of ready-made uniforms, in designing various items of equipment, and for other purposes that require detailed knowledge of the physical characteristics of Iranian military personnel. Every effort has been made to design a data collection plan comparable to those for surveys of this kind which have been carried out in other countries.

Although there is nothing particularly difficult about collecting data of this kind, it is imperative that every step be planned and executed in a thorough and methodical manner and that the various measurements be made accurately according to prescribed definitions and instructions. Therefore, a general description of the plan and detailed instructions for taking and recording both the anthropometric data and background information are presented in this Data Collection Instruction Manual.

General Description

The design of the sample which is to provide the data for this study calls for measurements to be taken of the personnel of company-sized units in various installations of the Imperial Armed Forces. The majority of the subjects will be trainees in the four regional Ground Forces training centers and the cadre training center in Tehran. The remainder of the sample will be drawn from regular Ground Force units, the Air Force, and the Navy.
The data collection will be accomplished by an Anthropometric Survey Group composed of a measuring team and medical officers under the supervision of the Project Officer. The Group will carry out a series of visits to designated military installations over a period of approximately four months. Prior to fixing the schedule of these visits, the Project Officer will make a preliminary personal visit to brief the commander of each installation regarding the purpose of the survey, the manner in which it will be conducted, the assistance that will be required from the commander, and the tentative schedule. (The briefing charts are attached as Appendix A). During the briefing visits, the Project Officer will ascertain the strength of the garrison approximately in order to determine the number of subjects it should furnish in accordance with the design of the sample. He will also survey the facilities to be made available at each installation to the measuring team. Following the briefing visits, on the basis of the information provided by the installation commanders, he will fix the schedule for the data collection visits and submit it to the proper headquarters. Two weeks before the beginning of the schedule, he will assemble the measuring team and medical officers and instruct them in their duties.

The procedures to be followed in carrying out the data collection visits are outlined below:

Upon arrival of the Anthropometric Survey Group at each installation, the Project Officer will report to the command of the garrison and confirm the arrangements made during the briefing visit for necessary assistance in organizing the facilities for measurement operations. The first day of each visit will be devoted to preparing rooms, assembling and arranging required furniture, and instructing support personnel provided by the garrison commander. On the second day, measuring operations will begin.

It is estimated that 25 subjects can be
I5 ~

On the basis of a six-hour day, it should be possible to measure 150 subjects a day. Garrison commanders will be requested to make available approximately this number of subjects daily. To minimize waiting time at the measuring site, it will be requested that subjects report to the Project Officer in successive groups of about 50. As each group arrives, the measuring procedures will be explained so that they can readily understand and follow the instructions of the measuring team personnel. They will then be told to remove all their clothing except undershorts and move one by one to the first measuring station.

Measurement data will be recorded by support personnel of the host installation on Data Recording Forms described below.

After each subject has been processed, he will be directed to return to the point where he left his clothing. There he will dress and rejoin his group.

Anthropometric Survey Group

The Anthropometric Survey Group will consist basically of the Project Officer, three Medical Officers, and a measuring team of ten noncommissioned officers. Five noncommissioned officers will be included as reserve members of the measuring team, and one R.T.I. analyst working with J-6, ARMISH/MAAG, will accompany the Group.

The Anthropometric Survey Group will assemble at the Combat Research and Evaluation Organization two weeks prior to the beginning of data collection visits. The Project Officer will train the medical officers and members of the measuring team in their duties, inform them of the schedule, and supervise arrangements for travel.

The duties of the Medical Officers will include administering tests for normal vision and color perception and supervising measuring team members and
support personnel. In addition, they will assist the Project Officer in instructing subjects prior to measuring, in checking completed data recording forms, and in expediting measuring operations as required.

