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A Study on the Selection of University C.O.T.C. Candidates

Thesis submitted to the Department of
Psychology in partial fulfillment
of the requirements for the
Master of Science Degree.

Frederick Thorburn Brown.

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CHAPTER I

THE UNIVERSITY CONTINGENTS OF THE CANADIAN OFFICERS' TRAINING CORPS

The dissertation that follows is the study of a particular area of officer selection for the Canadian Army. This particular area, the University Contingents of the Canadian Officers' Training Corps (COTC), is and will be, unless Army policy changes considerably, the principal source for obtaining officers required by the various components of the Army in peacetime. The present Army consists of three main parts, (a) the Active Force, the full-time, standing or permanent force, (b) the Reserve Force, a part-time component which is to be the basis of the main field force in the event of general mobilization, and (c) the Supplementary Reserve, the non-active component made up of previously trained personnel. In addition to these three main components, there are (a) a Reserve Militia, (b) the Command and University Contingents of the C.O.T.C., and (c) the Cadet Services of Canada. Certain educational and training establishments such as authorized Rifle Associations and the Royal Roads and Royal Military Academies are additional to but not integral parts of the Canadian Army.

There are several University Contingents of the C.O.T.C. throughout Canada, located at the universities that applied for the privilege, and were found to have an adequate curriculum, adequate accomodation, and the ability to supply a sufficient number of contingent officers and officer cadets. There is a Joint Services University Training Board at the Department of National Defence in Ottawa composed of four service members

and three university representatives nominated by the National Conference of Canadian Universities. This board coordinates the Navy, Army and Air Force programs for training in the universities, recommends policies for such training, and determines and notifies duties to be performed by the Joint Services University Training Committees located at all universities in which a Contingent of the C.O.T.C. is organized. This latter committee is composed of the executive head of the university, or his representative, nominees of the university who may be required from time to time, the commanding officer of each of the Service units at the university, and a Service representative from each command headquarters of the Service having a unit at the university. The purpose of this committee is to coordinate the Services training program with the academic syllabus, recommend to university authorities the granting of certain credits toward degrees, advise the officer commanding the particular command on selection and appointment of contingent officers, and perform such additional duties as necessary in connection with the various training programs.

It becomes clear that the University Contingents are guided by both the military and higher educational authorities of the country. At each university there is a Selection Board as follows: (a) The commanding officer of the university contingent, as chairman of the Board, (b) The Resident Staff Officer, an Active Force officer to act as staff officer to the commanding officer and to assist the universities in every way possible to make the C.O.T.C. plan a most effective and efficient organization for the production of officers for the Canadian Army, (c) An

Active Force officer not below the rank of Major to directly represent the general officer commanding the Command in which the contingent is located, (d) Members of the university faculty appointed by the head of the university, (e) The Command Personnel Officer, or his representative, when required, (f) The Command Medical Officer, or his representative, in an advisory capacity. This Selection Board is required to consider each application placed before it, for training in the C.O.T.C. and will: (a) give full consideration to the candidate's academic record, (b) acquaint themselves with all documents pertaining to the candidate's application, (c) interview the candidate with a view to his acceptance in the C.O.T.C., (d) recommend to Command acceptance of suitable candidates, and (e) review individual training records to recommend to Command concerning further training of officer cadets.

In practice the University Selection Board has usually devoted about ten to fifteen minutes to the consideration of each applicant. That so short a time is given to each candidate implies that a great deal of groundwork has to be done by the Resident Staff Officer (R.S.O.) and the Personnel Officer (P.O.) in preliminary preparation of reports to advise the Board concerning the merits of applicants eligible for appointment to the C.O.T.C.. The R.S.O. is required to carry out the preliminary screening of all applicants for the C.O.T.C., and is empowered to reject those who are "obviously unsuitable or ineligible". Let us now examine these eligibility, application, and preliminary selection factors.

University students desirous of taking C.O.T.C. training apply,

stating, (a) preference as to corps or arm of the service, (b) a willingness to complete the training program if accepted, and (c) that he is desirous of becoming a commissioned officer in the Canadian Army (any component) upon qualification. Note that acceptance into the C.O.T.C. gives the officer cadets the status of second lieutenants for all purposes and they are subject to military law as officers, but, except when otherwise specifically ordered, they exercise military command only over other officer cadets placed under their command. Transportation to and from corps school, rations, quarters, uniforms, and a number of other conveniences are given to the officer cadets, and they are paid the substantial sum of \$153.00 per month while undergoing training. These facts are mentioned particularly because they sometimes have an important bearing on the candidate's "motivation" to undergo C.O.T.C. training.

The applicant's preference of corps is governed in many instances by the course he is following at university. To get into the technical and professional corps such as Engineers, Signals, Electrical and Mechanical Engineers, Medical, Dental and Chaplain Corps, the applicant must be studying for a degree in the appropriate faculty. The combatant arms and services corps are not particularly restrictive, although preference are sometimes indicated. Ordnance will accept applicants from any faculty, but prefer those who are studying commerce; Pay Corps prefers students of commerce or economics; Provost Corps gives preference to law students. There are restrictions concerning maximum age that differ according to the role of the corps. Previously qualified officers

have to voluntarily revert to second lieutenant rank and must requalify in a technical corps appropriate to their studies. A candidate must be planning to continue in university, perhaps in graduate school, so that he may take at least two theoretical (winter) and two practical (summer, at Army camp) phases. At the time this particular study was started in 1947, candidates were eligible if they possessed junior matriculation, but they now are required to have senior matriculation. All must be Canadians, or British subjects who plan to reside in Canada after graduation. This last factor of planned residence, as well as genuine willingness to complete the C.O.T.C. training program and become a commissioned officer, are not as readily assessed as the other factors that bear on acceptance. Should an officer cadet apply for permission to discontinue training, his request is usually granted after the circumstances are reviewed by his commanding officer. The officer cadet is thus not under a very pressing obligation when he signifies on application that he intends to complete his training.

The R.S.O. is able to reject those who are ineligible, and in addition screens out a number that may not be "obviously" unsuitable, but whom he has reason to believe do not measure up to the desired standards of bearing, motivation, maturity and personality development. There are, then, very positive selection factors at work long before a candidate is referred to the personnel officer for appraisal. The candidate must have met the university entrance requirements. This is a variable factor from university to university. Note too that at the end of the

war barriers were lowered somewhat to allow veteran applicants every possible chance to acquire a higher education. The combination of meeting university standards and passing the R.S.O. screening generally makes the candidates referred for further appraisal fall into what might be called a "highly pre-selected" group. To differentiate members of this group poses a very real problem in psychological method, and for that reason all are referred to personnel officers for appraisal.

"Prior to being considered by the University Selection Board for acceptance or rejection, each candidate will be interviewed by a Personnel Officer, who will create a Personnel Selection Report for the University Selection Board on CAFB 1539, outlining the candidate's suitability for acceptance, in view of his physical condition, appearance, abilities, motivation, educational, occupational, military and interest background and his personality development. This report will also recommend the corps in which the officer cadet is considered suitable for training. The appraisal will be based on the results of a personal interview and such tests as may be authorized by Personnel Selection Service. Personnel officers are also required to appraise candidates during every period of their practical training, in cases of training failures, when application is made for a commission in the Canadian Army, and at any time required by the commanding officer or other appropriate authority".

The personnel officer has a responsibility to report on the candidate not only for initial selection, but, as just indicated, at every phase of training or critical point in the career of the officer cadet. The cadet must complete at least two phases of

practical (summer camp) training of from twelve to sixteen weeks. During his training he is assessed and reported upon by the various corps school regimental officers under whose supervision he is placed. The P.O. serves as advisor to these regimental officers; responsibility for administrative or training action, including ratings assigned to the candidate's work, is in the hands of the regimental officers. At the conclusion of training the officer cadet may apply for a commission in one of the components of the Army. He may already have been given a certificate of qualification. This establishes his eligibility for commission, but does not necessarily prove his immediate physical fitness nor his status in university. It has happened that some who have qualified in training have nevertheless been refused a commission, an inconsistency that has resulted from what appeared at the time to be rather lenient corps school grading, particularly as related to "officer" qualities of personality.

Inasmuch as reference will be made later to reports prepared by the training officers, instructions for using and samples of these reports are included as Appendix A. No comment is needed now, but will be reserved for later inclusion in an analysis of the experimental findings as related to criteria for judging initial selection techniques.

To complete the picture of requirements to be met by the officer cadet, a few words on the training program are required. It is divided into theoretical and practical phases over a three year period. Theoretical training consists of academic military studies conducted at the university prior to each of the three practical phases that are given at the Active Force schools of the various

corps. It consists of a series of lectures, demonstrations and discussions that will provide a background for the detailed practical work to follow. The practical training is conducted during the cadet's summer vacation at the appropriate corps school. The theoretical training in the first year is a general introduction to the Army, and requires approximately ten to fifteen hours. Forty hours of winter theoretical training are given after the first and second practical phases. The first year practical training is given to what might best be described as general military training common to all corps, although it is intended that about half of the first twelve to sixteen weeks, and all of the second and third practical phases will be devoted to special to corps subjects. The normal practical period is sixteen weeks, but a minimum of twelve weeks is sufficient in cases where officer cadets cannot attend the full period for reasons beyond their control, i.e. length of university holidays, compassionate leave, sickness, academic supplemental examinations, and other legitimate excuses.

Other rank personnel of the Active Force may be upgraded to commissioned rank. Such personnel must conform to certain age and other standards similar to the above, including senior matriculation. Accepted applicants are sent to university to obtain a degree, or are sent to Royal Roads or Royal Military College, and are required to undergo the full C.O.T.C. training. Even specialist direct-entry college graduates are required to complete an equivalent military training program. The Command Contingent, designed to qualify officers for the Reserve Force, allows junior matriculants to be commissioned, but they, too, must

complete the equivalent training program, and many do actually take their training along with the university students during the summer. Selection machinery for all applicants is similar to that applied to the University Contingents.

The reader should now have a working knowledge of the C.O.T.C. The superficial requirements to be met by an officer candidate, and the training he must undergo before earning a commission are fairly tangible. We have traced the selection procedure down to the level of referral to the personnel officer. Although it is the president and members of the University Selection Board who must decide whether a reasonably plausible candidate merits a trial in C.O.T.C., much of the burden of scientific argument concerning each individual case is put upon the personnel officer.

If his argument is sound, and "quota" permits, Board members will usually take his advice. The purpose of the following pages is to indicate the evidence upon which the personnel officer bases his assessments, to examine the testing, interviewing and reporting procedures, and to compare the recommendations made with the final results of training. In this critical analysis of personnel selection procedures the aim is to find out what the Army wants in a C.O.T.C. candidate, and to see if present methods are valid in meeting the demand. An attempt will be made through the use of additional techniques, tests and personality measures to establish the relative sensitivity of the personnel officer's work and to indicate where improvement is most needed. Before analysing the problem and detailing the plan of attack, certain background information, particularly methods used during the last war, will be reviewed.

