

CALIFORNIA  
COMMISSION ON PEACE OFFICER  
STANDARDS AND TRAINING

MEDICAL DECISION MAKING IN LAW ENFORCEMENT:  
Establishing Guidelines for the  
Medical Screening of Patrol Officer Candidates

Final Report

John W. Kohls, Ph.D.  
Chief of Personnel Research

1977

48821

## TABLE OF CONTENTS

	Page
INTRODUCTION . . . . .	1
MEDICAL DECISION-MAKING. . . . .	4
MEDICAL SCREENING. . . . .	6
Definition of the Medical Examination . . . . .	6
Current Practice Regarding the Medical Examination. . . . .	7
Conclusions Based Upon Statewide Mailout. . . . .	7
Conclusions Based Upon On-Site Visits . . . . .	9
Concept of the Medical Examination as a Screening Device . . . . .	10
Medical Screening and Job-Relatedness . . . . .	10
The Criteria of Job-Relevance . . . . .	10
The Medical Examination as One Component of an Occupational Health Program . . . . .	12
METHOD . . . . .	13
Job-Relatedness . . . . .	13
Procedure . . . . .	15
Step 1: Project Design . . . . .	15
Step 2: PERT Chart . . . . .	16
Step 3: Information Gathering. . . . .	16
Step 4: Compilation of Medical Diseases. . . . .	17
Step 5: Assembling the Medical Decision-Making Panel . . . . .	17
Step 6: Job Analysis . . . . .	18
Step 7: Medical Training and Test Meeting and Revision of the Process . . . . .	18
Step 8: Classification of Medical Conditions . . . . .	19
Step 9: Meeting Preparation. . . . .	19
Step 10: Decision-Making Meetings . . . . .	19
Step 11: Summary of Meeting Results . . . . .	22
Step 12: Review Process . . . . .	22
RESULTS . . . . .	24
Conclusions. . . . .	25

BIBLIOGRAPHY

APPENDIX A--PERT Chart

APPENDIX B--List of 700 Medical Disqualifiers

APPENDIX C--Credentials of Medical Panel Members

APPENDIX D--Credentials of Physical Requirement Panel Members

APPENDIX E--Medical Screening Manual

## INTRODUCTION

Selecting qualified personnel is critical to the efficient operation of any law enforcement organization. Selecting applicants on the basis of merit and in a manner which is fair and non-discriminatory is also necessary to comply with the letter and spirit of fair employment legislation.

The need for merit-based employment has long been recognized by California law enforcement and was one of the founding principles of the Commission on Peace Officer Standards and Training. Since 1960, the Commission has worked diligently toward establishing appropriate and effective minimum screening standards for law enforcement personnel.

The decade beginning in 1964, with the passage of the Civil Rights Act, has been a period of substantial change in personnel practices. As a result of various new laws and the issuance of federal guidelines on employee selection, merit-based selection is not merely a "good idea," but a requirement which, if violated, can result in severe sanctions.

Therefore, in March of 1973, the POST Commission, consistent with its traditional leadership role, called for a reevaluation of its mandated and recommended patrol officer standards and selection practices to ensure compliance with the new requirements.

To assist California law enforcement, the Commission on Peace Officer Standards and Training approved funding of a selection study in June, 1973. The total budget for the study was in excess of \$214,000 and consisted of the following six components:

### Component "A"--Validation of Job-Related Selection Standards.

A review and evaluation of selection standards such as educational level, physical requirements, and other potentially disqualifying personal history and background factors used by law enforcement agencies in California to: (a) determine whether these procedures and standards are job-related and (b) recommend minimum standards of personal fitness and background, which should be required by law enforcement agencies.

### Component "B"--Job Analysis for Promotional Examinations.

A job analysis of the positions of sergeant, lieutenant, and captain levels in California law enforcement agencies to serve as a basis for the preparation of a job-related promotional examination.

Component "C"--Development of a Content Valid Oral Interview for Entry-Level Peace Officers. An analysis of those job-related behaviors and characteristics which may be explored through the personal interview, development of a personal interview, development of personal interview standards and techniques, and preparation of a manual on employment interviewing of police officer candidates for distribution to law enforcement agencies in California.

Component "D"--Model Career Ladders and Job Restructuring Plans. A review of recruiting programs and job restructuring projects to provide guidance to local law enforcement concerning successful approaches to the development of model job restructuring and career ladder plans.

Component "E"--a. Developing a Job Knowledge Test; b. Identifying Operational Performance Criteria. The development of a comprehensive job knowledge test and a thorough analysis to determine the current policies used by raters of patrol officers in California law enforcement agencies to define what constitutes successful patrol officer job performance.

Component "F"--Validation of Physical Performance Test. The development of a physical agility examination to identify those patrol officer candidates who are able to meet the physical demands of the job.

After the successful completion of the above projects, two additional major projects were initiated by the Commission. On August 1, 1975, the Commission authorized staff to begin work designed to: (a) identify job-related medical disqualifiers as determined by a thorough medical examination, and (b) identify the legitimate areas of inquiry for the applicant background investigation.

POST has had a regulation concerning the medical examination since 1960. The current regulation requires that an applicant be examined by a licensed physician and must meet the requirements prescribed in POST Administrative Manual (PAM) Section C-2, regarding the physical examination. Section C-2 states, "The purpose of the physical examination is to select personnel who are physically sound and free from any physical defect, mental or emotional instability which might adversely affect his performance of duty." It goes on to require the examination by a licensed physician or surgeon within 60 days of hire and states that each applicant must supply the examining physician with a statement of his medical history, including past and present diseases, injuries or operations. It also requires that the hiring authority shall establish minimum standards for hearing, color vision, and visual acuity, and shall determine whether each candidate meets those standards.

Section C-2 also requires that the physician's findings be on appropriate forms and "shall note thereon, for evaluation of the appointing authority, any past or present physical defects, diseases, injuries, operations, or any evidence or indication of mental disease or emotional instability." Finally, the regulation requires the jurisdiction to retain the completed form.

Although the Commission on Peace Officer Standards and Training has had this long standing regulation, there has been a lack of definition as to what the medical examination should cover. The Commission, up to now, has not provided jurisdictions with a method of determining the job-relatedness of the disqualifiers discovered in the course of the medical examination.

In response to the present need, this project was undertaken to establish a process by which agencies could determine the job-relatedness of a wide range of medical disqualifiers. Using this process, a comprehensive list of common medical disqualifiers was evaluated in terms of job-relatedness.

## MEDICAL DECISION MAKING

The patrol officer's job is physically very demanding. Although there are lengthy periods of relative inactivity, an officer must be constantly alert and continually prepared for instant bursts of activity requiring stamina, strength, and agility. Physical illnesses and disabilities which would not seriously hinder performance on less demanding jobs can cause serious problems for the patrol officer. Therefore, law enforcement agencies must screen patrol officer applicants with great care in order to avoid hiring those individuals with debilitating medical conditions and diseases.

The importance of medical screening is reflected in Section 1031(f) of the California Government Code which requires that a peace officer shall "...be found, after examination by a licensed physician and surgeon, to be free from any physical, emotional, or mental condition which might adversely affect his exercise of the power of a peace officer."

Despite this strict statute, there is a high incidence of cardiovascular and circulatory disease, ulcers, back disorders and other stress-associated disabilities among California peace officers. According to survey data, workers' compensation records, and questionnaire responses gathered in connection with this study, the number of claims for workers' compensation and the number of disability retirements have risen alarmingly in the past decade to the point where municipalities are finding it increasingly difficult to meet their financial responsibilities in these areas.

One solution might consist of simply making medical standards more stringent for patrol officer applicants. Section 1031(f) of the California Code does not preclude the adoption of additional or higher standards. This seems like a simple and obvious solution. However, there exists other laws which complicate the matter:

- (a) Section 504 of the Rehabilitation Act of 1973 states, "no otherwise qualified handicapped individual in the United States, as defined in Section 7(6), shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal Assistance."
- (b) The California Fair Employment Practices Act was amended effective July 1, 1974, to prohibit discrimination in employment based on physical handicap.

These two laws prohibit employers from establishing medical standards which serve as employment barriers to those who can actually perform the job. Employers cannot set standards in the medical area which are unnecessarily high and bear no demonstrable relationship to the job. Employers are thus faced with a difficult dilemma. How can agencies set standards in order to satisfy the needs of law enforcement and, at the same time, avoid discriminating against handicapped individuals who are protected by fair employment legislation and who have a right to be considered for jobs for which they qualify? The answer lies in a concept called job-relatedness. Employers who wish to use a medical condition or disease as a disqualifying standard must demonstrate one of the following:

- . A person who does not meet the standard would simply be unable to perform the job or would be unable to perform the job at the minimally acceptable level of proficiency.
- . A person who does not meet the standard would be a safety hazard to him/herself or others on the job.
- . Hiring the person who does not meet the standard would result in the employer having to make unreasonable alteration of the premises.
- . Hiring a person who does not meet the standard would result in the employer incurring unreasonable costs or loss of efficiency.

When an employer is able to satisfactorily demonstrate that a certain medical standard is justified because of one or more of the above reasons, then the medical standard is said to be job-related.