The members of the measuring team will be responsible for taking dimensions of each subject with appropriate anthropometric instruments and calling out the numbers to the support personnel who serve as data recorders. On the first day of the data collection visit, the data recorders will be introduced to the measuring team members to whose stations they are assigned. The measuring team members will explain procedures and give recorders an opportunity to become familiar with the Data Recording Form. They will ensure that the data recorders enter these figures in the proper spaces of the data recording forms legibly and accurately. They will also be responsible for care and cleaning of the anthropometric instruments issued to them.

Measuring Team Operations

Each member of the measuring team will be assigned to one of ten numbered stations. At each station, a specific item will be covered. The number and kind of these items have been determined on the basis of the kind of instrument required, the kind of measurement information required, and the time required to take the measurement.

To move subjects through the various stations in an uninterrupted flow, it is important that the time each subject spends at each of the ten stations be about the same. It is also important that the team member manning each station not be required to make more than a few, if any, changes in the instrument he must use, the motions he must perform in taking measurements, or the position he has the subject assume.
Station 1 is engaged mostly in asking questions of the subject. For that reason, he serves as his own data recorder. Since the other nine team members are engaged in making physical measurements, they could not perform efficiently if they were required also to record the measurements. Therefore, data recorders from among the support personnel provided by the installation being surveyed will be assigned to Stations 2 through 10 to record the measurement figures as they are called out by the measurer.

The team member who mans Station 1 will also serve as Team Leader. During measuring operations, team personnel will promptly call upon the Project Officer and medical officers for guidance and assistance whenever any problem arises.

**Data Recording Form**

The Data Recording Form (see Appendix B) is divided into ten sections, corresponding to the ten measuring stations. The procedure of recording the information elicited at Station 1, which is almost entirely background data, differs from that in recording measurements taken at Stations 2 through 10.

Under Station 1, the form provides spaces for check marks to indicate appropriate responses or observations for items Nos. 1, 8, 9, 10, 11, 13, 14, 16, 17, and 18 (except for "Weight" under item No. 18, which is recorded in kilograms). This makes the form a bit longer, but it has several advantages. First, it saves time in recording answers. Second, it eliminates the need for translation and coding, since the punched card code appears beside the space for the check mark.

Whenever a response must be recorded as "Other", a line is provided for the exact information obtained, although the punched card code remains unchanged.

Under item No. 2, a block of five
squares is provided for writing in the serial number of the form. However, it is planned to use a number stamping machine and to place it on the line above the squares for legibility. Under item No. 3, a line is provided for the name of the subject.

Under items Nos. 4, 5, 6, 7, 12, and 15, and "Weight" under item No. 18, squares are provided for writing the numbers obtained.

Under the remaining nine stations, 2 through 10, each measurement is recorded in blocks of four squares. All values are in millimeters. Each digit of the numbers recorded will be written in the proper square. Zeroes will be added to the left if required to fill all columns.* Although the Data Recording Form is designed so that the code number of the survey sites can be combined with the serial numbers of the forms to form a unique number, this device will not be utilized in this survey. All forms in the entire survey will be numbered consecutively from "1".

Detailed Instructions

Station 1

1. Location of Unit: Place a check mark beside the name of the place where the measuring site is located.
2. Serial Number of Form: Stamp the serial number with the numbering machine on the line immediately above the squares.
3. Name of Subject: Enter full name of subject.
4. Military Serial Numbers: If unknown, leave this item blank.
5. Age: Record the age of the subject at his last birthday, in years.
6. Siblings: Ask the subject the following four questions: "How many older brothers do you have?"

* Farsi numbers are written from left to right in the same manner as English numbers.
7. Marital Status: Ask the subject the following questions:

- "Do you have a wife?". If the answer is "Yes", ask "How many?" and record the number. If the answer is "No", enter zeroes.

- "Have you divorced a wife?". If the answer is "Yes", ask "How many?" and record the number. If the answer is "No", enter zeroes.

8. Place of Birth: Ask the subject: "Where were you born?" Place a check mark in the square beside the province or chief gubernator indicated by the subject's response. If he was not born in Iran, place a check mark under "Foreign" and write the name of the country.