CHAPTER II

SOME HISTORICAL ASPECTS OF OFFICER SELECTION.

The selection of the most suitable candidates for training in University Contingents of the Canadian Officers' Training Corps poses a problem in psychological method. In solving this problem in military psychology, the stress must be laid on the application of science more than on the theoretical and experimental backgrounds that pertain to the underlying principles (1).

The program of procedures adopted for this peace-time selection of officer cadets has not been guided by any precisely defined methodological principles (2). It is based mainly on experience gained by officers engaged in selection work during the recent world conflict. Although certain technical guides for psychological testing, interviewing and reporting are generally accepted, yet no solid general principles of assessment have been established. Further experimentation may well convince assessors of the merits or limitations of certain methods, or lead to the adoption of one set of procedures for one particular situation, and another for another. Out of these various systems may come enough understanding to actually formulate and verify the laws of personality. It is not necessary, however, to await the integration of the various theories of personality before attacking the problem of assessment in a "common sense" way, based on ideas and principles from whatever source.

Before detailing the procedures adopted for selecting COTC applicants, it would be well to review the main procedures that

have been used for officer selection. It should be possible, on the basis of this historical review, to convince the reader of the logic, if not of the efficacy, of the procedures that have been chosen or adapted from the wartime setting to fit the present needs. The historical study should serve to explain the original choice of COTC techniques, whereas the experimental examination of these techniques should reveal their validity.

The use of many psychological techniques in handling men in wartime is as old as war itself, but the application of scientifically determined rules of human engineering to the military setting is relatively recent. Alfred Binet, the French physician who is known to most psychologists as the father of intelligence testing, wrote an article in the Annales Medico-psychologiques for January 1910 on the need for a method of diagnosis to be applied to enlistees in the French Army so that mentally defective, particularly feeble-minded recruits could be eliminated (3). T. Simon, who so often collaborated with Binet, did so again in this case, and the two enthusiasts seem to have taken up the matter with the military authorities and urged the adoption of psychological tests. No progress was made because the medical officers thought the tests unsuitable. Seven years later, however, the Binet-Simon tests, revised for American purposes, were used with splendid results along with other tests and techniques by American psychologists in selecting trainees for the American Army.

Starting, then, in 1917, the United States War and Navy Departments put psychological techniques to work both in the selecting and in the placing of those selected into various branches and jobs of the armed forces. Their emphasis was on tests. The great

need for quick and efficient psychological tools for military purposes gave impetus to the testing movement, and the extension of mental measurements into the field of personality. Undoubtedly this movement, which is still in an accelerating phase, is one of the outstanding events in twentieth century psychology (4). The rapid output of ever more ingenious tests has outstripped progress in criticism and theory. There are now, after a second world war, countless experiments performed in a military setting that have not yet been adequately analysed and integrated into a comprehensive theory of personality.

Between the two wars many advances of a diversified nature were made by psychologists both in and out the military setting. The use of psychology by Germany in total war was regarded by the Nazis as their most effective weapon (5). Army psychology gradually came to include the study of all psychological problems on both the military and the home fronts (6).

It is not intended here to review general psychological techniques, but rather to review only some of the more important ones that relate to present COTC officer selection. Mention will therefore be made of certain work done by the Germans, the Americans, the British and the Canadians.

THE NAZI CONTRIBUTION

German psychologists who were accepted into the Army were compelled to undergo a strict military training comparable to their equally strict scientific education (7). The Army psychologist was definitely subordinated to the military, and was regarded

as an advisor whose recommendations might or might not be accepted by the commanding officers. For some time many German generals refused even to consider the advisability of artificial selection and classification through scientific methods developed by industrial psychologists (8). It appears that the officers' general attitude was that psychology is most important in the military mind, but the practice of it in the Army must be confined to genuine military officers rather than to outside academicians and theorists. Actually the subordination of the psychologist to the military did not prove to be a serious handicap. The psychological section of the General Staff has frequently shown a high degree of courage and independence in defying and even refuting Nazi policies (9). Few of the Army psychologists felt so constricted as not to use the findings and methods of Jewish scholars like Bergson, Freud, Lazarus and Steinthal.

Psychologically, the Nazi leadership principle hinged on Der Fuehrer who delegated authority to sub-leaders in the form of a person-to-person mandate (10). This personal relationship of the leader and his followers was the psychological basis of the whole Nazi political system. To solidify this personal relationship the Nazis applied all manner of psychological weapons: indoctrination, propaganda, even terror and intimidation, to the German people themselves. The psychologists, exploring the implications of such leadership, undertook a dual approach to the problem. First, they tried to determine the psychological components of leader-genius, and, second, they devised ways of selecting a new generation of leaders for both the state and the army.

The consensus of opinion finally was that leader-genius cannot be typed (11). Its historical advent and impact follow no established norms. Its leadership methods cannot be canalized because they are formulated by the individual's personality as affected and directed by the circumstances of the times in which he lives, his environment, and his real or imagined destiny. The study of former leaders failed to yield adequate keys to a prognostic analysis of leadership, but rather merely demonstrated the appearance of two types of leaders, the spiritual, such as Jesus, and the conqueror type, such as Caesar and Napoleon.

The second problem of creating norms for finding sub-leaders, "good men", not required to possess creative genius, but able and ready to conform to the principles of the state and policies of the Army, gave again very challenging problems. Even the leadership qualities of "good men" could not be predicted by experimental performance tests, but satisfactory results were claimed through the study of their case history, emphasizing character and temperament.

We see the argument for the organismic approach to the study of personality. The psychological effects of modern weapons, war-planes, tanks, anti-aircraft and anti-tank guns, require personnel with never-failing nerves. Selection must go beyond the mere examination of intelligence and skill, and concentrate on the analysis of the total personality. Hence the German emphasis on the characterological examination.

It must be pointed out that in the totalitarian state selection began long before the youth was called to the colours. Boys, as well as girls, were closely observed in school, in the Hitler

Youth, Storm Troops, Black Corps and Labour Front, all of which organizations had their own selective methods and kept their own records (12). Each organization critically examined its members to determine their conduct in service (punctuality, orderliness, reliability, subordination), their attitude toward comrades and leaders, their adaptability, diligence, will power, skill, sensory perception, intellectual capacity, practical and unusual talents, and leadership qualifications. With typical German love for meticulous detail, these records were tabulated, analysed and filed. Thus at the time of military induction, or whenever required, there was available a complete record of character development, behavior and accomplishment to aid the psychologist in his assessment. Compare this to what is available in a democratic country. It is often impossible to get even a reasonably accurate record of scholastic achievement, to say nothing of trustworthy testimonials of work record or character.

Before the war, German officers were selected from applicants who applied while still in school to become members of a particular branch, even a particular unit of the service. Applications were submitted to the colonel of the desired regiment, who had the first and last say regarding the acceptance of the would-be officer. At age eighteen the candidate went before a board of medical and a board of psychological examiners, the function of the latter being only to advise and supply scientific leads concerning character and aptitude to the future colonel, who was always present at both examinations.

After the war started, officers were generally selected on the

basis of demonstrated military ability. Psychological examination at the preliminary selection was abandoned, but was usually carried out at the officer training school. It is worth repeating, however, that the final decision for acceptance rested less on the candidate's passing a psychological examination than on the opinion of a commanding officer.

It would appear that the German techniques used to select officers and specialists have been carefully studied by the British, and many features adapted to use by the British War Office Selection Boards. Canadian and American wartime procedures have certainly been greatly influenced by the W.O.S.B. programme, and now the Canadian peacetime reduced schedule for selection of COTC candidates is based on wartime experience. Consequently it should prove worthwhile to examine in some detail the schedule used by the Nazis in their thoroughgoing characterological approach to selection of army officers. It should be mentioned that it is reported that follow-up studies made by the training-staff personnel on officer candidates after three, six and twelve months' training showed agreement with the laboratory screening opinions to the extent of 98% (13). If preliminary psychological examination has actually been capable of selecting suitable applicants for leadership roles to this very remarkable extent, then the procedures employed certainly warrant careful examination.

The psychological examination was conducted by a team of examiners, an army officer, usually of colonel's rank, a medical officer, and three psychologists. Candidates reported to one of the several testing stations for three full days, the first and third of them

being taken up by tests and interviews, with the second day for rest under surveillance (14).

The actual sequence of tests is not important, and apparently is governed by convenience of administration. The following areas are studied (15):

I. Life History. Biographical material, influences of environment, home, school, youthful experiences influenced by reading and travel, attitude towards parents, teachers, national figures, political and social outlook, ambitions, general philosophy of life are examined.

II. Expression Analysis.

- (a) Facial expressions are studied by a motion picture recording taken by a concealed camera. The candidate is cross-questioned, subjected to unexpected electric shocks, asked to work an ergograph, or pull and squeeze an exercise expander through the handles of which ever-increasing electrical current passes. The camera recording is later analysed.
- (b) Body movements, such as involuntary scratching, position of lips while working, and general posture are analysed.
- (c) Voice analysis is attempted by noting differences between phonetic and formal expression in voice and speech loudness, pitch, melody, clang timbre, articulation, accentuation, tempo, pauses, and divergent selection of words, sentence development and use of idioms are all used as clues in rating voice.
- (d) Appearance analysis, based largely on first impression

is broken into four parts:

- i Physically weak appearance is usually accompanied by hesitation and meekness, sometimes resistance, tension, excitability, stubbornness, lack of sense of humour.
- ii Physically robust appearance usually shows energy, endurance, physical resistance to hardship, light-minded or careless courage, or perhaps low mental capacity, superciliousness, egoism, pretentiousness or scornfulness, and the two types should be recognized before selecting for commission.
- iii Neat appearance may indicate carefulness, reliability, parsimony, perhaps harmless vanity, or such negative qualities as bluffing and great need for recognition.
- iv Untidy appearance may conceal valuable hidden traits, but is generally not good in a soldier.

(e) Handwriting and writing style are assessed by a graphologist as an aid to personality analysis.

III. Mental Capacity is investigated, using both intelligence and interest tests of the American style. Also used is the written analysis by the candidate of pictures shown him to test his power of observation and imagination. A performance sort of completion test requiring the subject to arrange a number of articles of different size, weight, surface texture, shape and colour according to an underlying principle of classification is used in much

the same way as the familiar number or matrix series tests. The test supposedly requires ability for abstraction in the non-verbal field.

IV. Action Analysis is obtained by testing choice reactions, and by two other especially designed methods (16):

- (a) The command series is used. "The candidate receives a series of orders to be carried out during the day. He may be ordered to report at certain periods, to state the correct time, to mail a letter, to pack his knapsack, rifle, belt and helmet, to attach a rope to hooks fixed at certain intervals and, finally, to climb a smooth escalade with full equipment. The examiner frequently changes the tone of his commands and intentionally censures minor mistakes to determine the effect on the candidate. Physical dexterity, alertness, quick thinking, and memory are tested in this manner".
- (b) The leadership test involves placing under command of the candidate a group of infantry soldiers to whom he must give certain simple orders, or to whom he must explain and then supervise their carrying out some simple task. He may be asked to translate some instructions from formal military language into language easily understood by an other rank, perhaps lecture to them. The effects of his leadership are examined by both observing and questioning the soldiers he has commanded.