It was the goal of this project to establish the job-relatedness of a full range of medical disqualifiers for the position of patrol officer (i.e., disqualifiers which bear a demonstrable relationship to the job and which do not discriminate against those handicapped individuals who are capable of performing the job). The result is a set of guidelines for use by California law enforcement in examining patrol officer applicants. (A complete list of project products and a project time chart appear in Appendix A.)

## MEDICAL SCREENING

### Definition of the Medical Examination

Screening of applicants on physical factors can involve a medical examination or tests of physical capacity, condition, fitness, and agility. For the purposes of this study, we must distinguish between the medical examination versus evaluations of physical capacity or proficiency.

The medical examination concerns the functioning of bodily organs and processes with the emphasis on determining malfunctions and/or the presence of disease. The emphasis is on the negative. The examination is made to determine conditions which would disqualify rather than qualify an applicant.

In contrast, a test of an applicant's physical condition assesses the capacity or aptitude for activity. A physical performance test measures the applicant's physical achievement or current ability to perform certain physical job activities.

The focus of this study is exclusively on the medical examination, as defined above, and not on physical capacity, conditioning, or proficiency. The reasons for this particular focus are as follows:

- . . Based on a survey of California jurisdictions, over 700 medical disqualifiers were being used to screen patrol officer candidates at the time the study began. (See Appendix B for the complete list.) Many jurisdictions have not thoroughly evaluated the job-relatedness of their disqualifiers. The existence of such a voluminous number of disqualifiers alone indicated that the topic warranted a separate, detailed study.
- . There is considerable urgency to the matter of justifying medical disqualifiers in light of recent legislation regarding the employment rights of handicapped individuals. Jurisdictions have the immediate responsibility for eliminating discriminatory selection standards. To avoid doing so could prove extremely costly not only in terms of under-utilization of qualified handicapped candidates but also in terms of court-imposed sanctions.
- . Jurisdictions must meet head-on the problem of excessive workers' compensation payments and the rising incidence of disability retirement. This must be done by evaluating all disqualifiers in terms of the demands of the job.

- . In order to maximize the efficiency of a jurisdiction, care must be taken to identify those medical conditions, diseases, and symptoms which would interfere with the successful completion of the job.
- . Every employee selection standard must be evaluated using an appropriate job-relatedness strategy. The strategy chosen for medical disqualifiers is one which involves expert judgment and is called "procedural job-relatedness."\* It is not the same strategy which is appropriate for evaluating physical capacity, condition, and physical proficiency. Therefore, these topics should be the subject of separate, future projects.

One additional distinction must be made. A medical examination, depending on the purpose, can focus on three areas of physical well-being: anthropometric standards, sensory standards, and general health (Nationwide Research Center, 1974). Anthropometric and sensory (visual and auditory) standards are beyond the scope of this study. Rather, this study will concentrate on disease entities as they relate to job behavior and requirements.

#### Current Practice Regarding the Medical Examination

In keeping with Section 1031(f) of the California Government Code, all law enforcement agencies complying with POST standards must make the medical examination an integral part of their selection process. This is in contrast to the findings of the 1972 International Association of Chiefs of Police--Police Foundation (Eisenberg, Kent & Wall, 1972) national survey which found that 95% of the surveyed departments required medical examinations of male applicants, and only 64% required medical examinations of female applicants.

Therefore, California is somewhat ahead of the rest of the nation in requiring this most crucial screening technique. Unfortunately, however, a subsequent survey conducted by the Los Angeles County Sheriff's Department in 1973 indicated that little work has been done to tailor the medical examination specifically to the needs of law enforcement.

#### Conclusions Based Upon Statewide Mailout

As a part of the current study, each jurisdiction in the state of California was asked to submit a copy of its current medical standards and disqualifiers. The results are as follows:

---

\*For a full description and explanation of the strategy, see the POST publication, Procedural Job-Relatedness.

- . A number of departments have a small number of fairly general medical standards. They then contract with private physicians to conduct the medical examinations and allow the physicians to use their knowledge of the patrol officer's job to make the pass-fail decisions. This practice causes obvious difficulties in terms of consistency of decisions from one physician to another. It also makes use of the questionable assumption that every examining physician has a thorough knowledge of the physical demands of the job, based on job analysis.
- . A number of departments use a medical classification system developed by their personnel departments. Such systems generally describe four or five levels of physical fitness. All agency jobs are grouped into the appropriate categories depending on the level of fitness required by the job. In most systems, the top fitness category is required of all safety and sworn personnel.

The fact that a system of four or five categories can be used to cover all of several hundred agency job classifications immediately calls into question the job-relatedness of the medical standards for each and every job.

The noted difference between agencies concerning what constitutes top level physical fitness also indicates a problem, especially when one considers the documented similarity in the patrol officer's job from one agency in the state to another.

Some departments, especially some of the very large ones, have medical standards which were developed specifically for the job of law enforcement officer. Despite the aforementioned similarity of job requirements from agency to agency, the standards differ greatly in specificity and content. Some jurisdictions have broad, general guidelines for the examining physician requiring only two to three pages of text; others have a voluminous set of 300 to 400 specific medical disqualifiers. The appropriateness of the medical disqualifiers for the law enforcement officer position differs also. The disqualifiers for some agencies seem quite reasonable, while others seem overly strict and arbitrary including such things as baldness, any scar, "obscene" tatoos, and healed bone fractures. This lack of consistency across departments demonstrated the immediate need for the current study.

## Conclusions Based Upon On-Site Visits

Based on visits by the project staff to several departments across the State, it was found that departments differ greatly in the way they make use of the results of the medical examination. Two basic policies are currently in effect:

- . One policy consists of having the examining physician make the final decision about the physical qualifications of the applicant. In other words, the physician can independently disqualify an applicant from further consideration. This policy requires that the physicians make three separate determinations before disqualifying a candidate. It must be determined: (a) that the applicant definitely has a disease or medical condition, (b) that the condition or disease would adversely affect the applicant's ability in some specific way, and (c) that the incapacity would be a significant detriment to the particular required duties and activities of the patrol officer's job.
- . The second policy places less responsibilities on the examining physician. According to this plan, the police agency or the personnel department makes the decision whether or not to disqualify an applicant on medical grounds. As with the above policy, the physician determines: (a) that the applicant has a condition or disease, and (b) that the condition or disease would adversely affect the applicant's abilities in some specific way. However, it is the responsibility of the personnel/police agency to determine whether the incapacity would be a significant detriment to the particular required duties and activities of the job.

There are advantages and disadvantages to both approaches. Regardless of the approach used, it would seem quite appropriate to have both medical experts and job experts involved in a decision regarding the job-relatedness of medical diseases and conditions. Therefore, one component of this study involved developing a recommended decision-making process\* for making qualifying/disqualifying decisions based on medical information.

In conclusion, the current methods of gathering and using medical screening information are quite varied. The most effective screening procedure needs to be determined from the various alternative approaches.

---

\*This recommended process is described in the POST publication, Medical Decision-Making Handbook.

## Concept of the Medical Examination as a Screening Device

The information concerning current practices presented above does not reflect negatively upon California police agencies and personnel departments. The physical fitness classification system used by many agencies is, in fact, the only specifically mentioned approach in the Guiding Principles of Medical Examination in Industry, published in 1972 by the American Medical Association. It seems that the state of the medical screening art in 1973 simply did not anticipate the rigor which would be required in the setting of medical standards by the passage of the Rehabilitation Act of 1973 and the amendments to the California Fair Employment Practices Act. These laws have brought about a tremendous emphasis on job-relatedness and job-relevance which must be taken into account in the design of any medical screening program.

### Medical Screening and Job-Relatedness

Job-relatedness is described in the above mentioned American Medical Association Guiding Principles as follows:

"Original examinations (also often called pre-employment or preplacement examinations) are made for the express purpose of determining and recording the physical condition of the prospective worker and assignment to a suitable job in which his disabilities, if any, will not affect his personal efficiency, safety, and health, nor the safety of others."

This statement of the ideal which makes it clear that each and every disqualifier (medical disease or condition) must be evaluated to determine whether its presence in an applicant will lead to reduced worker efficiency or will represent a safety or health hazard to the applicant or other individuals. In other words, each medical standard must be carefully weighed against a number of job-relevant criteria.

### The Criteria of Job-Relevance

An exhaustive list of job-relevant criteria for evaluating medical standards was developed for this project based upon: (a) the wording of the California Fair Employment Practices Act, (b) a draft of Guidelines on the Hiring of the Handicapped currently being developed by the Technical Advisory Committee on Testing to the California Fair Employment Practices Commission, (c) the American Medical Association Guiding Principles, (d) a legal analysis of such criteria by a deputy attorney general from the California Attorney General's Office, and (e) a thorough analysis of the position of patrol officer completed under the auspices of the California Commission on Peace Officer Standards and Training. The criteria are as follows:

- . Inability or difficulty in performing required job behaviors at an acceptable level of proficiency.
  - (a) Inability to perform routine demands of the job such as riding in a car for extended periods or walking required distances.
  - (b) Inability to perform the more strenuous demands of the job such as lifting, carrying, balancing, crawling, running, jumping, pushing, pulling, dragging, or climbing.
  - (c) Difficulty in performing job activities or meeting job responsibilities due to such things as reduced reaction time, reduced physical flexibility, inability to adjust to required schedules for sleeping and eating, or inability to respond to inflexible work schedules.
- . Probability of time loss, such as a tendency toward absenteeism, lack of punctuality, necessity for frequent scheduled or unscheduled breaks in work routine, or unreasonable amount of sick leave.
- . Unreasonable and extraordinary accommodations, such as extensive training programs, significant job restructuring, serious scheduling changes, or expensive modification of premises or equipment.
- . Safety hazard to self or others, such as would result from contagious diseases or conditions which cause sudden, unexpected incapacitation.
- . Adverse reaction to environmental factors encountered on the job, such as the inability to work effectively in different types of climate (i.e., hot, cold, dry, humid), undue loss of effectiveness on slippery or uneven surfaces, or when working at heights.
- . Probability that disability retirement will occur within an unacceptably short period of time, thus interfering with the efficiency of the department.