9. Place of Residence when Entering Military Service: Ask the subject: "In what province were you living at the time you entered military service?". Place a check mark in the square beside the province or chief gubernator named by the subject. If he was not living in Iran when inducted, place a check mark in the square under "Foreign" and write the name of the country.

10. Ethnic Derivation: Ask the subject: "Do you belong to a city or to a tribe?". If he does not indicate a tribal affiliation, place a check mark beside the square corresponding to "Nontribal". Otherwise, indicate the tribal or minority affiliation. If the response must be recorded as "Other", write the name of the ethnic group on the line below the word "Other".

11. Languages Spoken, in Order of Fluency: As the subject the following questions:
“What languages do you know?” If he names more than one, ask “Which do you speak better?” and record the answers by placing a check mark in the square beside the appropriate language under the appropriate heading, “1st”, “2d”, or “3d”. If a language must be recorded as “Other”, write the name of it on the line beside “Other”. If the subject is fluent in only one language, only the column headed “1st” should contain a check mark with the other two left blank. If he is fluent in only two languages, the third column will be left blank. No more than three languages will be recorded. There should be only one check mark in a column. If a subject is equally fluent in more than one language, they should be ranked according to relative frequency of use, the one used most frequently being checked in the first column, and so on.

12. Years of School Completed: Ask the subject the following questions:

“Did you attend a maktab?” If so, “How many years?” “Did you attend elementary school?” If so, “How many years?” “Did you attend a university?” If so, “How many years?” This will include years of post-graduate study in professional institutions such as law school or medical school. “Have you attended other schools beyond high school?” If so, “How many years?” These schools will include all those providing training of a subprofessional or vocational nature, such as secretarial schools or industrial training schools. Record the number of years in the appropriate squares, entering zeroes when the answer is “None”.

13. Main Occupation Before Entering Military Service: Ask the subject “What was your main occupation before entering military service?” Record the answer by a check mark beside the appropriate category. The kinds of employment listed are defined briefly as follows:
Professional or Technical: Members of the learned professions whose duties require a college or university education, such as doctors, lawyers, engineers, and college-trained teachers.

Office Worker: Persons who do "desk work" in business and government offices which may or may not require specialized training or experience, but which definitely does not require a college or university education. Examples are book-keepers, secretaries, clerical workers, and bank tellers.

Sales and Merchandising: Persons directly concerned with buying and selling merchandise for profit, such as store owners or managers, buyers, salespersons, and peddlers. It does not include persons engaged in the manufacture of goods for sale, such as handcrafts, even though they sell the products themselves.

Sales and Merchandising: Persons directly concerned with buying and selling merchandise for profit, such as store owners or managers, buyers, salespersons, and peddlers. It does not include persons engaged in the manufacture of goods for sale, such as handcrafts, even though they sell the products themselves.
enrolled in schools, or had recently completed part or all of a course of study at a school, at the time of entering military service.

Herdsmen: All persons who migrate with herds and flocks between seasonal pastures and derive their livelihood thereby.

Other Employment: All persons whose occupations cannot reasonably be placed in any of the preceding categories, as well as persons who had no gainful occupation whatever.

14. Service: Indicate by a check mark whether the subject is a member of the Ground Forces, the Air Force, or the Navy.

15. Length of Service: Record the number of years and months the subject has been a member of the armed forces.

16. Rank: Indicate the subject's rank by a check mark. If he is a member of the Ground Forces or Air Force, find the rank listed in the right-hand column. If he is a member of the Navy, find the rank listed in the left-hand column.

17. Military Duty (Except Trainees): As the heading specifies, this part does not apply to Trainees. For personnel above the grade of Trainee, make a check mark in the appropriate square under the Service of which the subject is a member.

18. Anthropometric Data: The six items of information to be recorded here are assigned to Station 1 to lighten work at the other stations, where measurements are taken.

   (1) Ask the subject: "Do you ever wear eye glasses?". Indicate the answer by a check mark in the appropriate square.
   