The tests used are chiefly individual tests, but paper and pencil tests, mostly intelligence and some technical aptitude tests are

given in small groups of four or five. There is throughout an emphasis in determining the soldier's will power, mental energy, sustaining power, readiness to act to the limit of physical capacity. One test used was to have a candidate in full kit climb over a wall of smooth planks as often as he could (17). The number of times climbed was not so important to the examiners as the candidate's readiness to use the last ounce of his strength. To climb six times and give up without being exhausted merited a lower rating than to climb twice with effort and yet try a third time. Formal knowledge and intellectual capacity are explicitly stated as being of secondary importance to the spiritual qualities and emotional attitudes of the soldier (18). A certain basic intelligence is required, but apparently the initial aim is to find "good men" rather than superior leaders or geniuses.

One must compare this German attitude of finding "good men" to the attitude expressed in the assessment of COTC candidates. The Nazis recognized the difficulty of finding or even recognizing superior leaders at the initial assessment stage, just as we do. But they had positive ideas of what makes the exceptional leader. They believed he is more born than made (19). Theobald von Schaefer, one of Germany's "greatest and most objective" military historians, stated in 1936: "Training, the appointment to office, and even experience are not enough; the qualities of leadership must be innate". He quotes Frederick the Great: "The mule that carried Prince Eugene's packsaddle through ten campaigns did not thereby become a better tactician". The principal criteria for leadership are positive will, determination, operative thinking, mental elasticity, mathematical thinking, and character.

It was stated earlier that selection opinion was confirmed by training staff ratings in 98% of the cases. This statement was made by an Australian, Dr. A.H. Martin, but apparently was a quotation made to him by a refugee German psychologist who had served in the Army just before the war (20). A number of German Army psychologists cautioned against indiscriminate application of Army methods to industry, suggesting that the "system of prognostic personality study" is applicable only to professions where certain vital stimuli can be properly foreseen, such as the Army with the ultimate goal of combat. Performance tests were validated in the usual manner, but the characterological tests either were not validated, or reports on such work censored, perhaps because of the unsuitable results. Farago (21) makes the point that "final validation was left to the war itself which has fully confirmed the tests both in a strictly functional and in a wider characterological sense".

THE BRITISH ARMY PROCEDURES

In February 1942, the British War Office Selection Boards, popularly known as "Wosbies", were established. Then in June 1943, the Canadian Army overseas followed the British example and set up the Canadian Selection and Appraisal Centre at Ash, in Surrey. Inasmuch as considerable detail of the CS&AC procedures will be given, and these were based on the WOSB programme, it is not planned to do more than call attention to this marked tie between the British and Canadian methods. The close liaison between the two can be better appreciated if it is realized that many overseas

Canadian candidates were sent to British Officer Training Centres instead of being returned to Canada for their commissioning courses. Moreover, the head of Canadian Selection of Personnel Section, Lieutenant-Col J.W. Howard, AAG (SP) at Canadian Military Headquarters, actually helped the British to set up their procedures, and after a time became fully associated with the British War Office. The Canadian Officer Selection and Appraisal Centres in Canada were, as will be shown later, very similar to their prototype overseas.

Having acknowledged this interrelationship of British and Canadian wartime officer selection procedures, there now remains the comparing of the two peacetime programmes that have emerged from the wartime experience. The two have developed quite independently of each another. Without going into great detail, it will be possible to show certain features of the British officer production machinery that should prove of comparative interest in studying the Canadian counterpart. For this purpose it is planned to discuss briefly the officer selection for the British National Service Army (conscriptees), and give some notes on procedures of the Royal Military Academy at Sandhurst (RMAS).

Selection of officer candidates for Britain's National Service Army is done in two phases, the first being a rather rough screening by officers at the Army Basic Training Unit (ABTU) to which the draftees report, and the second a more thorough review by members of a WOSB of those candidates who survive the first winnowing. It would appear that in the ABTU there is considerable caution shown in rejecting candidates. The responsibility for acceptance or rejection rests on the commanding officer, who, although advised

by a personnel officer and his regimental officers, prefers to allow any candidate whom he has not been able to "convince" concerning his shortcomings, to go forth to the WOSB. Obviously unsuitable candidates are not put forward, and an attempt is made to "discourage" or delay others who lack certain qualities that might be developed in time. The rejection at ABTU level by the commanding officer has been subjected to some criticism, whereas the rejection by a WOSB carries so much weight that disappointed parents and other critics accept the Board decision with much more grace.

The personnel officer at the ABTU administers an intelligence test, checks the candidate's educational status, and gives him a brief interview. Most of the candidates who apply for commissioning do so within a few weeks after induction into the Army. This allows only a short period for regimental officers to observe their "military behavior", but on the basis of these brief military and psychological reports the commanding officer has a reasonable basis on which to decide whether a candidate merits going before a WOSB.

The WOSB assessment takes two and a half days. The candidate is required to undergo a number of tests: intelligence, attitude, personality and performance. The performance tests, usually "out-door" situational tests, are designed to show the candidate's agility, ruggedness, daring, stamina, practical intelligence, stability under stress, underlying motivation, ability to deal with people, and readiness to serve as a cooperative team member. Tests similar to those that will be described in discussing the Canadian wartime selection procedures are used. A fairly important assessment document is the autobiography that the candidate writes at the time he

fills a number of other forms and questionnaires. The candidate's history is reviewed and compared with his performance in a number of situations, and he is interviewed separately by the personnel officer (Captain), the regimental officer (Major), and the president of the board (Colonel), the three members of the WOSB. Thus a good deal of material on which to decide concerning the candidate's suitability to proceed to Officer Cadet School (O.C.S.) is available for the Board members to review as a selection team.

Colonel Maclachlan, the source of most of the above mentioned information, reports (21a) that the WOSB procedures are adequate in selecting the extreme cases. Good candidates and poor prospects for officer role can be detected, but there is, even with the two and a half day programme applied to a pre-selected group who have undergone some military training, considerable difficulty in determining the relative merits of the middle group. Hence a "N.Y." rating is used to indicate some candidates whom the board is "not yet" prepared to accept. These "N.Y." candidates may apply at a later date after a period of military training as an other rank, during which time their progress is carefully watched. It is not clear what percentage of these "delayed" candidates apply again for upgrading to commission, but roughly fifty per cent of those who do reappear before a WOSB are recommended to go to an O.C.S. The WOSB is inclined to reject rather than accept the doubtful or borderline cases, because "the O.C.S. does not like to see failures".

The National Service selection procedure at the WOSB level is identical to that employed in examining candidates from other sources for the Regular Army (22). There are those who apply for a commis-

sion before entering the Army. Instead of being screened at regimental or ABTU level, they are examined in a common services entrance examination set by the Civil Service Commission. This would be a procedure similar to that used in Canada for preliminary screening of Royal Roads or Royal Military Academy candidates. If the candidate qualifies on the Civil Service examination, mostly educational, and passes his medical examination, he then appears before a WOSB. If "passed" by this Board, he is enlisted in the ranks as a Regular soldier for four to six months further assessment before proceeding to the Royal Military Academy at Sandhurst (R.M.A.S.). Other candidates enlist directly into the Regular Army and then apply for upgrading to commissioned rank. They would be assessed at unit level (in the same way as is done for the draftees at ABTU), and then sent to WOSB for final assessment. All candidates, after acceptance by WOSB are required to take enough more general military training before proceeding to officer school to bring them to a common level of about six months minimum of military experience.

Members of the selection team at WOSB, except in the case of those entering the Regular Army through Civil Service examination, have in addition to tests and assessments made over a two and a half day period, the aid of reports made by officers observing the candidate in a military setting for at least a number of weeks. It would be most interesting to compare the validity of WOSB judgments made on those with, and those without this preliminary training and "screening" assessment. This information is not at hand. The point is mentioned because there might be comparisons made with

Canadian results under similar conditions. Generally COTC candidates for acceptance into University Contingents have not had recent military experience. The only aid to be given to the University Selection Boards are reports prepared by the personnel officer after subjecting the candidate to a maximum of three hours of paper and pencil testing, questionnaire filling and interviewing.

The National Service officer candidates spend six months at Officer Cadet School, whereas the Regular Army cadet stays a year and a half at Sandhurst. As previously mentioned "the O.C.S. does not like to see failures". The same applies to Sandhurst. In both cases those who for one reason or another are not doing well are "relegated" at least once before being failed. The man is thus warned about his shortcomings and steps are taken to apply remedial action. The "slow-developing" Sandhurst cadet is allowed to repeat no more than one of the three six-months phases into which the course is divided. Major Palmer does not make clear in his report on Sandhurst what is meant by a "slow-developing" cadet. The average age for acceptance as an officer cadet is "18 - 18½", so that the "maturity" of some of the cadets might be somewhat difficult to assess. The minimum formal educational level for acceptance of officer candidates is not stated in immediately available source material, but may be inferred from the average age of candidates to be at approximately the matriculation level required for Canadian applicants.

At this point it seems worthwhile to call further attention to differences between the British and Canadian training programme. At Sandhurst the cadet training is continuous over three six-months

periods. The curriculum is about two-thirds military, and certainly the educational part, given by specially trained military "professors", does not raise the cadet's formal standing to the Bachelor's level. The discussion does not refer to training of officers for Reserve Force in either Britain or Canada. It is fair to state that the Canadian programme separates the cadet's training more distinctly into two parts, the military and the university. Other ranks being upgraded to commission must (with very special exception for a limited few "limited career" candidates) complete university training as well as military training. The university training is given at a university or at one of the Services Colleges during the months October to May inclusive, and the military training, ranging from three to four months, is given during the remaining four months. Senior Matriculation is a prerequisite to this upgrading, so that a cadet generally has three years of university as well as three summers of military training to complete. During the time a Canadian candidate is at university, whether or not he be an other rank member of the Army, he is given very little supervision by the military, and his academic standing is judged solely by the non-military university staff. This two-thirds of the Canadian officer training, given over to higher education in a non-military setting, bears noting.

The Canadian officer cadet is accepted for military training in a particular arm or corps, and most of his military training is therefore special to corps. The British cadet gets a more varied course, for he is not allocated to corps until he graduates. He is allowed to express a preference for corps, and must indicate his first, second, and third choice. The principal basis of allocation is the cadet's

success at R.M.A.S. At the end of the third term an order of merit of a complete class of cadets is established as the "Passing-out Order", and a cadet high in this order is more likely to be allowed his first choice of corps than one who ranks near the bottom of the class. It is against policy to direct a cadet to a technical corps just because he shows a "scientific aptitude". The overall needs of the Army must in certain cases, however, overrule the wishes of individual cadets. The vacancies attached to a particular corps or regiment are established by Army Council, so that there may be rather stiff competition between cadets desiring particular corps affiliation. The allocation to particular regiments within corps is governed in the same way, although the order of merit may be modified in exceptional cases such as when the cadet has strong territorial or ancestral claims to a particular regiment, several generations of his family having commanded the regiment.