A medical disease or condition cannot become a medical disqualifier unless it bears a logical or demonstrable relationship to one or more of the criteria.

The proper concept of medical screening includes the fact that employers do not have the right to expect their employees to be perfect physical specimens. Instead, employers must make an effort to determine the required level of physical fitness which is needed to ensure adequate personal and organizational effectiveness. The current study represents such an effort.

The Medical Examination as  
One Component of an Occupational Health Program

The medical examination is only a small part of a well-rounded medical health program. (A comprehensive program is described in Scope, Objectives and Functions of Occupational Health Programs, published by the American Medical Association.) Other facets include periodic health appraisals, maintenance of a healthful work environment, diagnosis and treatment of both occupational and non-occupational injuries and diseases, physical fitness programs, and health education and counseling programs. It is hoped that this study might be a stimulus for law enforcement to develop more effective programs in all of these areas. Nevertheless, as a starting point, this study concentrates on the crucial first step in any occupational medical plan--the medical examination.

## METHOD

This chapter describes all the project activities from the formation of the initial concept to the seminars which will be held to disseminate the results.

### Job-Relatedness

One of the key concepts that has received great emphasis during this era of fair employment legislation is the concept of job-relatedness. Selection standards and practices which tend to adversely affect the employment opportunities of those individuals protected by fair employment legislation must bear a demonstrable relationship to the requirement of the job. Therefore, medical standards which tend to serve as employment barriers to the physically handicapped must be shown to be relevant to the job (i.e., related to one or more of the criteria of job-relevance listed in the preceding chapter).

The Equal Employment Opportunity Commission, the Department of Justice, the Department of Labor, the U.S. Civil Service Commission, and the California Fair Employment Practices Commission have issued guidelines which specify how an employer must go about establishing the job-relevance of selection standards. All five sets of guidelines agree that job-relatedness can be established using one of the following three procedures:

- (1) Criterion-related validity should be used when one hypothesizes that a selection standard, such as a psychological test score, predicts performance on the job. The hypothesis is evaluated by statistically relating test scores with measures of job performance.
- (2) Construct validity should be used when one determines that a particular level of a defined psychological construct (e.g., introversion-extroversion) is required by the job. The selection standard or practice must then be evaluated in terms of its effectiveness in measuring the necessary construct.
- (3) Content validity should be used when one wishes to establish that the content of a selection technique (usually expressed in terms of job knowledge or job performance) is a representative sample of the content of the job. According to the Fair Employment Practices Commission, content validity is also appropriate "when an employment practice can be rationally justified."

An employer wishing to establish the job-relatedness of a selection standard must choose the most appropriate strategy from among the three possibilities.

To do a criterion-related validity study of certain medical conditions and diseases, one would have to hire applicants with those conditions and diseases to determine empirically how they would perform on the job. Obviously, it is not feasible to do this; nor is it necessary. Physicians do not usually have to talk in terms of the predictability of the behavioral consequences of diseases. In most cases, the consequences occur quite reliably and have been well substantiated and documented. Therefore, criterion-related validation must be rejected as being both inappropriate and unnecessary.

As already mentioned, construct validity is the appropriate strategy when an employer wishes to make use of a psychological construct. Medical conditions and diseases obviously are not psychological constructs: they are concrete and well-defined entities with specific behavioral implications. Construct validity must also be rejected as being inappropriate.

Content validity is most often used when the selection technique requires an applicant to demonstrate the possession of necessary job knowledge or skill. A person with a disqualifying medical disease, however, is rejected because of an inability to perform a required activity. The connection between a medical disease or condition and the job requirements is not based on applicant performance, but on rational judgments of experts who know the consequences of the disease. The California Fair Employment Practices Commission Guidelines on Employee Selection Procedures lists such rational justification as a subcategory of content validity. Therefore, rational justification was chosen as the appropriate strategy for establishing the job-relatedness of medical conditions.

Although the California Fair Employment Practices Commission does not propose a particular approach to rational justification, the requirements of one such approach were outlined in a recent technical report which was published by POST entitled, Procedural Job-Relatedness. The characteristics of this approach are as follows:

- (a) The inference of job-relatedness is made by "job experts."
- (b) Several job experts simultaneously, but independently, make judgments about the relatedness of selection information and job requirements.
- (c) The importance placed on the experts' conclusions is based on the certainty which the experts have about the conclusions.

- (d) The utility of the job experts' conclusions is based on the importance of the job requirement in question.
- (e) The degree of certainty required of the experts depends, in part, on the tendency of a selection standard to produce adverse impact against those classes of applicants protected by fair employment legislation.
- (f) The decision-making session is conducted under the guidance and direction of a "referee" who is completely familiar with the topics of fair employment, validation, and job-relatedness.
- (g) The quality of work exhibited by employees who are selected using a particular set of selection standards is monitored in order to assess the effectiveness of the selection system.

Procedural job-relatedness was the strategy chosen to evaluate the job-relatedness of medical standards for the job of patrol officer.

#### Procedure

With this particular validity approach, the "validity" of the instrument is built into it by virtue of the procedures one uses to construct it. To develop job-related medical standards, the following steps have been completed.

Step 1: Project Design. The design of the project was developed in consultation with physicians. Three major decisions were made at that time which determined scope and content of the project:

- (1) The subject matter for the study would be medical diseases rather than physical and behavioral symptoms. The implied symptoms would be enumerated after a disease is judged to be job-related.
- (2) Medical diseases would be considered in a priority order. Diseases to be considered first would be those which have a high incidence in the applicant population and which have caused the most problems for law enforcement as determined by a letter of inquiry to each jurisdiction in the state. (It was determined through a mailout, described below, that law enforcement has critical needs in three major areas: cardiology, orthopedics, and gastroenterology. Comprehensive coverage of those three areas was accomplished before other areas were addressed.)

- (3) Only those diseases would be evaluated which have a sufficient likelihood of occurring in the applicant population. Obviously, the total number of identified diseases is so voluminous that one could not hope to deal with more than a fraction of them.

Step 2: Program Evaluation Review Technique (PERT). After the design was finalized, a PERT chart was developed which listed all the project steps, outcomes, and dates. The chart appears in Appendix A.

Step 3: Information Gathering. This step consisted of three phases:

- (1) A mailout was sent to all California jurisdictions and members of the National Association of State Directors of Law Enforcement Training (nationwide) requesting: (a) the department's medical questionnaire, (b) the physician's guide to the medical examination, (c) the list of currently utilized medical disqualifiers and standards, (d) any written justification for the use of disqualifiers and standards, and (e) a priority listing of the medical conditions about which the department was most concerned. A collation of this material resulted in a list of over 700 diseases, conditions and symptoms.
- (2) A survey of the literature was conducted to determine what has been done in the area of validation of medical standards. In sum, it was found that no one has addressed the issue of the job-relatedness of medical standards with sufficient rigor to be of any assistance in the completion of this project.
- (3) Five departments in California were visited by the project staff (Los Angeles City, Daly City, Concord, Sacramento, Los Angeles County). In each, interviews were conducted to determine: (a) how their medical standards were established, (b) how their medical examinations are administered, (c) how their medical examinations fit into the selection process, and (d) problems encountered in the administration of their medical screening programs. These data were used to verify that the project design was appropriate to the needs of law enforcement. No major changes in the original project design were indicated as a result of these visits.

Step 4: Compilation of Medical Diseases. A master list of all diseases which were listed as disqualifiers by jurisdictions in the State of California was compiled. The completed list contained over 700 entries. (The list appears in Appendix B.) The diseases were then categorized into 20 medical specialty areas as follows: allergy, cardiology, dentistry, dermatology, endocrinology, gastroenterology, surgery-general medicine, hematology/oncology, infectious and immunologic diseases, internal medicine, nephrology/urology, neurology/neurosurgery, nutrition, obstetrics and gynecology, ophthalmology, orthopedics/surgery, otorhinolaryngology, plastic surgery, physical medicine and rehabilitation, and pulmonary medicine/thoracic surgery.

Step 5: Assembling the Medical Decision-Making Panel. Based on the questionnaire results and input from the medical advisors, it was decided that the decision-making panel should be made up of physicians with special expertise in the following areas: cardiology, orthopedics, and gastroenterology. The choice was based primarily on the high incidence of heart disease, back and knee problems, and ulcers among current law enforcement personnel. In addition to the specific areas of expertise, the physicians needed to be licensed and currently practicing in their specialty area. Based on these requirements, three physicians were chosen whose credentials appear in Appendix C. When the physicians considered conditions outside their specific areas of expertise and when they felt the conditions required the input of a specialist, they requested the project staff to contract with such specialists. When this was done, the additional specialists provided information to the panel which always made the final decisions.