   (2) Test the subject for apparent short-sightedness by means of a standard eye chart. Indicate by a check mark in the appropriate square whether vision appears to be normal or abnormal.
(3) Test the subject for normal color perception by means of Ishihara's Tests for Colour-Blindness. Indicate the result by a check in the appropriate square.

(4) Ask the subject: "Are you right-handed or left-handed?". If the subject cannot answer clearly make the following request: Please pretend that you are throwing rocks at a dog," and observe which hand is favored. Record the result by a check mark in the appropriate square.

(5) Weight: Platform scales are placed conveniently near the team member's table. The subject is asked to step onto the scales and the team member reads and records the weight to the nearest whole kilogram.

(6) Toe Length: While the subject is standing on the scales, observe whether the first or second toe of the right foot protrudes the farther. Record the result by a check mark in the appropriate square.
Station 2
Standing Measurements
with Anthropometer

7. Height (Stature)
Subject stands erect. Measure maximum distance from floor to top of head.

8. Cervical Height
Subject stands erect. Measure vertical distance from floor to base of neck (protrusion of the spinous process of the seventh cervical vertebra) with anthropometer parallel to the spinal column along the back.

9. Shoulder Height
Subject stands erect. Measure vertical distance from floor to outer edge of right shoulder (acromion).
10. **Waist Height**

Subject stands erect. Measure vertical distance from floor to top of right hip bone.

11. **Crotch Height**

Subject stands erect. Measure vertical distance from floor to crotch.

**NOTE:** The scale on the anthropometer indicates the distance from the lower edge of the anthropometer arm. Therefore, ten (10) millimeters (the width of the arm) must be added to the recorded figure to obtain the true Crotch Height.

12. **Knee Height**

Subject stands erect. Measure vertical distance from floor to top of right kneecap.
13. **Calf Height**

Subject stands erect. Measure vertical distance from floor to point of maximum calf circumference on right leg.

14. **Functional Arm Reach Forward**

Subject stands erect with his shoulders pressed against wall, right arm extended forward, palm down, and top of thumb and forefinger pressed together, forming an oval. Measure perpendicular distance from wall behind shoulder to tip of thumb.

15. **Coat Length**

Subject stands erect, arms and fingers hanging down. Measure vertical distance between base of neck at right shoulder and first knuckle of right thumb.
16. **Hip Breadth, Standing**

Subject stands erect. Measure maximum distance across the hips.

17. **Chest Breadth**

Subject stands erect and breathes normally. Measure breadth of chest at nipple level.

18. **Chest Depth**

Subject stands erect and breathes normally. Measure depth of chest from right side at nipple level.

19. **Hand Measurements with Small Sliding Caliper**

Subject stands erect with right hand extended forward, palm up and fingers straight. Measure distance from wrist (navicular) to tip of middle finger.

B- Hand Measurements with Small Sliding Caliper
20. Palm Length

With right hand in same position as for No. 19, measure distance from wrist to base of middle finger.

21. Hand Breadth

With right hand in same position as for No. 19 and No. 20, measure maximum breadth across base of fingers.

Station 4

Sitting Measurements with Anthropometer

Subject sits erect on flat-topped table or bench with his feet on a firm flat footrest. The height of the footrest should be adjusted by placing enough flat boards under the subject’s feet so that his knees are at right angles.

22. Arm Reach Upward

Subject extends right arm and fingers upward. Measure vertical distance from seat to tip of middle finger.
23. **Sitting Height**

Measure vertical distance from seat to top of head.

24. **Eye Height**

Measure vertical distance from seat to level of inner corner of right eye. It is not necessary to touch the latter point with the instrument, since it can be located by sighting along the anthropometer arm.

25. **Mid-Shoulder Height**

Measure vertical distance from seat to point midway between neck-shoulder junction and top of outer edge of right shoulder.

26. **Shoulder Height**

Measure vertical distance from seat to top of outer edge of right shoulder.
27. **Knee Height**
Measure vertical distance from footrest to top of right knee.