Because of the importance attached to the "Passing-out Order", special efforts are made to see that the method of reporting cadets' progress is "foolproof and above reproach". Attached as appendix (B) is the R.M.A.S. Standing Order for tests, exams and production of reports, together with pages one and two of the report forms used to rank the cadets. As stated in the Standing Order, examination results rather than test results are used in assessing the final "educational" standard. Each examination is scored and then graded using the standard distribution shown as appendix "C" to the Standing Order. Each subject is then given a grading factor by which all grades in that subject are multiplied in order that due weight may be given to the more important subjects. Map Reading has a grading factor of one,

Military Tactics, six, so that the "multiple grades" for Map Reading will range from nine to one, while Tactics will be from fifty-four to six. These multiple grades for all subjects are added and this total is again graded using the standard distribution. Each cadet is thus given a total educational grade that may range from nine to one.

The factors used in assessing character are shown on page one of the report form. The grades of these thirteen factors, seven rated in the first term, four in the second, and two in the final term, are generally the opinion of the platoon commander, but they are modified by all officers of the company sitting in committee. These include officers who have instructed the cadet and officers responsible for organization of games and other extra-curricular activities. The committee generally consults any civilian tutors who have had contact with the cadets. At these end-term meetings the cadets of each company are thus put in order of merit with gradings ranging from nine to one.

R.M.A.S. is composed of three colleges, each commanded by a Lieutenant-Colonel, and is organized on a battalion basis. Each college is divided into four companies commanded by a Major, and each company into three platoons commanded by a junior officer, and containing cadets from all three terms - junior, intermediate, and senior. The term results of the four companies in a college are considered by the college commander sitting in committee with the company commanders. Certain adjustments in the gradings, usually only the top and bottom few are made by the committee to produce a nine to one character grade for the whole college. No

attempt is made to relate the standards between the three colleges.

The final order of merit is produced by adding the overall educational grade and the character grade of each cadet to give a combined grading ranging from eighteen to two. To put cadets in order of merit within a grade, each grade is considered in turn. The summation of a cadet's multiple educational grade is used to determine this order. In a rare case where this method still leaves two cadets equal, the actual examination marks obtained are used to separate them, the only occasion when the marks themselves are used. Thus the final order of merit is basically an equal division between educational attainment and character assessment, with a slight bias on the educational side in separating cadets within a grade.

It is intended that the British rank-order system for determining the merit of cadets will be discussed further and compared with the Canadian rating system as a part of the analysis of the experimental results to follow. The picture of British Army procedures as given above shows a number of points in common with Canadian peacetime selection. There now remains the task of reviewing the Canadian wartime programme which was very similar to the British, and has served as an anchor for the present COTC methods.

CANADIAN OFFICER SELECTION IN WORLD WAR II (22a)

At the outbreak of War, Canada had a very small Permanent Force and a number of militia regiments, the Reserve Force, or Non-Permanent Active Militia. There were on mobilization in September 1939 barely over two thousand commissioned officers, representing about 3.9% of

the total strength of the Army. The production of officers had to keep pace with the rapid expansion of the Army. It was anticipated that casualties amongst officers would be relatively higher than casualties amongst their men, a prediction that was justified, for while the average ratio of officers to other ranks was 6.20%, the numbers of officers killed up to V-E Day was in the ratio of 8.18%. By the end of 1939 the officer strength was 3414 (5.39%), and this number was increased in 1940 by 5974, in 1941 by 6875, in 1942 by 8868, and in 1943 by 9876. This increased rate of officer production tapered off somewhat in 1944 and 1945. It should be possible to obtain valuable background information by examining some of the solutions to the problems raised in selecting over 40000 officers in approximately five years.

In the first few months of the war commissions were granted through the mobilized militia battalions. Units trained prospective officers and sent to written examinations those whom the commanding officer was willing to accept into his own available vacancies. In April 1941 an Officer Training Centre was opened at Brockville so that standards of qualification became more uniform. Overseas candidates, except for Infantry, were trained in British centres. Only those whom units could accept as part of their own quota of officers were at first sent to officer training centres. The demand for officers created by a rapidly expanding army soon put this system out of mode. A number of good men were not put forward for commission, presumably in order to retain them in lower ranks to maintain unit efficiency. Strangely enough some commanding officers sent candidates to O.T.C. as a means of ridding their units of "problem children". But fortunately there was very little

of this "kicking upstairs". Efforts were made to find a system that would be completely objective and just. The interests of both the Army and of legitimate candidates had to be protected against intriguing influences at unit level. Thus it became necessary to institute a sound system of spotting and following up every potential candidate from the moment he entered the Army. To do so necessitated finding fair and uncompromising methods of testing and reporting upon candidates. Processes for both pre-selection and final appraisal had to be devised. The consequent introduction of personnel officers and officer appraisal centres marked an entirely new practice in the Canadian Army.

By an Adjutant-General's directive the Directorate of Personnel Selection became formally integrated into the procedure of officer selection in June 1942. Personnel officers were required to report to commanding officers on any likely candidates encountered in normal induction and training phases, and commanding officers were instructed to secure a report written by a personnel officer before initiating other steps to have a man commissioned. Copies of the report advising the commanding officer concerning a candidate's potential were forwarded with other pertinent documents to the headquarters of the appropriate military district where a board reviewed all documents, and in some cases interviewed the candidates briefly before authorizing them to proceed to O.T.C.

The O.T.C. staff was able by this time to make a number of observations on causes for failure. It was found that an unduly large percentage of candidates who scored below 160 on the Army M-test were unsuccessful. Studies of the whole Army population

showed that an M-score of 160 was approximately one standard deviation above the mean. Also it was approximately one standard deviation below the average score of successful officers. The curve showing distribution of officer candidate scores showed a tail that broke off from the more regular part of the curve at about the 160 level. Consequently personnel officers were advised to be prepared to justify recommendations for O.T.C. of candidates near and below this 160 level. These observations were reported to senior Army officers who put their own interpretation on the sensitivity of the M-test and decreed that (with a few minor exceptions) this 160 would be the critical score for acceptance of an officer candidate in Canada. This precise recognition of the relation between a man's ability to obtain points on an "intelligence" test and ability to succeed as a leader was the occasion for much controversy. The personnel selection staff was concerned with the setting of such an arbitrary level of elimination when so many other variables are involved in appraising officer potential. But this reducing of the selection ratio while using a test whose validity coefficient had not been proved "stood the test of time" and served as a ready means of eliminating a number of otherwise unsatisfactory candidates on whose behalf some personal influences had been brought to bear. The critical score was relaxed for a while in 1943 in order that men possessing "a conspicuous force of character and leadership ability" should not be overlooked just because their score was below 160, but in the light of results at the various appraisal and training centres this concession was soon withdrawn. The critical score was not

enforced overseas largely because applicants had more military experience, and also because testing conditions had frequently been poor. It is important to note that it did not apply to selection immediately following the war, but in October 1949 the critical score of 160 was reestablished. The M-score for all officers during wartime averaged about 175. It is approximately the same now for all officer applicants. The standard deviation from the mean is in the neighbourhood of 12. Thus an applicant scoring 159 is not just one point below the "absolute minimum", but 16 points below the average. The critical score of 160 is about 1.25 standard deviations below the mean score of all applicants, so that one making such a score is surpassed by roughly 87% of his "competitors". During the war years approximately 20% of the Army population, other than officers, had M-scores above 160. A fairly large proportion of peacetime soldiers have high M-rating, and during the period April 1949 to the end of March 1950 the average M-score of other rank enlistees taken into the Army at No 4 Personnel Depot in Montreal was 154. There was and still is no great difficulty finding officer candidates who score above the critical 160, but to find those possessing the necessary education and other attributes is not as easy.

The introduction of a critical score on a psychological test was a novel feature to Canadian officer selection and placed a disproportionate emphasis on that aspect of a candidate's qualifications. To reach the critical M-score was no guarantee of success at O.T.C. As will be shown later in more detail, such factors

as poor personality, lack of leadership experience, occupational instability, broken home background, low educational achievement, poor motivation, "immaturity" and lack of practical intelligence were noted as common causes for failure at O.T.C., and of course for rejection by appraisal boards. Note that these personal qualities have long defied assessment, for it is difficult to reduce them to any commonly accepted standard of measurement. The assessment report prepared by "relatively inexperienced" personnel officers, because it often was the only available statement of appraisal, took on great importance, indeed in many cases was the deciding factor used by headquarters boards in deciding a man's suitability for O.T.C. To give such responsibility in so grave a matter was not fair to the candidate nor to the officer reporting on his suitability. Consequently early in 1943 steps were taken to establish appraisal centres where a tribunal of officers would review pre-selected candidates and appraise on uniform standards in a specially designed setting.

In January 1943 a Pre-COTC School was established overseas at Balckdown. One of the main purposes was to allow candidates to make up or review educational material prior to going to OCTU where many failures occurred because candidates lacked the necessary facility in educational, particularly scientific and mathematical subjects. During the month's stay at Pre-OCTU candidates were assessed by educational staffs, Military Testing Officers (M.T.O.) and a Selection of Personnel Officer. The MTOs adopted some of the ingenuity tests and group leadership tasks that had already been tried out at the British "Wosbies",

and these became a feature of other appraisal centres overseas and in Canada. In March 1943 an Officer Selection and Appraisal Centre was established at Three Rivers, Quebec, and mushroomed into an organization that gave a three week's appraisal to as many as 750 candidates per month. In June 1943, the Army overseas set up the Canadian Selection and Appraisal Centre modelled on the WOSB, and quite distinct from the Pre-OCTU. The appraisal staff of this centre included a Major and three Captain MTOs, the same number of personnel officers, a psychiatrist, Major, an educational officer, Captain, and a Captain Adjutant. The Officer Selection and Appraisal Board (OSAB) had a Colonel for president, two lieutenant-colonels as deputy presidents, and visiting members, usually regimental commanding officers or others to represent particular corps.

The O.S. & A.C. was situated on a country estate covering about twenty acres at Ash, in Surrey. Candidates arrived each Wednesday and Sunday afternoon in groups of fifty or fewer, and remained for three days. Note the difference between the appraisal here and at the Pre-OCTU and Canadian OSAC, and the similarity to the British WOSB and the American Office of Strategic Services assessment schools. Compare also to the German Appraisal centres. On arrival the candidates were segregated into groups of six or seven, each group with a leader. They were welcomed by the Board president who explained to them what their program would be. During the first evening they wrote a number of tests and completed various questionnaires, and on the following two days went through a series of outdoor situational tests and various interviews. The

staff attempted to be with the candidates as much as possible, and sat informally amongst them for the mid-day meal. To arrive at a decision the Board met in a conference at which the appraisal officers were present. Successful candidates returned to their units and were summoned to O.T.C. at the beginning of each month.