The decisions which the panel were being asked to make concerned the job-relatedness of medical diseases for the job of patrol officer. Therefore, it was mandatory that the panel include members who were familiar with the physical demands of the job. Two additional individuals were chosen to round out the panel. The first of the two was a currently active peace officer from a large department whose responsibility it is to ensure the physical fitness of recruits. The final panel member is employed by the personnel department of a large city. This person is involved in the assessment of the physical qualifications of police applicants and, as such, is well-versed in the physical demands of a patrol officer's job. The credentials of these two individuals appear in Appendix D. These five experts constituted the decision-making panel.

Step 6: Job Analysis. A crucial step in any job-relatedness strategy is the job analysis. The demands of the position must be determined before applicant qualifications can be established. At the inception of this project, it was decided that sufficient job-analytic data was available to preclude the necessity for additional job analysis data gathering. The existing data consisted of:

- (a) A thorough study sponsored by the POST Commission on the job activities of a patrol officer. The study resulted in a list of 800 task statements which described job duties in the functional areas of administration, bailiff, civil, communications, community relations, detention, field services, identification, investigation, personnel, property and evidence, records and clerical, traffic, training, and warrants. The list was extremely thorough.
- (b) The results of studies on the physical demands of the job by a number of cities and counties, such as San Jose, Los Angeles, Oakland, and San Francisco were compiled. The two job experts on the decision panel reviewed all the material to verify that each entry on the physical demands list was part of the patrol officer's job in their agencies.

Since both of the job experts were employed by large agencies, one might reasonably inquire whether the results of this study would be appropriate for medium or small agencies. The answer is that every agency should do its own job analysis before applying the results of this study. A medical disqualifier becomes a disqualifier if it is judged to be significantly related to one or more specified job criteria. If a job analysis demonstrates that a specified job criterion is appropriate to an agency, then the disqualifier identified in this study may be used. If the job criterion does not apply, the disqualifier cannot be used unless justified in some other way. Because of the similarity of police work across different agencies, it is probable that most agencies will have similar standards. Nevertheless, each agency must justify its own standards based on local requirements.

Step 7: Medical Training and Test Meeting and Revision of the Process. The panel members were assembled in a preliminary meeting to receive training in all aspects of procedural job-relatedness. The topics covered included fair employment laws, validation of selection instruments, requirements of the patrol officer's job, and the characteristics of procedural job-relatedness.

After the training portion of the meeting, an initial design for the decision-making process was tested. Decision-makers listed and further defined disease entities, considered the requirements of the job, decided under what conditions the disease would be disqualifying and provided the reason (i.e., in terms of which job criterion would be affected and how it would be affected). Appropriate changes in the process were made as indicated. The final decision-making process is described below.

Step 8: Classification of Medical Conditions. In order to organize the results into a meaningful format and to proceed in a systematic fashion, all medical conditions were reclassified into one of the following categories:

- (1) Integumentary System
- (2) Head; Larynx, Neck, Nose, Oral Cavity, Paranasal Sinuses, and Pharynx
- (3) Chest Wall and Respiratory System
- (4) Cardiovascular System
- (5) Gastrointestinal System
- (6) Genitourinary System
- (7) Musculoskeletal System
- (8) Nervous System and Organs of Special Sense
- (9) Endocrine and Metabolic Disorders
- (10) Hematopoietic System
- (11) Other Medical Conditions

A full list of conditions was developed for each category based upon the original list of 700 conditions, and any additional conditions which the participating physicians felt should be added.

Step 9: Meeting Preparation. Four three-day meetings were scheduled to discuss the conditions which met the criteria for inclusion in the project. For each meeting, one physician was assigned the task of enumerating and ordering the conditions which would be discussed at that meeting. The proposed list was then sent to the other two physicians for their review. Finally, the project staff listed the conditions on the "Decision Response Form," which will be discussed in the next section.

Step 10: Decision-Making Meetings. The meetings were attended by the five decision-makers and the project staff. On the morning of the first of three days, the project director set the ground rules for the decision-making process. In order to satisfy the requirements of procedural job-relatedness, it was necessary that the process be carried out in a predetermined and very formal way. Each medical condition was evaluated using the same procedure as follows:

- (a) The decision-makers were presented with the Medical Examination Project-Decision Response Booklet. The booklet contained the job analysis information (which the decision-makers had already reviewed), the definitions of the decision criteria, the list of medical conditions which would be the topic of the meeting, and a set of response forms.
- (b) The meeting referee announced the first condition to be discussed. The first task of the physicians was to make sure that the phraseology and spelling of the conditions were correct, and whether additions or changes should be made. The final statement of the condition was written on the Medical Examination Project-Decision Response Form, which appears in Table 1.
- (c) When the physicians were satisfied that the statement of the condition was in a proper form, they explained to the non-physicians at the meeting the nature of the disease or condition and the behavioral consequences.
- (d) One important factor to be considered when conducting a procedural job-relatedness study is the potential adverse impact against protected classes which would result from the use of a selection standard. For conditions which have adverse impact, the decision-makers must possess a high degree of certainty concerning when the condition is disqualifying. Therefore, the physicians indicated whether a condition would have adverse impact and against which classes of protected individuals.
- (e) The next issue was job-relatedness. The physicians were given several minutes to consider their answer. Preparatory to the discussion, each physician filled out the "Qualifying Statements-Related or Additional Circumstances" portion of the Decision Response Form. They stated whether the disease was job-related and under what conditions it was disqualifying (e.g., at what degree of severity or when accompanied by other complicating factors).
- (f) Having made the decision, each physician wrote his "Rationale for the Decision." They were asked to justify their decision by stating how the disease would adversely affect performance on a job behavior or criterion.

MEDICAL EXAMINATION PROJECT  
DECISION RESPONSE FORM

State of California

Department of Justice

COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING  
7100 Bowling Drive, Sacramento, CA 95823

Medical Condi- tion or Disease	Qualifying Statements - Related or Additional Circumstances	Rationale for Decision: Job Behavior or Criterion Affected

- (g) Another requirement of procedural job-relatedness is consensus among the decision-makers. Discussion was held to achieve the consensus and when it was reached, the project secretary recorded the agreed-upon qualifying statements and the rationale for the decision.
- (h) This was not the end of the decision-making process. No final decision could be made without the concurrence of the two job experts. Based on their knowledge of the job, they were in a position to evaluate the rationale for the decision. For example, if the job experts decided that the stated behavioral consequence of a disease did not have important implications for the job, they could veto the job-relatedness decision. If such a veto did occur, full panel discussion would begin again until all five panel members were in agreement. Such agreement constituted a final decision.
- (i) The role of the referee is very important in procedural job-relatedness. Throughout the procedure, the staff person who was assigned the position of referee monitored the discussion to ensure that the formal procedure was adhered to and that the rationales for the decision were based solely on the relevant job criteria.
- (j) Each condition within each category was treated in this manner until a decision had been reached concerning over 700 conditions in the eleven categories.

Step 11: Summary of Meeting Results. After each meeting, the project staff summarized the results in a standardized manner as per the following example:

Condition: Dupuytren's Contracture  
Disposition: Disqualifying  
Rationale: Condition would interfere with function of hand in grasping and hooking, which would interfere with firearm operation and controlling suspects.

The meeting summaries were sent to each panel member for review. Any comments or concerns expressed by any panel member were resolved at a subsequent meeting.

Step 12: Review Process. After the final meeting, the results were incorporated into the Medical Screening Manual for California Law Enforcement (Appendix E). The Manual discusses medical screening in general, instructions on the use of the Manual, and the comprehensive list of medical conditions discussed in the course of the project.

The Manual was first subjected to a thorough review by the project staff and panel members. Next, the entire POST professional staff was asked for comments, suggestions, and any necessary corrections. Finally, the Manual was presented to the POST Commissioners who, in turn, submitted it to their law enforcement personnel and medical staffs for review. Comments were forwarded to the project staff and the necessary changes were incorporated into a final draft of the Medical Manual.

This final draft was subsequently given approval by the POST Commission on January 20, 1977.

Through these procedures the job-relatedness of a wide range of medical conditions was evaluated. The results should have applicability to entry-level law enforcement positions for most agencies in the state. Nevertheless, since the entry-level position may differ somewhat in each agency, each condition in the Manual should be reviewed by an agency wishing to use the Manual to determine whether the stated "rationale" for the condition is appropriate to the local job content.

## RESULTS

The results of this project consist of four products which have been sent to every California law enforcement agency which is participating in the POST program.

### Medical Screening Manual

The Manual appears in Appendix E. It was designed to be a guide to local agencies in the establishment of sound medical screening practices and job-related medical disqualifiers.

The disqualifiers in the Manual appear as recommendations and are not POST mandated standards. The project results do not preclude an agency from establishing stricter or more lenient levels of disqualification. Nevertheless, the process which was utilized can serve as a useful guide to agencies wishing to establish their own standards.

### Medical History Statement

To further assist agencies in conducting the medical screening, POST has developed a revised Medical History Statement. It appears in Appendix A of the Manual. It is essentially a questionnaire which was designed to generate information relevant to an applicant's medical fitness for the entry-level law enforcement officer position.