28. **Popliteal Height**
Measure vertical distance from footrest to underside of right knee.

**NOTE:** The scale on the anthropometer indicates the distance from the lower edge of the anthropometer arm. Therefore, ten (10) millimeters (the width of the arm) must be added to the recorded figure to obtain the true Popliteal Height.

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**Station 5**

**Sitting Measurements with Large Sliding Caliper**

Subject sits erect on flat-topped table or bench with his feet on a firm flat footrest. The height of the footrest should be adjusted by placing enough flat boards under the subject's feet so that his knees are at right angles.
29. Arm Reach Forward

Subject's right arm and fingers are extended forward parallel to the floor. Measure distance from back of right shoulder (greatest bulge of trapezius) to tip of middle finger.

30. Shoulder-Elbow Length

Subject's right upper arm hangs down at his side, forearm is extended forward at right angles. Measure the vertical distance from the edge of right shoulder to right elbow.

31. Forearm-Hand Length

Subject's right upper arm hangs down at his side, forearm and fingers extended forward at right angles. Measure the distance from the elbow to the tip of the middle finger.

32. Shoulder Breadth

Subject's upper arms hang down at his sides and forearms are extended forward at right angles, elbows against the body. Measure the maximum distance across the upper arm muscles.
33. **Elbow-Elbow Breadth**

Subject is in the same position as for No. 32. From behind the subject, measure the maximum distance across the elbows.

34. **Maximum Forearm-Forearm Breadth**

Subject is in the same position as for No. 32 and No. 33. Measure the maximum distance across the forearms.

35. **Hip Breadth, Sitting**

Measure maximum distance across the hips.

36. **Buttock-Knee Length**

Measure distance from rear projection of right buttock to front of right knee cap.
37. **Buttock-Popliteal Length**

Measure distance from rear projection of right buttock to back of right knee.

**NOTE**: The scale on the anthropometer indicates the distance from the lower edge of the anthropometer arm. Therefore, ten (10) millimeters (the width of the arm) must be added to the recorded figure to obtain the true Buttock-Popliteal Length.

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**Station 6**

**Surface Measurements with Tape Following Contours of Body, Subject Standing**

38. **Back-Waist Length**

Measure along spinal crease of back from base of neck to level of waist (top of hip bones).

39. **Shoulder Length**

Measure along top of right shoulder from junction of neck to level of waist (top of hip bones).
40. **Intersosseous Breadth**

Subject's arms are hanging down. 
Measure across back between armpit creases (soye points).

41. **Intersosseous Maximum**

Subject's arms and hands are extended fully forward. Measure minimum distance across the back between the soye points.

42. **Sleeve Inseam**

Subject's arms and fingers are straight and right arm is held away from the body at a 45-degree angle. Measure distance from front edge of right armpit to notch between thumb and wrist.

43. **Sleeve Length**

Subject's upper arms are raised and pointing horizontally, forearms crooked at a 90-degree angle, and hands making fists. Place the two fists against each other in front, knuckles touching. Measure from spinal crease, over the right elbow, to right wrist (middle of styloid process).
Station 7

Circumference Measurements with Tape, Subject Standing

44. Head
Measure maximum circumference at forehead, above ears.

45. Neck
Measure circumference just below top of Adam's apple.

46. Shoulder
Measure circumference of upper body, over bulges of upper arm muscles.
47. Chest

Subject is breathing normally. Measure chest circumference at nipple level.

48. Waist

Circumference at level of navel with abdomen relaxed. Place tape around waist with abdomen "sucked in". Ask subject to relax ("let it out") and loosen tape as abdomen is relaxed. Read circumference when fully relaxed.

49. Hip

Measure circumference around hips at level of greatest buttock protrusion.

50. Vertical Trunk

Measure vertical circumference through the crotch, over the right buttock, and over the midpoint of the right shoulder.
Station 8

Additional Circumference Measurements with Tape, Subject Standing

51. Arm Circumference

Subject's right arm is hanging straight down. Measure vertical circumference with tape as high as possible under right armpit and passing over acromion (knob on top of outside edge of right shoulder).