It was necessary to take account of the very different geographical conditions in Canada. Instead of being concentrated about one area, as troops were about Aldershot in England, the units supplying OSAC candidates in Canada were stationed anywhere from the Atlantic to the Pacific Oceans. In order to reduce the amount of travelling, candidates were gathered for a three-weeks period of assessment after which the successful ones would constitute the monthly intake at OTCs. The Canadian OSABs were staffed by a group of senior corps representatives, each under the chairmanship of a Brigadier. Personnel officers and psychiatrists as well as squad leaders who had close contact with the candidates reported directly to the Boards, and usually were present as candidates passed before the Boards at the end of the appraisal period. Naturally the three-weeks (as compared to the three-days) period of assessment led to a number of differences in the details of the two OSAC programs, although the basic principles were similar. The following table shows the principal features of the appraisal programs used overseas and in Canada. A number of these will be described in some detail.

TABIE I

Principal Devices used at OSACs in Canada and Overseas		
Common	Canada only	Overseas only
1. Revised Examination "MM" 2. Figure Analogies Test 7. Educational Test	3. Canadian Army Classification Test 5. "O" Test - C.P.A. Verbal 6. Pattern Perception Test 8. Health & Attitudes Questionnaire 9. Group Rorschach Test 12. Basic Military Knowledge Test 13. Mutual Appraisal	4. Canadian Army Classification Test (Advanced Form) 10. Self-description Test 11. Word Association Test
14. Leaderless Group Tests 15. Group Discussions 16. Platoon Talks 17. Individual Field Tests	18. Military Training Exercises	
19. Personnel Officer's Interview 20. Psychiatrist's Interview 21. Interviews by Members of OSAB		

Revised Examination "M" and Complementary Intelligence Tests.

Revised Examination "M" is the test most widely used in the Canadian Army. It was used during wartime to classify all personnel, officers and other ranks, overseas and in Canada, according to certain aspects of their general intelligence (or trainability). It is a 211 item group test composed of eight short sub-tests each purporting to measure a somewhat different aspect of an individual's ability. The first three sub-tests are non-language picture tests that can be understood by illiterates. Sub-tests four and five are designed to measure a man's knowledge of tools and simple mechanical and scientific processes that purport to reflect mechanical aptitudes or experience. The last three sub-tests measure the individual's ability in simple arithmetic, vocabulary, and word relationship; a considerable degree of literacy is required for good results in this last group of sub-tests. One overseas study (23) gave the following results: The average score for 2,201 officers was 171.9; 14,251 non-commissioned officers averaged 149.4; and 56,602 privates obtained an average of 127.4. Scores made by other samples, particularly officer candidates, will be shown in some of the tables that follow. Various research projects on fairly large samples have shown reliability coefficients ranging from .96 - .98, standard deviations ranging from 36 downwards, and standard errors of 6 and smaller. Correlations of individual sub-tests with the total M-score range from .85 - .69. The following table is of interest, because it shows the relative consistency of the sub-tests in measuring total score.

TABLE II (24)

"M" Sub-tests	Number of items	Correlation with Total "M" score
Test 5 - Mechanical Information	35	.845
8 - Word Analogies	35	.841
7 - Vocabulary	30	.838
4 - Tool Recognition	30	.787
6 - Arithmetic	20	.787
2 - Picture Absurdities	20	.757
3 - Paper Form Board	21	.731
1 - Picture Completion	<u>20</u>	.692
	211	

The Figure Analogies Test, which is a group non-language test of relationships composed of 60 sets of geometrical figures or patterns of increasing complexity, was prepared overseas by Major G.A. Ferguson, and used at OSACs there and in Canada. The mean and standard deviation and standard error of one overseas group of 869 OCTU candidates are respectively 37.05, 8.32 and .282 (25). In a study (26) made on 1831 candidates sent to the OSAC at Three Rivers, the author reports a mean of 40.5, a standard deviation of 7.25 and a standard error of .170.

The Canadian Army Classification Test was prepared by R.W.B. Jackson and G.A. Ferguson. It was often used as a quick means of checking a "doubtful" M-score, for it is a 75 item verbal test requiring only twenty-five minutes working time. It generally yielded a rectangular distribution of scores (27). It was found to be insufficiently discriminative at OSAC level, and was replaced by other tests.

The Canadian Army Classification Test (Advanced Form) was prepared by G.A. Ferguson. It is similar in design to the earlier test, but has 90 items selected to discriminate at officer level of ability. It requires 45 minutes working time. The mean, standard deviation and standard error of a random group of 1165 overseas OCTU candidates are respectively 48.81, 15.70 and .450.

The "O" Test - C.P.A. Verbal, consists of four parts involving arithmetical reasoning, word analogies, vocabulary and number sequences. It was substituted for the CACT at OSAC in Canada. In a sample of 1812 OSAC candidates the mean score was 64.06 with a standard deviation of 14.25 and a standard error of .334.

The Pattern Perception Test, designed by A.E. Penrose, was used in Canada only. When the Figure Analogies Test came into use overseas it was adopted in Canada in hopes it would be more discriminative than the PPT. The use of non-verbal tests to aid in the appraisal of officer candidates at Three Rivers did not meet with much success. The following quotation is taken from an unpublished OSAB analysis of test results: In the Figure Analogies Test there are "too many misfits at all critical scores. As with Pattern Perception it would apparently not be feasible to set any critical score on the basis of this data. The fact that a critical score would have to be above the mean (for both FA and PPT) suggests the test was not standardized on a representative officer population."

Other Tests and Techniques

The Educational Tests, administered by educational officers,

were neither extensive nor intensive, and only in very exceptional cases served to eliminate a candidate. They did serve as a check on claimed education and gave some clue to effective education, particularly of those with limited formal schooling. They were most useful in revealing weaknesses in mathematics, and thus served to prevent allocation to certain corps requiring immediate working knowledge of mathematics and related subjects. Another use was in throwing light on certain aspects of personality: reading habits, knowledge of current events and ability to interpret, range of and attention to interests.

The Health and Attitudes Questionnaire is a long inventory composed of questions similar to many of those used in the Bernreuter Personality Inventory and the Minnesota Multiphasic Inventory. It enquired into the man's interests, recreations, social activities, fears, worries, sexual life, etc. It offered the man a chance to talk about himself in answering "what do you think would be your principal assets as an officer?" and "what would you find most difficult?" The questionnaire was prepared and significant answers "scored" by psychiatrists, who then selected candidates with a large number of "positive" for individual interview. The completed questionnaire was made available to personnel officers for study to help them in their interview. The cooperation of candidates was sought by emphasizing the confidentiality of the questionnaire and explaining how it would be used. It is to be expected that much falsifying of answers would be attempted, but the OSAC staff found that many candidates answered questions with remarkable

candour, so that the questionnaire did help to identify several rather unstable individuals, and others whose acceptance or allocation demanded special caution.

The Rorschach Test was given to groups of candidates by projecting the cards onto a screen and having the ink blots outlined on individual test sheets on which the candidates wrote their impressions. The technique was attempted earlier in selecting paratroopers, but did not prove more effective than more simple methods already in use (28). Candidates identified by their significant responses in the Rorschach Group Test and many of those identified by other means (Health & Attitudes Questionnaire or referral by the Personnel or other officer) were given an individual Rorschach examination. It is not clear how successful this method proved to be, and in any case it was dropped when its principal proponent was posted away from OSAC.

The Self-description Test (29) served much of the same purpose overseas as the Health & Attitudes Questionnaire served in Canada. It called for the candidate to write in approximately fifteen minutes two contrasting descriptions of himself, one as a friend would likely describe him, and one as an enemy might think of him. In a fair proportion of the descriptions candidates wrote conscientiously, and seemed, particularly the older ones, to have some insight into their own character. The descriptions gave some indication of the candidate's scale of values and maturity of judgment. By indicating features of his own personality that he considered important he gave clues that could be compared with indications from other sources. The test also

served as a rough means of judging the candidate's cooperativeness, and was often quoted in reporting his ability to write logically.

The Word Association Test was the overseas substitute for the Rorschach Test. It consists of a list of sixty words that are read by the examiner at 15 second intervals to one or a group of individuals. They are required to write down whatever word, phrase, or thought that enters their mind in response to each word. Scoring or interpreting the test results created a problem that could be solved only by examiners having long experience and comprehensive psychological knowledge. No single response could be regarded as significant by itself, but psychiatrists and personnel officers acquired ability to recognize certain characteristic patterns in the responses. The responses are hyper-sensitive to recent experiences of the candidate, and although they furnish a few indicators of personality characteristics, examiners found it difficult to assess the relative importance of such characteristics in the "total personality" picture. The test proved to be a very weak aid in suggesting certain features of a candidate's personality which might not otherwise have been spotted. Like the other tests of personality it was used only as an aid to the interviewer, rather than as a means of comprehensive diagnosis.

The Basic Military Knowledge Test, was, as the name implies, a test to discover the extent of a candidate's knowledge, or lack of it, of weapons and general military training. It was not used as an eliminating factor because those about to enter O.T.C. were required to have completed basic training with satisfactory standing.

A number of candidates who had been employed on administrative or other specialized duties were found to have forgotten much of their earlier training, and the test served to advise them of any outstanding deficiency.

Mutual Appraisal at the end of the OSAC period gave some rather interesting results. Each member of a group ranked all the members of his squad in the order he believed they merited as officer candidates, and was asked to make written remarks to explain his rankings. It was found that the rankings given in this manner bore a very positive relationship to final OSAB ratings (30). There were instances where the group members recognized the values of individual members more than many of the instructors and appraisal staff, and several revisions of ratings were instituted as a result of clues given by the group in the Mutual Appraisal Test. This technique of appraisal is hardly suitable for assessing candidates until they have been selected by other means and thus have become members of a group working together. It could not be used in the 3-day assessment period overseas, nor would it be of use in COTC selection. However it is used at various COTC schools as an aid to rating progress in training and development of the officer cadet.

The next few techniques also fall into the class that can not be used unless a very special setting and a fair amount of assessment time are permitted. They are situational tests administered and rated by army regimental officers rather than by personnel officers, and are usually referred to as Military Testing Officer (MTO) Tests. It was originally intended to

discuss these MTO assessment processes to some length, but space does not permit so doing in the COTC context. They are of interest in the general field of selection, and may be considered a valuable contribution of World War II, meriting further study. The details of a number of leaderless group and other situational tests are carefully documented in a report made on the selection of personnel for the American Office of Strategic Services (31).

The Leaderless Group Test is a practical exercise. It involves an artificially contrived situation in which a small group of men usually from five to eight, are presented with a certain task to be performed. They are not given a pre-arranged plan, and must work as a team to complete the job. Usually one or another member emerges as the dominant director in certain or all aspects of the task, while others exhibit mere cooperativeness. Such a task as building a bridge over an imaginary stream with material supplied on the site - perhaps miscellaneous poles, planks, ropes, or even a heavy framework requiring the use of pulleys - allowed a group sufficient scope so that trained observers could compare, rank and rate the individuals on such aspects of personality as energy and persistence, initiative, effective intelligence, social relations, leadership and physical ability.