### Medical Examination Report

Any medical disqualification of an applicant must be well documented. Challenges and appeals to the decision will inevitably occur, and agencies must be prepared to provide reasons for the disqualification. Therefore, the medical examination data should be reliably recorded and maintained. To facilitate this process, POST has developed the Medical Examination Report, which appears in Appendix B of the manual. This form was also prepared in such a way as to focus in on those areas of medical fitness which are related to the job of peace officer.

### Medical Decision-Making Handbook

As previously stated, nothing in this Manual precludes an agency from setting stricter or more lenient standards. In addition, agencies will be called upon to make employment decisions concerning applicants who have conditions which are not listed in the Manual. Therefore, it is important that each agency have a decision-making capability regarding medical standards and disqualifiers. POST has proposed a decision-making strategy in the

Medical Decision-Making Handbook, which appears in Appendix C of the Manual. The Handbook describes recommended steps which agencies may use to make informed, job-related medical screening decisions.

### Conclusions

The Commission on POST is committed to providing assistance to California law enforcement agencies in accomplishing the important goals of merit and fair employment. The products mentioned in this report are consistent with the Commission's basic approach of establishing screening practices and procedures which can be used by agencies in complying with entry-level standards.

POST has already done a substantial part of the job by:

- (a) listing the common diseases in the applicant population and those which are of concern to law enforcement;
- (b) providing recommendations concerning which diseases should be disqualifying and when; and
- (c) providing recommended medical history and examiner report forms.

The remaining burden rests upon local agencies to apply these products to their agencies in such a way as to reflect local conditions and job content.

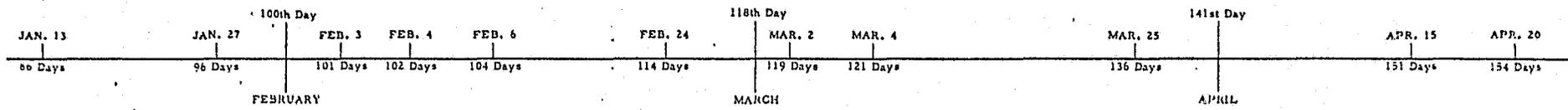
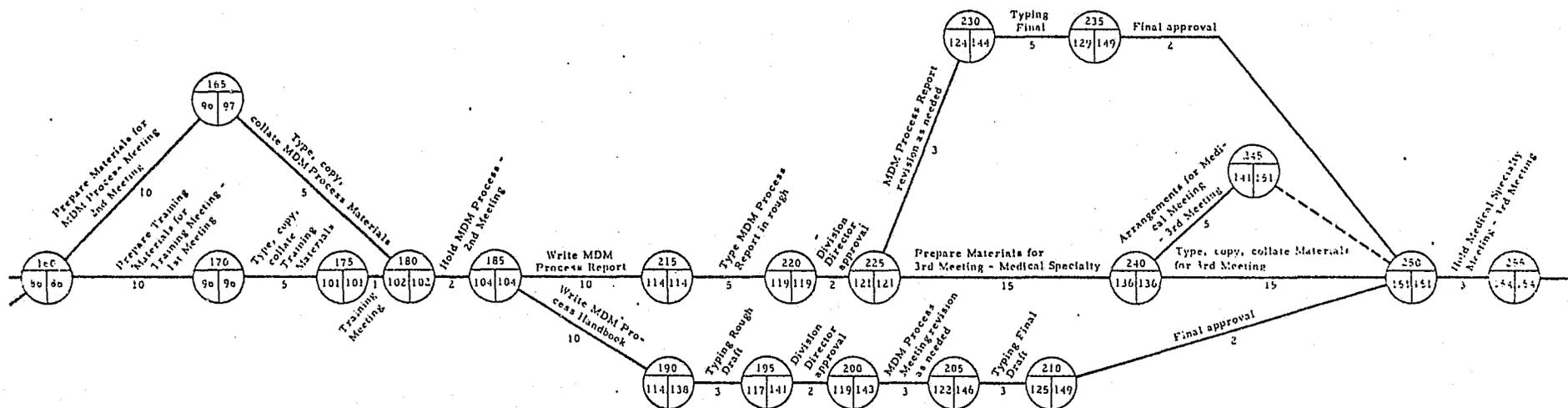
## BIBLIOGRAPHY

- Eisenberg, T., D.A. Kent, and C.R. Wall. Police Personnel Practices in State and Local Governments. Washington, D.C.: Police Foundation, 1973.
- Guidelines on Employee Selection Procedures. California Fair Employment Practices Commission, October, 1972.
- Guiding Principles of Medical Examinations in Industry. Chicago: American Medical Association, 1973.
- Job Relevance of Police Candidate Physical Requirements. Columbus, Ohio: National Research Center, 1974.
- Kohls, J. W. Procedural Job-Relatedness. Sacramento: California Commission on Peace Officer Standards and Training, 1976.
- Physiological Fitness Standards for Police. Los Angeles: Los Angeles County Sheriff's Department, 1973.
- Scope, Objectives, and Functions of Occupational Health Program. Chicago: American Medical Association, 1971.

APPENDIX A  
PERT CHART

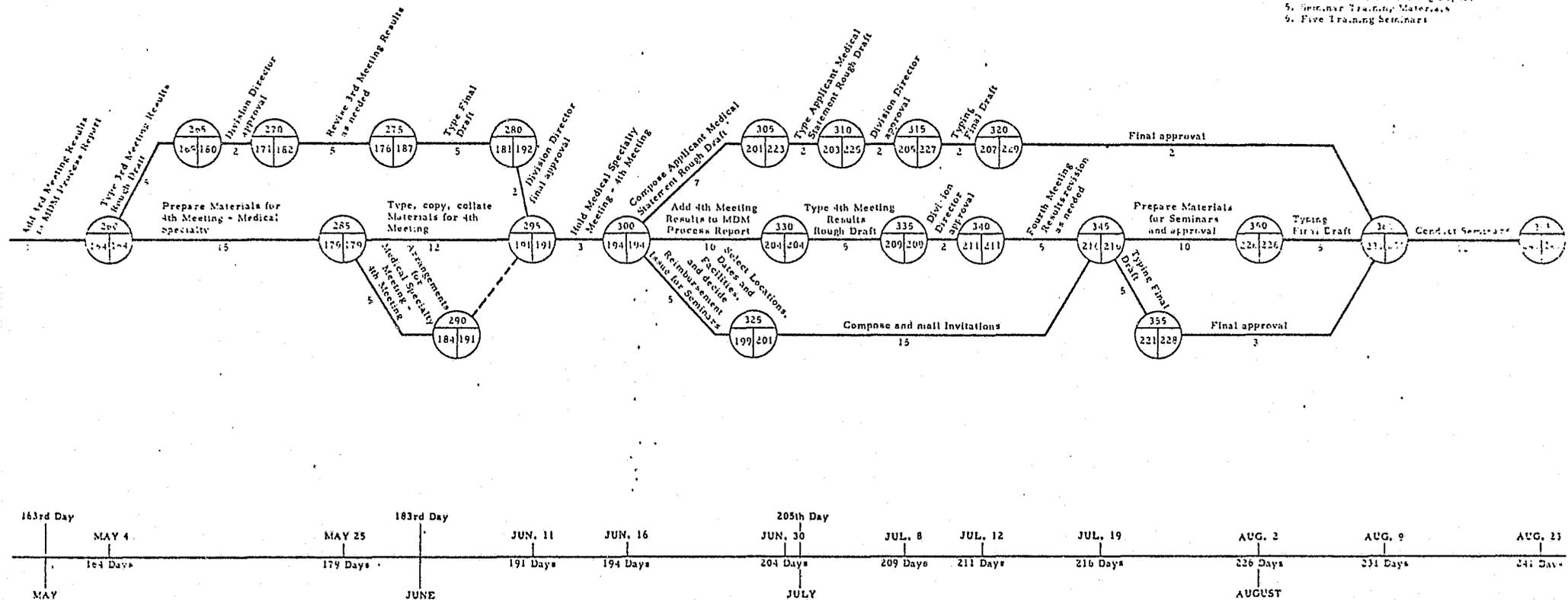


# Medical Examination Project



PRODUCTS OF MEDICAL EXAMINATION PROJECT

1. Medical Decision Making Handbook
2. Job related Medical Standards
3. Applicant Medical Statement
4. Medical Decision Making Report
5. Seminar Training Materials
6. Five Training Seminars



APPENDIX B  
LIST OF 700 MEDICAL DISQUALIFIERS

## Allergy

Allergic dermatitis  
Angioneurotic edema  
Asthma, cardiac, bronchial  
Chronic rhinitis (catarrh)  
Food intolerance  
Hay fever  
Neurodermatitis  
Urticaria

## Cardiology

Aneurism  
Angina pectoris of cardiac origin  
Arteriosclerosis, generalized  
Arteritis  
Ascites  
Buerger's disease (thromboangiitis obliterans)  
Bundle branch block, left, right  
Cardiomegaly  
Circulatory deficiencies of the extremities (upper and lower)  
Congenital heart disease or deformity, including great vessels  
Coronary artery disease  
Coronary occlusion  
Dyspnea  
Dysrhythmias  
Endocarditis  
Heart failure  
Hypertension  
Hypotension  
Murmurs, organic, functional  
Myocarditis  
Orthostatic hypotension or tachycardia  
Periarteritis nodosa  
Pericarditis  
Pulse rate, over 90 five minutes after exercise; slower than 50 per minute

Raynaud's disease  
Rheumatic fever  
Scleroderma  
CVA, history of  
Thrombophlebitis  
Tuberculosis  
Valvular disease of the heart  
Vascular tumors

## Dentistry

Dental insufficiencies  
Gingivitis, acute, chronic  
Jaw, disease of  
Mandible, recurring dislocation of  
Mandible and maxilla, , relationship between, of such nature as to preclude satisfactory prosthodontic replacement should it become necessary to remove any or all of the remaining natural teeth  
Molar teeth, must be at least two molar teeth to each jaw on each side, these teeth in good apposition for proper mastication  
Offensive breath (very)  
Prosthodontic appliances, lower applicance which is not retained or adequately stabilized by sufficient serviceable natural teeth  
Pyorrhea alveolaris  
Teeth, anterior, grossly disfiguring spacing of  
Vincent's angina (trench mouth)

## Dermatology

Acne, vulgaris, rosacea  
Albinism vitiligo  
Alopecia  
Athlete's foot  
Atopic dermatitis\*

Dermatology, cont.