52. Upper Arm

Measure circumference of right upper arm midway between shoulder and elbow with biceps relaxed.

53. Biceps

Measure circumference on right arm with biceps flexed and hand making a fist.
54. **Forearm**
Measure maximum circumference around right forearm with muscle flexed and hand making a fist.

55. **Wrist**
Measure circumference of right wrist above protrusion of the wristbone.

56. **Hand**
Measure circumference of right hand around base of fingers.

57. **Crotch-Thigh**
Measure circumference of right thigh just below buttock crease.
58. Lower Thigh
Measure circumference of right thigh just above kneecap.

59. Calf
Measure on right leg at point of greatest calf circumference.

60. Ankle
Measure on right leg at point of least circumference above ankle bone.

Station 2
Head Measurements with Large Sliding Caliper, Small Sliding Caliper, and Spreading Caliper

61. Head Height
Measure vertical distance from notch in front of right ear (tragion) to top of head with large sliding caliper.
62. **Head Length**

Measure maximum length of the head from slightly above the eyes on the forehead to the back of the head with the spreading caliper.

63. **Head Breadth**

Measure, from behind subject, maximum breadth of head (usually above and behind the ears) with the spreading caliper.

64. **Face Breadth**

Measure maximum breadth between the cheekbone bulges with the spreading caliper.

65. **Tragion Diameter**

Measure distance from the cartilaginous notch (tragion) of the right ear to same point of the left ear with the spreading caliper.
66. **Face Length**

Measure vertical distance between the tip of the chin and the depression between the eyes at the top of the nose with the small sliding caliper.

67. **Interpupillary Distance**

With subject's eyes looking straight ahead, measure distance between the centers of the pupils of the two eyes with the small sliding caliper.

**Station 10**

**Foot Measurements**

Subject Standing on an Elevated Platform Such as a Table, Bench or Large Firm Box

68. **Foot Length**

Subject's right foot is placed in foot box with heel touching the end barricade and with right edge of widest part of foot touching the side barricade. Measure the maximum length of the foot from back of heel to tip of longest toe.
69. Instep Length
Subject's right foot is in same position in foot box as for No. 68. Measure distance from back of heel to widest part of foot (ball of foot).

70. Foot Breadth
Subject's right foot is in same position in foot box as for No. 68 and No. 69. Measure maximum breadth of foot at ball of foot.

71. Heel Breadth
Subject stands on flat surface. Measure maximum breadth of right heel behind and below the projections of the ankle bones with the small sliding caliper.

72. Ball-of-Foot Circumference
Subject stands on flat surface. Measure maximum circumference of right foot at ball of foot with tape.
73. **Heel-Ankle Diagonal**

Subject stands on flat surface. With tape, measure the diagonal circumference around the right ankle, around rear tip of the heel, and over instep where foot joins the leg.

74. **Instep Circumference**

Subject stands on flat surface. With tape, measure the circumference over the instep of the right foot, where the foot joins the leg, and under the arch.
ATTACHMENT A
ANTHROPOMETRIC SURVEY OF
IMPERIAL IRANIAN ARMED FORCES
BRIEFING CHARTS
برنی اندازه‌گیری اخوان
شریعت مسالمت‌آمیز ایران

سازمان شیعه و ارزیابی اخوان
سکوت در انتقاد امام خمینی

افسر بروزه
الف ۲
۲-۲
خلاصه برنامه‌تویجی

مقدمه
شرح نهایی
سال قطعات
حدود برگ
اطلاعات غیر اطلاعات
بند
لغزدگی برگ
رمز تعریف
سر و تخت
سالنداری
ویژه‌سازی
بررسی و تحلیل
نمره‌های جدول
نمره‌های دیگر
الف
هدف‌ها

اجرای برنامه‌بری اندازه‌گیری اندام‌نوری سطح شاهنشاهی ایران

بمنظور جمع‌آوری اطلاعات جامع نسبت به مدارک زیر:

۰ از اطلاعاتی که جمع‌آوری گردید، از همه‌جانان حاصل شوند که

اندازه‌گیری استانداردی را برای پیش‌گزاری انجام تیم‌های پزشکی.