Group Discussions lasting a little over half an hour gave material for judging personality, and gave opportunity for the members with the academic or administrative background an opportunity for expression that they might not have had in the more "practical" situations. The group was asked to choose any subject it liked for discussion, and plan a summary of its

conclusions for presentation at a certain time. Thus again the dominant type might get control of the group. It was of interest to observers to see which one of the group had ideas to contribute, which ones had their ideas actually accepted, who organized the discussion, became chairman, assumed the role of secretary, and who took over or was appointed to the job of presenting the final conclusions.

Platoon Talks were quickly prepared, five-minute talks, allegedly to be given to a platoon of other ranks, on subjects the candidates had been assigned by drawing cards from a box. They were not designed to test any special area of knowledge, but rather to give the candidate a chance to show his ability to handle practical human problems that might confront him as an officer and father-counsellor to his men.

Individual Field Tests might be described as a special form of obstacle course designed to test physical stamina, agility, practical intelligence and ingenuity. The situation developed both overseas and in Canada permitted the introduction of different combinations of obstacles and problems calling for from five to fifteen minutes of the candidate's time. Usually conditions of considerable stress were introduced, tiring the candidate, and these were followed by problems requiring a degree of intelligent thought to solve. Typical of these tests are situation such as the following: (a) Various forms of jumps and climbs over awkward gaps, from heights, with the aid of swinging ropes, planks, etc. (b) Crawling through a twisting, darkened tunnel about 50 yards long having a number of blind alleys, and sometimes other obstacles

or annoying situations such as mud holes. (c) Puzzle situations requiring the crossing of streams or climbing of fences by means of certain limited equipment. (d) Crossing a memorized mapped route through a simulated mine-field and delivering a message at the conclusion of the trip.

Military Training Exercises were used in Canada where some of the candidates had very limited military experience. The military and other previous related experience factors had to be considered before judging men on the basis of over-night bivouac schemes and exercises in platoon tactics and fieldcraft. These situations proved of some value in appraising young and inexperienced candidates, particularly in their adaptability to sleeping and cooking in the open, and in their general resourcefulness, initiative, and group value. Some officers reported that they found out more about a candidate in one night's bivouac than in two weeks of more formal tests.

In developing the tests that have just been described it is evident that the Army has been striving to find every possible means of arriving at a reliable and valid rating of officer candidates. It should be clear, however, that the tests are not completely objective, nor are they capable of rendering fine discriminations between individuals. Whatever results they do give have to be interpreted. All the way along the line there is placed a premium on the exercise of judgment. The onus of rating is placed upon individuals who have found that none of the instruments or combination of instruments cancel the need for the unique contribution to be made by an individual interview.

Inasmuch as the selection teams were made up of psychologists, psychiatrists, and carefully chosen officers with broad military experience, it is presumed that all or most of them had received training in the art of interviewing. The Directorate of Personnel Selection did not issue to its wartime field staff any precise instructions on how to conduct an interview, although a few general principles were outlined in training and policy directives. It was assumed then as now that personnel officers had studied or would study such standard references as Bingham and Moore's How to Interview, and R.C. Oldfield's The Psychology of the Interview. At the moment it is more important to consider the areas investigated in the officer selection interviews made by personnel officers than to argue about the adequacy of interviewer training.

The personnel selection report gave the necessary minimum space to identifying the person being reported upon, a few pieces of factual information, and then was divided into sections or paragraphs as follows: (a) Family History, (b) Educational Record, (c) Occupational background, (d) Military History, (e) Appraisal and Summary, (f) Recommendation and Grading. For more detail of the kind of material included in these paragraphs, a copy of instructions to personnel officers overseas is shown at Appendix (C). It should be clear that none of the actual reports contained all of the material suggested for inclusion under the various headings. The interview on which the reports were based usually lasted about one hour, and the material written into the report generally covered about one and a half to two typewritten 9 x 13 inch pages. This may be judged by Appendix (D), copies of typical personnel selection reports

written on COTC candidates in 1947.

Some Statistical Information about OSAC Candidates

Examination of percentages of applicants accepted for the various arms and corps shows very little of lasting interest. The bulk of OSAC candidates, 78.9% of the overseas (32) and 86.4% of the Canadian (33), were applying for the three principal combatant corps, Infantry, Artillery and Armoured. The numbers for other corps were small so that comparisons are not reliable. There was a trend toward a higher percentage of acceptances for the technical corps applicants, suggesting that technical qualifications were given more weight than the personality and leadership factors so important in a combatant officer.

In general there is little to be learned from analysis of the age of applicants. The average age of overseas OSAC candidates, 25.5, was higher than the median age of 23.5 recorded for the Canadian applicants. It is clear that Army regulations governing age bias results for the different corps. Perhaps it is worth noting that candidates 20 years old and younger were not accepted as readily as those close to 23 years of age. It is possible that the best of the younger population were accepted for Canadian Army University Courses (CAUC), and were given technical rather than officer training.

The higher an applicant's rank at the time of his appearing at OSAC, the better were his chances for acceptance. This is an anticipated finding, for those who had leadership or administrative ability should have been spotted and promoted to NCO rating. Actual

length of service does not appear to have been an important factor in differentiating successful from unsuccessful applicants.

There is little to learn by examining tables to indicate the level of formal education obtained by OSAC applicants. Once a certain minimum of education is reached, whether it be formal or effective, the selection process seems to have centered on personality rather than degree of education. It is true that candidates having grade eleven or higher education were accepted in greater proportion than those having less education, but little else can be concluded.

There is nothing significant to be found in an analysis of acceptances and rejection of candidates coming from the different provinces of Canada. It is reasonable to postulate that generally speaking the province of enlistment has little direct bearing on the candidate's normal background. Factors other than geography are at work in moulding character.

Again there is little to learn from analyzing the pre-enlistment occupation of candidates. Professional and managerial groups, and students are more likely to succeed than labourers, semi-skilled and skilled tradesmen. The same trend is indicated in the occupational background of paternal parents. The numbers of cases studied are so small as to have little statistical significance, although the raw figures show that the candidate whose father is an unskilled labourer is less likely to meet OSAC standards than one whose father is a skilled tradesman; and sons of white collar workers have some advantages over the labourer and tradesman group.

An area of investigation that proved a little more fruitful in comparing acceptances and rejections now deserves comment. The staff

at OSAC overseas made a study of a random sampling of 300 rejectees and 100 acceptees for purposes of comparing ratings made by MTOs and POs, and comments made by POs in their assessment reports (34). Attached as Appendix (E) is an excerpt from the study that defines the terms used and delineates the meaning of such expressions as "Broken Background" and "Poor Personality", reasons quoted for expressing doubt concerning the officer potentiality of candidates. Table III is a revision of the findings of this particular study.

TABLE III

Reasons for Rejection at Overseas OSAC

		% Failures		% Passes	
		N	300	N	100
		F&D	D	F&D	D
MTO Tests	I	58	30	21	15
	II - III	91	18	18	9
	IV	87	31	46	28
MI		83	43	22	21
1. I P under 30		37		19	
2. E P under 35		20		7	
3. Broken Background		28		29	
4. Occupational Instability		26		9	
5. Army Instability		12		1	
6. Poor Personality		65		15	
7. Lack of Leadership		52		13	
8. Weak in Group Sports		16		2	
9. Poor Army Attitude		8		1	
10. PO Grading		95	28	38	31
11. Psychiatric Referral		28	3	12	10

The table indicates that 58% of the 300 who were failed by the OSAB received a failure or a discussable-failure rating on MTO Test I, and 30% of them were graded in the discussable class alone. Also 65% of them were noted in the assessment reports to have "Poor Personality". It is clear on studying the table that most of the rejected candidates did poorly on the MTO tests. The 83% that were given low ratings on the Military Interview should not be interpreted to mean that candidates lacked military service, but rather that they did not have the kind and quality of military experience likely to make them successful as officers in the corps for which they were applying.

It may be seen under IP and EP that those who ranked in the lowest third of the OSAC population in intelligence test scores and effective education are much less likely to succeed than those who ranked higher. Note the comparative figures showing the percentages of those who passed OSAB; the lack of the qualities, except in the case of those with broken home background, is not nearly so often reported. There is an interesting speculation to account for the similarity of percentages of passes and failures of those with the broken background. The loss of a parent, although it is often a certain kind of handicap, sometimes serves as a challenge to the remaining parent, and of course to the orphan, and brings forth in him qualities that actually are an asset. In other words there is little value to postulating that all orphans should be classified with those who have an unhappy home. Hence the Broken Background section of this study is poorly conceived.

The high percentages of CSAB failures noted as having poor personality and lacking leadership experience is important. Some of these "intangible" officer qualities are indicated in the Appendix, but because of the frequency they are quoted as affecting assessors' judgments, they should receive more study. Speaking very broadly, the main challenge to the rating officers is to rationalize and make objective the procedures used in appraising the "leadership personality". Once a candidate comes up to the standard of intelligence more or less naturally set by reaching junior matriculation, it is much more likely that officer qualities will be dependent upon a pattern of personality traits than upon fine gradations of intelligence.

It is interesting to note that personnel officers recommended against taking 95% of those the Board finally refused, although 38% were in the doubtful rather than failure classification. It is just as interesting to see that 38% of the accepted candidates were rated low by PO, although the majority were in the doubtful class. There is no way to follow up the actual performance of candidates as officers to gauge whether perhaps the POs ratings were too much on the conservative side. In any case there is clear evidence that the OSAB final decision rested not on one but on a combination of ratings plus their own judgment of the candidates.

Very little has been said about the role of the psychiatrist in the selection team. From the table it is possible to see that 28% of the rejected candidates were referred ~~for~~ psychiatric appraisal. Twelve percent of the accepted candidates were referred, 10% of them having been assessed by the PO as belonging in the doubtful

category. There were 26% of the rejectees and only 9% of the acceptees who exhibited an unstable work history. The 12% rejectees showing unstable military background is in direct contrast to the 1% passing. Admittedly the numbers involved are small for making reliable comparisons. The number showing poor work records is really quite large when one considers that many OSAC applicants had no occupational experience, having enlisted right after leaving school. The 26% would rise if the denominator of the ratio were reduced to represent only those who had a work history.

Lack of interest in group sports, though not a major factor in failure, seems closely related to personality and leadership, and should receive attention in a personnel selection interview. Among the rejected candidates, at least 16% had never had any real interest in team games, whereas among the accepted candidates this percentage drops to 2%. From an earlier study it would appear that this lack of participation in organized athletics is found with greater frequency among candidates with high IPs and excellent education - that is among those who are fundamentally the "book-worm" type - young lads with plenty of brains but little physical drive or group value.