Blastomycosis  
Bromidrosis, more than mild  
Burns, scars, contractures, and skin grafts where job requirement may aggravate or they will interfere with performance of duties  
Calluses and corns  
Cancer  
Cold injury, residuals of frostbite chilblain, immersion foot, or trench foot, such as deep seated ache, paresthesia, hyperhidrosis, easily traumatized skin, cyanosis, amputation of any digit  
Dermatitis  
Dermatitis herpetiformis and factitia  
Eczema  
Exfoliating dermatitis  
Furunculosis  
Ichthyosis  
Impetigo  
Keratosis, non-ulcerating or ulcerating  
Lichen planus  
Lupus erythematosus (acute, sub-acute or chronic) or any other dermatosis aggravated by sunlight  
Mycotic disease  
Nevi  
Neurodermatitis  
Psoriasis  
Radiodermatitis  
Sarcoidosis  
Scleroderma  
Seborrheic dermatitis  
Skin, any chronic disorder of, a degree or nature which requires outpatient treatment or hospitalization, or precludes satisfactory performance  
Skin, vascular tumors of, if extensive, unsightly, or exposed to constant irritation

Skin infections, active  
Skin, cysts and tumors of, which interfere with work  
Sycosis  
Tinea  
Ulcerations  
Urticaria  
Vitiligo, or other skin disorders which are disfiguring or unsightly  
Warts, plantar, if disabling

Endocrinology

Acromegaly  
Addison's disease  
Adenomatous goiter  
Alopecia  
Atrophy (testicular)  
Branchial cleft cysts  
Colloidal goiter  
Cretinism  
Cushing's syndrome  
Diabetes insipidus  
Diabetes mellitus  
Elephantiasis  
Exophthalmic goiter  
Glycosuria, persistent, regardless of cause  
Hermaphroditism  
Hyperinsulinism  
Hypoglycemia  
Hypothyroidism  
Infantile genital organs  
Lymphangitis  
Lymphomata, malignant  
Metabolic disorders (inborn)  
Myxedema  
Orchitis  
Parathyroid abnormality  
Pituitary dysfunction  
Simmond's disease  
Thyroglossal duct, cyst of  
Thyroid (enlargement, toxic)  
Thyroidectomy  
Thyroidectomy, for malignancy

## Gastroenterology

Amebiasis  
Blood in feces  
Chronic stomach problems  
Colitis, ulcerative  
Colostomy  
Diarrhea, chronic  
Diastasis recti, when slight and asymptomatic  
Digestive disease, chronic  
Dilation of the esophagus  
Diverticulae, with symptomatology, such as abdominal pains, bleeding, vomiting, or symptoms of obstruction  
Diverticulitis  
Diverticulosis  
Engorgement of the superficial abdominal vessels  
Esophageal lesions  
Fecal incontinence  
Fissure of anus  
Fistula of viscera  
Gastric resection  
Gastric ulcer  
Gastroenterostomy  
Gastrostomy  
Hernia, potential, actual or repaired  
Intestinal diseases  
Ileitis  
Intestinal adhesions  
Intestinal parasites  
Intestinal obstruction, history of  
Polycystic disease of viscera  
Proctitis  
Pruritis ani  
Rectocele  
Resection (also partial) of, gastric  
Sinus tracts, ischiorectal abscess  
Stomatitis  
Stricture (esophagus)  
Ulcerations of GI tract

## Surgery--General Medicine

Abdominal surgery  
Abscesses, acute, boils

Actinomycosis  
Adhesions  
Agenesis, severe, or severe traumatic deformity, unilateral or bilateral  
Appendectomy  
Bacterial, fungal, and viral infections  
Blastomycosis  
Burns, scars, contractures, and skin grafts where job requirement may aggravate or they will interfere with performance of duties  
Chronic metallic poisoning  
Cleanliness (lack of)  
Cold injury, residuals of (frostbite, chilblain, immersion foot, or trench foot)  
Colostomy  
Dermatomyositis  
Edema  
Fibrositis  
Gout  
Gummata, of muscle, bone, or viscera  
Gynecomastia  
Headache, frequent, severe or disabling  
Heat pyrexia  
Hemorrhoids  
Hepatitis, within the preceding 12 months  
Hernia, potential, actual or repaired  
Hernia, history of operation for within the preceding 60 days  
Hypertension, any evidence of  
Ingrowing toenails  
Intermittent claudication  
Leukocytosis  
Leukoplakia  
Ligament surgery  
Lobectomy, pulmonary  
Lymphangitis  
Malaria  
Metastatic diseases  
Muscular atrophy, progressive  
Muscular dystrophy

## Surgery--General Medicine, cont.

Nonspastic contraction of the neck muscles, or cicatricial contracture of the neck, to the extent that it interferes with the wearing of a uniform, or is so disfiguring as to make the individual objectionable in common social relationships  
Paresis or significant atrophy  
Pemphigus  
Poliomyelitis, post, with residual muscular weakness  
Protozoa, acute  
Ranula (tongue)  
Skin infections, active  
Sprue, tropical, non-tropical  
Stomatitis  
Syphilis  
Systemic diseases, and miscellaneous medical conditions and defects which interfere with the daily participation in a rigorous physical training or athletic program, with the wearing of equipment, or which detract from a smart bearing or appearance  
Thyroglossal duct cyst  
Thyroidectomy, for malignancy  
Upper extremities, any anomaly or limitation of motion which would preclude satisfactory performance of duty  
Varicose veins  
Vertigo  
Vincent's angina (trench mouth)  
Wounds, severe, unhealed

## Hematology/Oncology

Anemia, primary, pernicious or aplastic  
Anoxia, in lower extremities  
Benign tumors  
Brain tumor  
Cancer  
Dyscrasias of blood

Hemoglobin and hematocrit, abnormal, below 11 gms. or a hematocrit of less than 37%  
Hemolytic jaundice  
Hemophilia  
Hemorrhagic states, due to changes in coagulation system, due to platelet deficiency, due to vascular instability  
Hodgkin's disease  
Hypersplenism (hemolytic jaundice, thrombopenic purpura, splenic neutropenia, splenic panhematodystopenia) except congenital microspherocytic anemia which has undergone successful splenectomy  
Inadequate blood supply to any limb  
Leukemia  
Leukocytosis  
Leukopenia  
Lymphadenopathy  
Lymphangitis  
Megakaryocytic myelosis  
Metastatic diseases  
Myelofibrosis, megakaryocytic myelosis  
Myelophthisic anemia  
Myeloproliferative disease (other than leukemia)  
Polycythemia vera  
Raynaud's disease  
Sickle cell trait  
Sickle cell disease  
Splenic neutropenia  
Splenic panhematocytopenia  
Thrombocytopenic purpura  
Thrombocytosis  
Thromboembolic disease, except for acute, non-recurrent conditions  
Tumors  
Vascular tumors

## Infectious/Immunologic Diseases

Bacterial, fungal, and viral infections  
Bronchitis  
All communicable diseases  
Gonococcus infections  
Leprosy  
Leukocytosis

Infectious/Immunologic Diseases,  
cont.