۰ برای اینکه گیت‌های اطلاعات کلیتو اندازه‌گیری

مربط بی‌بیسی‌بی‌بی انسانی را در اختیار دارایی‌های

راشته‌شناسی ایران قرار دهید.

الف ۴
سابقه مطالعه

تصمیم دبیرخانه انقلاب اسلامی در خصوص آلودگی جنگل‌ها و کوه‌های ایران.

هم و جوا اندازه‌ای استان‌ها و واحدهای جغرافیایی شاهنشاهی ایران.

اطلاعات دربار، مکاتبه‌ای انسانی شال‌اندازه‌ای استان‌ها و واحدهای جغرافیایی موجود در سیاست‌های اندازگیری اسلام.

فعالیت‌های انسان‌گرایی و انسان‌گیری برای اندازه‌گیری اندام و دسته‌های سالم شاهنشاهی ایران را ارائه می‌کند.

پیوسته‌ی نیرویی تقدم بسیاری از این اقدامات و اعمال در زمینه قطعات مبتنی بر رشد و حمایت مصری اندازه‌گیری شود.

اطلاعات دربار از کمیته‌های مطالعه و تحقیقات جغرافیایی برای تحلیل نویشده.

الف ۵
طرح نمونه‌گری
تاریخ ۱۳۸۸ اسفند تابستان ۱۴۰۰

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الف: ۶
حمله مورشیز

اطالق زیرگی که پس از ۱۵ آفتاب مصرف شده و از دست داده شده کافی خواهد که در صورت اعتماد به اینکه مناسب است اصطلاح می‌گیرد.

صاقل با یک لامپ زیرگی از بیایده ۳ متر در مسیر که به شدت ۱۵ متر نور نشان می‌دهد.

امکانات می‌گیرند است مصرف دارد و صاقل برای انجام کار می‌گیرد.

میزان صدای

اطالق اصالت که پس از ۱۵ آفتاب

اطالق نشان که پس از ۱۵ آفتاب گیره دلالی باشد ۱۵ فقر

اطالق‌های الکترونیکی ۲ میلی‌گرم گیاه خوراکی آن بایستی پاک شود در صاقل

نیم‌تاریخ (در کاهه، دو و اکثریت صاقل‌ها، یک، سه هزار و ۴)

یکی از میزان‌های انرژی را به روز رساند و آن برای پاک‌کردن صاقل

در کاهه (در کاهه، ۲۰)

امیر کیت میزان‌های افراشته، ایمپریال دلالی با پاک‌کردن صاقل

صدای ۱۰ صدای دلالی با پاک‌کردن صاقل

گریز جلالی با چکت وارد ۱۰ فقر
اندازه‌ها

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۲. صفحه‌ای و چاپ‌شده
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۴. خلاصه‌ای تحت
۵. اطلاعات و اطلاعات
۶. اطلاعات و اطلاعات
۷. اطلاعات و اطلاعات
۸. اطلاعات و اطلاعات
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۱۳- بلندی تاشان

۱۵- طول دست کوهی

۱۶- لبه دست کوهی

۱۷- بلندی تاشکو

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ATTACHMENT B

ANTHROPOMETRIC SURVEY OF

IMPERIAL IRANIAN ARMED FORCES

DATA RECORDING FORM
<table>
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<th>راهبردی و اجرایی</th>
<th>برنامه‌ریزی و اتصال</th>
<th>گزارش و گراش</th>
<th>داده‌گیری و جمع‌آوری</th>
<th>پیشرفت و ضرایب</th>
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<th>نتایج و نتیده‌بندی</th>
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* متن فرم در لیست نمایش داده می‌شود.