Another interesting area of investigation is that of comparing PO, MTO, and final OSAB ratings. Assessors gave ratings of E (excellent), V (very good), S (suitable), D (discussable) and F (failure). The D rating was used when there was some doubt in the rater's mind regarding the candidate's suitability. The officer might feel that the candidate is suitable, but desire information

on certain factors that can be secured clearly only from the results of other observations or tests. In the same way he might feel that the candidate is borderline, but wish to leave the way open for acceptance if he shows sufficient in other tests to support the positive factors he has exhibited to the grading officer. For example, a PO grading of D might be used, perhaps because of low intelligence test scores obtained by a candidate possessing some compensating factors, but the D might be upgraded by the Board if the MTO tests gave reassurance as to the candidate's ability to use his practical intelligence.

The PO bases his ratings on the results of an interview with the candidate and considers especially factors of intelligence, education, stability, leadership, drive and personality as revealed in the candidate's background according to his own story. The MTO rating is based on the complete picture received by the MTOs during the whole MTO performance. Thus it may agree or disagree with the ratings awarded on any one MTL test, just as there may be differences in scores made on different intelligence tests. The OSAB rating is the final acceptance or rejection of the candidate by the Board, and is arrived at by the President after a consideration of all the ratings the candidate secures. Both PO and MTO ratings are arrived at independently and there is little reference between the rating officers before the ratings are presented to the Board. The following tables (34a) illustrate the correlation between PO, MTO and Board gradings for 1000 candidates selected from the period January to June 1944, including both accepted and rejected cases. The Pearson Product-Moment Correlations are shown in order to compare these ratings with those to be calculated in experimental results to follow.

TABLE IV

PO, MTO and Board Gradings

(Pearson Product-Moment Correlations shown as r)

M T O

P O

	E	V	S	D	F	Total
E		2	1	1		4
V		3	17	4	1	25
S		7	72	64	35	178
D		3	58	95	178	334
F	1		30	92	336	459
Total	1	15	178	256	550	1000

r = .48

Board

P O

	E	V	S	D	F	Total
E	1	2	1			4
V	1	12	11		1	25
S	1	20	113	4	40	178
D		4	110	3	217	334
F			27		432	459
Total	3	38	262	7	690	1000

r = .64

Board

M T O

	E	V	S	D	F	Total
E			1			1
V	2	13				15
S	1	25	124	1	27	178
D			118	2	136	256
F			19	4	527	550
Total	3	38	262	7	690	1000

r = .73

From the tables it may be seen that although the gradings are made independently by MTOs and POs there is a good deal of agreement in clear-cut accepted or rejected cases. The area of divergence is in the discussable cases, and it is in such cases that the findings of the MTOs and POs can implement one another and aid the Board to arrive at a final decision. The POs gave a few more D-ratings than the MTOs. It should be noted that few of these D ratings are made on the same candidates.

In examining the ratings given by MTOs and POs to 300 candidates accepted by the Board over a period of 16 months from July 1943 to November 1944, taking 50 candidates at random from each of six fairly evenly separated periods, a trend can be detected. The first three samples indicate fairly close agreement between FO, MTO and Board, but the three latest groups show more divergence of opinion, with the Board accepting many more of the candidates graded D by the POs and MTOs. It is possible that the assessing officers became more and more cautious or open minded, although judging by the fewer total V and E ratings given by both MTOs and POs as well as the increased number of their D and F-rated candidates finally accepted by the Board, it appears that the preliminary graders, particularly the POs, gradually developed a more exacting standard for acceptance. Of course it may be that the quality of candidates decreased in this period but had to be accepted anyway in order to meet the current demands for officers.

There is the suggestion that "quota filling", matching immediate supply and demand, caused fluctuations in the absolute standard of candidates accepted at different critical periods of the war.

At the Canadian OSAC an anonymous study of 1053 accepted and 760 rejected candidates showed that 87% of the accepted had been recommended, and 77% of the rejected had not been recommended by the PO. Thus there was more agreement about who should be accepted than who should be rejected.

One of the weaknesses of this historical review is very well recognized by the writer. The comparisons that have been quoted all relate to agreement or disagreement of assessors at the initial selection level. Evidence has not been produced to show what happened at OTC to those recommended by the OSABs. Attempts were made to track down material that would reveal the validity of OSAB selection using success at OTC as a criterion, but if any such reports have been prepared, they are not immediately available, not being in any of the files the writer has had opportunity to examine. In the same sense, no studies have been found comparing OSAB ratings with actual performance of the OTC graduates. It can be argued that the OSAC staffs were kept so busy in the processes of assessment, presumably while establishing reasonable liaison with OTC staffs, that the scientific appraisal of assessment validity was neglected more than it should have been. The setting up of satisfactory criteria by which to measure the accuracy of the diagnoses of personality and prognoses of performance of OSAC "graduates" seems to have been overlooked in the hustle of wartime emphasis on production at any cost. This oversight is not peculiar to the Canadian Army, as may be appreciated by the difficulties encountered by the American OSS staff in their assessment of men (35).

No mention has been made of pre-war selection for COTC, of the United States Army selection for ROTC, nor of American officer selection generally. The best justification to be given for omitting discussion the first two is that there actually is very little evidence of any scientific selection for the old COTC or the ROTC. The main factor in acceptance of candidates in both cases is that of being a bona fide university student. In other words the personality factors of leadership are not investigated. Anyone surviving the natural selection processes mitigating against a young man reaching university was considered good enough for the old COTC, and such a person, meeting certain eligibility prerequisites, is accepted into the ROTC. The principal reason for omitting reference to American Army officer selection is that it is based on quite different concepts of appraisal from those used in the Canadian Army. The American selection has emphasized tests and critical scores, and has minimized the use of the interview, a fundamental technique of OSAC appraisal. The Canadian approach is to consider the whole personality, and might be partially described by such concepts as: field theory, holistic, organismic, topological, gestaltian (36) (37).

The 1947 COTC Selection Procedure

The establishing in 1947 of the University Contingents of COTC created a challenge to the Army Personnel Selection Staff, for as indicated earlier, "each candidate will be interviewed by a Personnel Officer, who will create a Personnel Selection Report outlining the candidate's suitability for acceptance.....". There were no immediate instructions from Army Headquarters to indicate in other than a very general way what the field staff should do in assessing COTC candidates. The general instructions applying to all selection problems were to apply to this "new type" of officer candidate. This meant that within certain broad limitations each Army Command would establish its own detailed procedures, and that the Command Personnel Officer would serve as advisor to the regimental officers concerned, as well as plan and supervise the work of the POs who would do the testing, interviewing and reporting on candidates.

The standard procedure used by POs was to give an officer applicant an M-test, arrange an interview and create a report ending in a recommendation regarding suitability - essentially the same as the wartime procedure. But up to this time all assessment reports had been created on candidates applying for a wartime commission. Some adjustments in selecting for the peacetime Army would have to be made. There had been no specifics set regarding a peacetime officer, nor indeed has there ever been general agreement regarding the specifics required of any officer.

In a lecture to POs the Command PO reviewed the philosophy and set the stage for the Quebec Command staff COTC approach to

the problem very much as follows: The COTC as now conceived is a new venture for the Army; the selection of candidates who will have two or three years in which to be trained and observed is a new and different challenge to the PO. Officer selection in the past has been confined to picking men who after about three months of training would have to take full responsibility as officers. The situation is now much different. There are no precise concepts concerning what constitutes a good COTC candidate. No job analysis has been performed to make it clear what is required of a candidate once he does become an officer. As near as can be ascertained the Army is not looking primarily for candidates who will become Active Force officers on graduation, but will be "pleased" if graduates do seek appointment in either the AF or RF. However there is no contract to be signed, and a COTC graduate is not required to become a member of any component of the Army. If he becomes an inactive member in the Supplementary Reserve, or even if he has no Army ties, he nevertheless should be, because of his COTC training, a better citizen, and a good influence in his community insofar as helping to create informed public opinion on military matters affecting the nation.

Because of not knowing what exactly it is we are selecting for, our reports will more than ever before have to quote evidence upon which conclusions are based. Categorical or dogmatic statements are to be avoided. The final responsibility for selection lies on the COTC Board. You are to aid and advise this Board in as scientific a manner as your wartime experience permits. You should try to assess candidates not so much in terms of suitability

for COTC, which you do not yet understand, but rather in terms of suitability to become an officer - whatever that means to you. You should review the history of wartime officer selection, and adapt whatever you can to the present situation. You will note that each candidate will be available to you for a maximum of one hour. There can be no thought of getting help from MTO tests, and there will be no written record or testimonial for you to use. Where possible the candidate's application form and medical board results will be available, but you will not have a transcript of the applicants pre-university or immediate university educational record. The Selection Board is to have a university faculty representative to advise it regarding educational attainments of candidates. Thus you will have only the M-test results, the completed Personality Questionnaire and a short Autobiography to aid in your interview.

Your job will be first of all to check on the screening already given by the Resident Staff Officer (RSO). You must determine whether the candidate actually is eligible in terms of nationality, age, physical standards, and whether he is studying in a faculty appropriate to the corps for which he is applying. You will then investigate such factors as appearance, intelligence, motivation, social, educational, occupational and military interests and background, and the personality development of the candidate. Your reports are to be broken into paragraphs and include the same sort of material as the overseas OSAC used. (See Appendix C). It is expected there will be more applicants than there are vacancies. It might be that nearly all of the

candidates will appear suitable for COTC. In order to help the Selection Board in any pruning necessary, you are to try to rate candidates on an "absolute standard", considering which are the best, the next best and the poorest in qualities of overall officer potential. Thus you will use ratings E, V, S, D and F. You are to avoid the use of D ratings, and conclude where possible in a recommendation for or against acceptance. Each corps has a quota set for it, but you are not to know the quota. Advise a candidate to register a second choice of corps if he seems more suitable for one different from which he has made application, and show your recommendation as well as the candidate's wish for a particular corps.

A number of applicants will be veterans, many of whom will be nearing the upper age limit for acceptance. You should be careful in your analysis of military background not to condemn a man who did not receive wartime promotion probably because of extreme youthfulness, or because he was "frozen" at an important trade, or because he lacked the necessary formal education which he now possesses. But bring out, where applicable, the mediocrity of service in an applicant who had opportunity to do better than he did. Again, in military matters, try to find out why a candidate is applying for COTC, and evaluate his motivation. See if he is just applying for a "free ride", a lucrative summer job, or whether he has a deeper understanding of the implication of his application. Does he believe in the formative value of military training? Is he hoping "the Army will make a man of me"? Perhaps he is merely curious, or seeking comradeship, or setting up his own future security.

Maybe he is applying out of a sense of patriotic duty, or in gratefulness, in the case of a veteran, for opportunities already afforded him.