Malaria  
Poliomyelitis, post, with residual  
muscular weakness  
Pott's disease  
Protozoa, acute  
Salmonella  
Scabies  
Sprue, tropical, non-tropical  
Syphilis  
Trypanosomiasis  
Tuberculosis

Internal Medicine

Angina pectoris, of cardiac origin  
Arthritis, acute or symptomatic  
of all types  
Blood in feces  
Burns, scars, contractures, and  
skin grafts  
Cancer  
Cerebellar and Friedrich's ataxia  
Cholecystitis, with or without  
cholelithiasis  
Chronic liver disease  
Circulatory grafts and insertion  
of prosthetics into the vascular  
system  
Coccidioidomycosis, progressive  
Dermatomyositis  
Glycosuria, persistent, regardless  
of cause  
Granulomatous diseases, either  
active or healed  
Gummata, of muscle, bone, or  
viscera  
Hepatitis, within the preceding  
12 months  
Hodgkin's disease  
Hyperlipidemia (cholesterol,  
phospholipids and triglycerides)  
Hypersplenism (hemolytic jaundice,  
thrombopenic purpura, splenic,  
neutropenia, splenic panhema-  
tocytopenia) except congenital  
microspherocytic anemia which has  
undergone successful splenectomy

Hypertrophic tongue  
Hypotension  
Ischiorectal abscess  
Jaundice  
Liver disease  
Lymphangitis  
Lymphomata  
Lupus erythematosus disseminata  
Metastatic bone tumor, any  
malignant bone tumor  
Muscles, significant atrophy and/or  
weakness of, compared with the  
opposite member  
Mycosis fungoides: mycotic disease  
Myelofibrosis, megakaryocytic  
myelosis  
Myeloproliferative disease (other  
than leukemia)  
Myositis  
Myotonia congenita, confirmed  
Neurosyphilis, in any form  
Non-traumatic splenectomy  
Pancreatic cysts  
Pancreatitis, acute, chronic,  
recurrent  
Periarteritis nodosa  
Pericarditis  
Poliomyelitis, post, with residual  
muscular weakness  
Sarcoidosis, sarcoid active, or  
sarcoid of undetermined activity  
Scleroderma  
CVA (stroke, history of)  
Syncope (fainting)  
Thromboembolic disease, except for  
acute, non-recurrent conditions  
Torticollis  
Tuberculosis  
Varicose veins  
Visceroptosis  
Venereal disease, lues, gonorrhoea, LGV,  
chancroid, GI, herpes simplex type II

Mental Health

Drug addiction  
Alcoholism

## Nephrology/Urology

Albumin in urine  
Bladder, tumor of  
Cystinuria  
Cystocele  
Enuresis  
Epididymitis  
Epispadias  
Fistula, urinary  
Floating kidney  
Genitourinary tract, acute, chronic, congenital disorders of  
Genitalia, major abnormalities and defects of, such as a change of sex, a history thereof, or complications (adhesions, disfiguring scars, etc.)  
Genitourinary infections  
Glomerulonephritis, with any significant urine findings  
Glycosuria, persistent  
Gonad, tumor of  
Hematuria  
Hydrocele  
Hydronephrosis  
Hypertrophic prostate  
Hypospadias  
Incontinence or retention of urine  
Infantile genital organs  
Kidney, absence of one  
Kidney, horseshoe  
Kidney, polycystic  
Kidney, tumor of  
Nephritis  
Pampiniform plexus  
Pelvic, chronic inflammatory disease of  
Penis, acute ulcerations of  
Penis, infection of  
Peyronie's disease  
Phimosis  
Porphyrinuria  
Prostatectomy  
Proteinuria  
Pus (prostatic smear)  
Pyelitis  
Pylonephritis, acute  
Pylonephritis, chronic

Pyonephrosis  
Pyuria  
Renal calculi  
Renal glycosuria  
Scrotal mass, undiagnosed  
Spermatocele  
Testicle, deformity, tumor or evidence of inflammation  
Testicles, undescended, absence of one, unless removed for tuberculosis or malignant disease  
Urethral discharge, acute or chronic  
Urethral stricture  
Urethritis, acute or chronic, other than gonorrheal urethritis, without complications  
Urinary calculi, history of single episode, if less than five years has elapsed between symptoms and medical examination  
Varicocele

## Neurology/Neurosurgery

Abnormalities which are apparently temporary in character resulting from recent injuries until a period of 3 months has elapsed. These include severe contusions and other wounds of the scalp and cerebral concussion  
Atrophy, muscular  
Brain Tumor  
Burr holes, cranial vault bony defects  
Cerebellar and Friedrich's ataxia  
Cerebral arteriosclerosis  
Cerebrospinal syphilis  
Cerebrovascular accident  
Chorea  
Convulsions  
CNS lues  
Central nervous system, disease of, chronic, progressive or degenerative or disorders of, symptomatic or asymptomatic  
Depressed fracture near central sulcus with or without convulsive seizures

Neurology/Neurosurgery, cont.

Deformities of the skull of any degree, associated with evidence of disease of the brain, spinal cord, or peripheral nerves  
Encephalomyelitis  
Epilepsy  
Feeble mindedness  
Headache, frequent, severe or disabling  
Hemiparesis  
Hemiplegia  
Herniated nucleus pulposus  
Huntington's chorea  
Injuries to peripheral nerves  
Metal poisoning, acute or chronic, heavy metal  
Migraine  
Mononeuritis or neuralgia, which is chronic or recurrent  
Monoplegia  
Multiple sclerosis  
Muscular atrophies and dystrophies, of any type  
Narcolepsy  
Nerve, severance of, with resultant atrophy, sensory loss of, or paralysis  
Neuralgia  
Neurasthenia  
Neuritis  
Neuro-circulatory asthenias  
Neurofibromatosis (Von Reckinghausen's disease)  
Neurological disorders, history or evidence of, including psychosis, neuropsychosis, personality disorders, or immaturity  
Neurological manifestation, if associated with congenital malformations and meningocele, even if uncomplicated  
Organic or functional nervous system disease  
Papilledema  
Paralysis agitans  
Paralysis, minor

Peripheral nerve disorder  
Post-encephalitis syndrome  
Psychoneurosis  
Sciatica  
Skull, deformities of, loss or congenital absence of the bony substance of, any amount  
Spasms (tic or habitual)  
Syncope (fainting)  
Tremor, noticeable

Nutrition

Atrophy (dystrophic)  
Beriberi  
Osteoporosis  
Pellagra  
Scurvy  
Stomatitis

Obstetrics and Gynecology

Amenorrhea  
Amputation of breast  
Breast, masses, discharge  
Cervical polyps, ulcer, or marked erosion of  
Cervicitis, acute or chronic, manifested by leukorrhea  
Dysmenorrhea  
Endocervicitis, more than mild  
Endometriosis  
Genitourinary tract, acute, chronic, congenital disorders of  
Genitalia, major abnormalities and defects of  
Genitalia, new growths on (adhesions, disfiguring scars, etc., internal or external)  
Hysterectomy  
Infantile genital organs  
Menstrual cycle, irregularities of  
Menopausal syndrome, either physiological or artificial, if manifested by more than mild constitutional or mental symptoms  
Oophorectomy (bilateral)  
Oophoritis, acute or chronic

## Obstetrics and Gynecology, cont.

Ovarian cysts or tumors  
Pampiniform plexus  
Pelvic or uterine tumors  
Pelvis, chronic inflammatory disease of, one year must have elapsed between symptoms and medical examination  
Phimosis, redundant prepuce is not cause of rejection  
Pregnancy  
Rectocele  
Salpingitis, acute or chronic  
Skenitis  
Uterine prolapse  
Uterus, benign tumor of  
Uterus, enlargement of, due to any cause  
Uterus, malignancy, evidence of  
Uterus, malposition of, if symptomatic  
Vagina, congenital abnormalities or severe lacerations of  
Vaginal tract, acute inflammatory disease, or evidence of  
Vaginitis, acute or chronic, manifested by leukorrhea  
Vulvitis, acute or chronic

## Ophthalmology

Amblyopis  
Asthenopia  
Blepharitis  
Blepharospasm  
Choroiditis  
Coloboma  
Color blindness  
Conjunctivitis  
Corneal dystrophy, including keratoconus  
Corneal opacities and ulcers  
Corneal scars, which interfere with vision  
Dacryocystitis  
Depth perception, impaired

Diplopia  
Epiphora  
Exophthalmus  
Eye and eyelid disfiguration  
Eyelids, impaired  
Glaucoma  
Iritis  
Irregular or unequal pupils  
Irregular or unequal iris  
Keratitis  
Lacrimal fistula  
Lagophthalmus  
Lens, aphakia, dislocation herionopsia, exophoria 15 prism diapters, exophoria over 10 prism diapters, hyperphoria over 2 prism diapters  
Lens opacities  
Neuroretinitis  
Night blindness  
Nystagmus  
Optic nerve atrophy  
Optic neuritis  
Papilledema  
Pigment (lack of in eye)  
Pterygium  
Retina, angiomatosis, phakomatoses, macular cysts or holes  
Retinal detachment  
Retinitis  
Staphyloma  
Strabismus  
Synechia  
Trachoma  
Trichiasis  
Xerophthalmia

## Orthopedics/Surgery

Abnormalities which are apparently temporary in character resulting from recent injuries until a period of 3 months has elapsed. These include severe contusions and other wounds of the scalp and cerebral concussion  
Adherent (webbed) fingers and/or toes

Orthopedics/Surgery, cont.

Amputation  
Ankylosis  
Anomaly of vertebral body,  
butterfly vertebra, hemivertebra,  
generalized or metabolic  
diseases of any type  
Arm, surgical plate in  
Arthritis  
Arthritis, Marie Strumpell type  
Arthrodesis  
Articular involvement, acute,  
chronic or recurrent, either  
on a mechanical or disease  
basis, acquired or congenital  
Back injury, disc, or back pathology,  
history of, abnormal curvature  
or other gross abnormalities  
Backsprain, recurrent  
Back surgery, evidence of or  
disc surgery  
Bone or joint, disease of, healed,  
with such resulting deformity or  
rigidity that function is impaired  
to such a degree as to preclude  
satisfactory performance of duty  
Bowlegs  
Bunions  
Bursitis, acute, chronic or  
recurrent  
Caries of the ribs  
Cervical rib  
Chondromalacia, manifested by  
verified history of joint effusion,  
interference with function, or  
residual from surgery  
Clavical problems  
Claw toes, precluding the wearing of  
normal footgear  
Clubfoot  
Coccyx, history of trauma,  
symptomatic  
Deformities of hip, knee, or ankle  
joint which interfere with  
walking or running  
Deformities of the skull of any  
degree associated with evidence  
of disease of the brain, spinal  
cord, or peripheral nerves  
Depressed fractures near  
central sulcus with or  
without convulsive seizures  
Depressed skull fractures  
Dislocation, instability  
compared with the  
opposite normal side  
Dislocations, reduced or partially  
reduced  
Fistula of bony lesions  
Flatfoot  
Floating cartilage  
Foreign bodies, such as retained  
bullets, shell fragments, metal  
plates, wires, hip cups  
Fractures  
Hallux valgus  
Hammertoes  
Healed fractures or dislocation of  
the vertebrae  
Herniated nucleus pulposus  
Hip, corrective surgery of  
Hyperdactyly, which precludes  
running, painful or prohibits  
wearing or normal footgear  
Imperfect ossification of cranial  
bones  
Jaw, disease of  
Joint, fixation of (major)  
Joint, loss of more than one of the  
3rd, 4th or 5th finger on either  
hand  
Joint, resection of, disease of,  
internal derangement of  
Joint, surgery  
Joints, foreign bodies or joint mice  
within  
Knee, corrective surgery of or re-  
moval of kneecap  
Knee, instability of, lateral direction  
compared with normal knee  
Knee, severe tear of collateral  
ligaments of  
Knock-knee (if severe)  
Kyphosis  
Lameness  
Laminectomy  
Ligament surgery  
Ligaments, relaxed articular  
Limping

Orthopedics/Surgery, cont.

Long bone curvature  
Lordosis  
Loss or congenital absence of the bony substance of the skull of any amount  
Lower extremity, shortening of, which requires a lift, or when there is any perceptible limp, or there is functional shortening of over 1/2 inch  
Lumbosacral joint disease  
Lumbosacral space, narrow, definite, marked  
Mandible, recurring dislocation of  
Metastatic bone tumor, any malignant bone tumor  
Muscles or tendons, calcification in, if associated with progressive disease of metabolic derangement  
Myositis  
Necrosis of ribs, sternum, clavicle, scapula, or vertebrae  
Neurofibromatosis (Von Reckingenhausen's disease)  
Osteoarthritis  
Osteomyelitis  
Osteoporosis  
Osteosclerosis  
Osteomalacia, generalized  
Paget's disease  
Periostitis  
Pes cavus  
Pilonidal cyst  
Poliomyelitis, post, with residual muscular weakness  
Polycystic disease, of bone and/or viscera  
Pott's disease  
Reductions, fractures, dislocation  
Rheumatoid or destructive arthritis  
Ribs, recent fracture of  
Rib, sternum, clavicle, scapula or vertebra, suppurative periostitis of  
Ribs, faulty fracture union  
Sarcoidosis

Sacroiliac disease  
Scoliosis  
Semilunar cartilage, torn, dislocated, fractures, unless without symptoms for at least 6 months  
Skeletal or postural anomalies, congenital or acquired  
Skeletal system, acute or chronic disease of  
Spine, congenital anomalies of, which are likely to result in future inability to perform full duty  
Spinal diseases, causing loss of flexibility  
Spondylolisthesis, any degree  
Spondylolysis  
Sprains (severe)  
Sternum, clavicle or scapula, recent fracture of  
Synovitis  
Muscles, significant atrophy and/or weakness of, compared with the opposite or normal member  
Thin legs (disproportionately)  
Thoracoplasties, with marked residual deformity of the spine secondary to an extensive thoracoplasty  
Thumb, loss of  
Toes, loss of any  
Torticollis  
Transverse arch, obliteration of, associated with permanent flexion of the small toes  
Trick knee  
Tuberculosis of bone  
Ununited callous formations, functional interference  
Upper extremities, any anomaly or limitation of motion which would preclude satisfactory performance of duty  
Wrist, healed disease or injury of, with residual weakness

## Otorhinolaryngology

Adenoiditis  
Adenoids, postnasal, interfering with respiration or associated with middle ear disease  
Aphonia  
Atresia  
Catarrhal otitis media  
Esophagus, organic disease of  
Harelip  
Hearing defect  
Hypertrophic rhinitis  
Inner ear, any abnormality of  
Laryngeal paralysis, sensory or motor  
Laryngectomy, post-operative  
Laryngitis  
Larynx, organic disease of, such as neoplasm, polyps, granuloma  
Mastoiditis  
Membrane tympanic perforations  
Meniere's syndrome  
Middle ear, any abnormality of  
Nasal obstructions  
Nasal septum, perforation of  
Nasopharynx or mouth, neoplasm of any part  
Nose, loss of, deformities interfering with breathing  
Otitis media  
Ozena  
Palate problems  
Paralysis of vocal chords  
Pharyngitis and nasopharyngitis, chronic  
Pharynx, deformities of  
Plica dysphonia ventricularis  
Rhinitis, chronic, atrophic  
Salivary fistula  
Salivary glands, acute inflammation  
Salpingitis, acute or chronic  
Sinus, chronic inflammation of  
Septal deviation, hypertrophic rhinitis or other conditions which result in 50% more obstruction of either airway, or which interfere with drainage of a sinus on either side

Stuttering or stammering  
Suppurative otitis media  
Syphilitic disease of the mouth, nose, throat, larynx  
Tracheostomy or tracheal fistula  
Tonsil conditions, pathological  
Vertigo  
Vincent's angina (trench mouth)

## Plastic Surgery

Adherent (webbed) fingers and/or toes  
Bifid tongue  
Burns, scars, contractures, and skin grafts, where job requirement may aggravate or they will interfere with performance of duties  
Claw toes, precluding the wearing of normal footwear  
Dupuytren's contracture  
Harelip  
Hermaphroditism  
Nonspastic contraction of the muscles of the neck or cicatricial contracture of the neck, to the extent that it interferes with the wearing of a uniform, or is so disfiguring as to make the individual objectionable in common social relationships  
Nose, loss of

## Pulmonary Medicine/Thoracic Surgery

Abcess of the lung  
Asbestosis  
Bronchiecstasis  
Bronchitis, chronic  
Bronchopleural fistula  
Chest, traumatic lesions of or its contents  
Chest, significant abnormal finding on physical examination of  
Chronic adhesive pleuritis  
Clinical tuberculosis  
Coccidioidomycosis, primary progressive  
Cystic lung disease  
Dyspnea

Pulmonary Medicine/Thoracic  
Surgery, cont.

Emphysema  
Empyema  
Esophageal lesions  
Fibrosis of the lungs  
Foreign body in lung  
Granulomatous  
Histoplasmosis  
Hydrothorax  
Lobectomy  
Lungs, abcess of  
Lung, multiple cystic disease  
of, or solitary cyst which is  
large and incapacitating  
Lungs, rales in  
Pleuritis, chronic fibrous, of  
sufficient extent to interfere  
with pulmonary function or  
obscure the lung field in the  
roentgenogram  
Pneumoconiosis  
Pneumonitis, typical or other  
slow healing  
Pneumothorax  
Pneumonectomy  
Pulmonary embolism  
Pulmonary bullae, x-ray evidence  
of  
Sarcoidosis  
Silicosis  
Sinus (unhealed chest wall)  
Thorax, weak, poorly developed  
Trachea or bronchus, foreign  
body in  
Valley fever

Physical Medicine/Rahabilitation

Ankylosis  
Arthritis  
Sprains  
Torticollis

General Disqualifiers

Asthenia (muscular weakness)  
Malformations, of any system, organ  
or bone  
Malignancies, of any system, organ  
or bone  
Medical discharge from any governmental  
service  
Microcephalus or hydrocephalus  
Physique, poor  
Tuberculosis of any organ, system  
or bone

APPENDIX C  
MEDICAL PANEL MEMBERS

MEDICAL PANEL MEMBERS

John H. Allan, M.D.

Chief Medical Officer, Armed Forces Examination and Entrance Station, Los Angeles; Orthopaedic Consultant, Occupational Health Department, Los Angeles; Orthopaedic Consultant, Liberty Mutual Insurance Company, Los Angeles

Garrett Lee, M.D.

Assistant Professor of Internal Medicine, University of California, Davis; Assistant Director, Coronary Care Unit

Ronald Schwartz, M.D.

Director of Medical Services, Occupational Health Services for the County of Los Angeles; specialty in Internal Medicine

APPENDIX D  
PHYSICAL REQUIREMENT PANEL MEMBERS

PHYSICAL REQUIREMENT PANEL MEMBERS

Ann H. Duncan

Associate Personnel Analyst with the City of Oakland; screens and selects prospective employees for the Police and Fire Departments; consults with the city physician and city attorney concerning standards and requirements for the selection of personnel, particularly the Police Department

Gerald W. Mowat

Holds the rank of Sergeant and is in charge of the Physical Fitness and Self Defense Unit of the Los Angeles Police Department, Training Division; investigates the causes of injuries to police recruits; develops programs designed to reduce injuries to recruits