The formal educational requirements for COTC are primarily that the applicant be "in good standing" at the university. All applicants are supposed to be screened by the RSO before coming to the PO, and will again be reviewed by the Board. You should show the educational history of a candidate in much the same manner as is the custom of POs under other circumstances. In this case point out the strengths and weaknesses, but poor educational history should not be used alone as a rejection factor. It is common for students in university to have to write a supplemental examination. They are allowed to have two failures, but must pass later. A number of the veterans have a hasty preparation for university, but are reported to be doing a generally fine job in getting a higher education. Let the responsibility for judging education rest upon the deans of the various faculties. If a candidate's prognosis is poor, this fact should be brought out by the university representative in the final Board meeting.

Another factor that may cause difficulty is that of "maturity". There will be some very young non-veteran candidates for COTC. Generally by the time a young man reaches university his personality is fairly well set. In any case you will have to judge the present and future by the past, and if you report negatively on the "immature" there will be many to argue with you. In the belief that the candidate will not yet have reached "maturity" just because he is not old and experienced enough, and again because the candidate will have two or three years rather than the wartime three months in which to develop,

regimental officers have already indicated their desire to be lenient in this factor. Therefore avoid the use of the word "maturity" in your reports, and develop the description of the man's behavior and attitude that are important in this area. If there are candidates who indicate intellectual or emotional immaturity in the sense that they are dull, unaware of their surroundings, unsophisticated for their age, or have shown a continuous history of unwillingness to submit to discipline, or to persevere in the face of anything unpleasant, give the evidence rather than use the expression "very immature". Those who have been over-protected, sickly, or perhaps rejected, may find reality painful and give infantile responses because they lack self-confidence. Some may already have shown a pattern of contentment to live on their parents' bounty, or through the efforts of an employed wife, and may have reached the conclusion that the COTC will afford excellent opportunity to "live off George". Look for and report interpretatively on those who exhibit excessiveness in any of the following: suspiciousness, day-dreaming, ups and downs in mood, depression, preoccupations with health, excessive worry, boastfulness, over-rating of accomplishments, lack of self-discipline, hyper-criticalness or excessive sarcasm. Make your report read so that others may reach the same logical conclusion you have reached because of certain evidence you have put on paper.

The POs, armed with the little information indicated above, did not have an easy time. Medical boards in many cases were not completed before the interview. Applicants missed test sessions and skipped interview appointments. Proper facilities for a

private, quiet interview could not always be provided. Additional candidates were recruited at the last minute in an apparent effort to fill particular quota vacancies. Interviews had to be done more rapidly, hence less thoroughly than had been planned. Supplementary Reserve FOs had to be called for spare-time duty, and because of production-pressure received very little training or supervision. Several hundred candidates were interviewed in the months from November 1947 to April 1948, roughly 140 from the McGill COTC. In some instances reports were made orally, particularly if the candidate was "obviously unsuitable", so that complete records on all candidates sent for FO processing are not available.

Based on wartime experience, FOs were asked to be particularly careful in reporting on any who scored below 160 on the M-test. A number of applicants scoring below this one-time critical score were recommended and accepted into COTC. In other words, the assessment of the whole personality involved much more than a rating based on a test score; moreover there no longer was the urgency of wartime, so that performance, it was hoped, could be more leisurely assessed.

Note the introduction in this Command of an Autobiographical form (Appendix G). The form served as a means of anchoring an interview around a few critical areas of the applicant's history. Opportunity was afforded also for the candidate to show something of his personality through the approach he took to writing this autobiography. Some were neat, concise, precise, and indicated careful cooperation, while others wrote in a loose, haphazard, inaccurate manner calculated to tell nothing. No study has been made by the writer to check how much of a testing tool the

autobiography could become, but from oral reports by the POs the impression is that the form is useful both as a means of gathering factual information and creating an impression that is reflected in the overall judgment made by the PO in his assessment.

The other aid to the PO in COTC interviewing is a Personality Questionnaire, sample at Appendix H . Most of the officer candidates are too sophisticated to reveal very much in answering this questionnaire, but there are those who are very honest in their answers, and reveal a good deal about their adjustment.

The Validation and Refinement of COTC Selection Techniques

The Problem

In the foregoing pages an outline has been given of the COTC. Officer selection procedures used in the German, British and Canadian armies have been reviewed. The role of the PO in assessing COTC candidates has been defined. It is clear that the present brief assessment given to COTC candidates is much less elaborate, employs fewer props, consumes less time than any of the other programs that have been discussed. But how efficient is it? Is there reasonable evidence that the right people are being selected, that there is not too much wastage? The selection ratio has been about .5 after the first rough screening-out of ineligible and others "obviously unsuitable". How do the 50% selected stand up in training? Are the COTC casualties due to faulty selection? What do we know about the 50% not selected? The finding of answers to these and similar questions is precisely the problem of this thesis.

The Method

In order to find out if present procedures are reasonably valid, a comparison must be made with a more elaborate program, using other methods and different or added techniques. These two programs must be studied critically in terms of their respective ability to differentiate between the good and the poor applicant for COTC. There must therefore be some means found to decide who are the good and the poor; some criteria must be established to judge the success of officer cadets, and if possible the comparative

success of those rejected by the Board. A validation group must be found on whom experimental tests can be performed and on whom follow-up reports can be secured in terms of the established criteria.

The Tests

There was no particular hesitation in choosing a battery of tests to be given to the validation group, or in choosing the validation group itself - the applicants for McGill Contingent of the COTC. The American Council on Education Psychological Examination (38) is designed to appraise what has been called scholastic aptitude or general intelligence. It has six sub-tests divided into two groups, giving two subscores, one for three linguistic, and one for three quantitative sub-tests. The two subscores are construed as guides (a) to linguistic or liberal arts abilities, and (b) to the quantitative, technical, or engineering abilities. There is a record of total scores for 246 Psychology I McGill students obtained by A.F. Holmes in the scholastic year 1945-46.(39) The mean was found to be 130.15, with a standard deviation of 20.05. This test was taken because it seemed to give a fair measure of intelligence of the university group.

G.A. Ferguson, who, it will be recalled, constructed the CAC Test (Advanced Form) and the Figure Analogies Test for use at the overseas OSAC, was working on a new test which may be called the Speed of Closure Test. Very little was known about the test, but a good deal about the author, which was sufficient recommendation to include it as a second measure of "trainability". For the same

reason a test that had shown some promise in assessing personality in the industrial field was added to the battery. For convenience this test will be referred to as the SK Personality Chart.

Inasmuch as personal interests, motives and evaluative attitudes are assessed to some extent in an interview, it was decided to include the Allport-Vernon "Values" Test (40) as a part of the battery. Since the Values test is fairly well known (41) no description or discussion of it will be given, other than to state that the test aims to measure the relative prominence of six basic interests or motives in personality: the theoretical, economic, aesthetic, social, political, and religious.

The Speed of Closure Test is composed of two parts, the first a word-completion test, and the second a jumbled-word test. The word completion test has 100 items, and is a series of commonly used words with certain letters omitted, dashes being employed to indicate the number of missing letters. Testees are to insert the missing letters in 8 minutes. The following examples will make the procedure clear: Y A _ D, H _ M _, and T A _ A _ _ O N can be "closed" by adding the appropriate letters to form the words yard, hymn or home, and taxation. The second sub-test is composed of 35 jumbled words to be recognized in 5 minutes. The testee is asked to rearrange the letters of the jumbled words to get a meaningful word, and write the first letter of that word in brackets shown to the right of the identifying clue. For example:

R A T R O P is a bird ()

D I P O E R is a punctuation mark ()

H I T M T R A C I E is a school subject ()

The letters properly rearranged spell the words parrot, period, and arithmetic, so that the letters P, P, and A would be inserted in the proper brackets.

The SK Personality Test is a questionnaire composed of 208 questions that are to be answered "yes" or "no". The scoring of the test is rather tedious since 11 different marking keys or templates have to be used to get scores on eleven separate factors. Appendix (J) shows the range of scores and definitions for extremes of each of the traits measured. The diagonal shows the average trend line of scores made on the test. The individual scores are plotted on the chart, and joined to form a profile graph. The profile requires considerable study before an interpretation can be made, for certain combinations of scores are more significant than others.

The Criteria

The value of assessment procedures will be judged by the results or performance of those that have been assessed. But there must be some measures applied to determine good and bad performance. The precision of an instrument cannot properly be measured by an instrument that is less precise. Clinical psychologists have tended to devote the greater part of their energies to the construction and perfection of testing materials. They are generally very conscientious in calculating reliabilities of their tests, but rather uncritical in accepting whatever validating material is close at hand. As Murray puts it, (42)

"The degree of scientific sophistication that has been applied

to the assessment process is much greater than has been applied to the appraisal process, despite the fact that the proof of the whole enterprise hangs upon the dependability of the latter".

There is small satisfaction to using for criteria of officer cadet success such factors as ratings of personality and grades made at COTC corps schools, knowing that officers and NCOs have not been properly trained in rating. That officers commanding corps schools are aware of the difficulties facing them and their staffs in making proper assessments is clear by reports made at the end of the practical phase in 1948. (43) But the corps school reports, the assessments and grades recorded on the ITRs, largely determine whether cadets will be commissioned as officers. The officer commanding the particular contingent to which an officer cadet belongs also has reports to make, often on the advice of the RSO. The university has a very firm hand in determining the cadets' success in COTC, in that the cadets must maintain good standing in their scholastic endeavours in order to continue training. Thus the selection of criteria upon which to judge the success of candidates has been limited to the following: (a) Corps school ratings recorded on the ITR. (b) RSO ratings given by ranking the cadets after they have served a full year, one theoretical and one practical phase. (c) The university grades, percentage marks obtained in university studies, in terms of first, second or third class average, and failure. These criteria are not exact, specific, nor independent, but they are the only ones available.

The Process of Gathering Ratings and Test Scores

The Commanding Officer of the McGill Contingent, COTC, kindly consented to allow each officer cadet to devote one training parade period to whatever tests or other processes would be required in the experimental investigation. There were 40 first year officer cadets at McGill in Montreal and 31 at Dawson College in St. Johns at the conclusion of the 1947-48 selection period. Many of these officer cadets were given the battery of tests in March 1948, but for reasons best left unmentioned a considerable number could not be tested until February and March 1949. Three of the McGill and one of the Dawson group did not undergo training in the summer of 1948. This left 37 McGill and 30 Dawson members for the validation group, only a few of them not having taken the full battery of tests, mainly because they became COTC casualties between the 1948 and 1949 test periods,

At the end of the training period of the summer of 1948 an effort was made, by soliciting the aid of FOs at the various corps schools, to obtain summary charts of all the ratings given throughout Canada on all COTC cadets. The ratings given on the personality factors 1-10, and the overall personality rating (OPR), number 21 on the ITR, are available on 1124 candidates, representing more than 90% of all cadets in training in 1948. (See Table VII, page 86)

It was possible to obtain the ITR for the 67 members of the validation group who completed the practical phase in 1948, and for the 48 who completed the second practical phase in 1949. From these ITRs a record was created of remarks made by various instructors, as well as of the 10 personality and one OPR ratings, and the actual

grade assigned to the cadet in Part V, page 6 of the ITR. Thus there are at hand personality ratings and school grades assigned over a two-year period.

In March 1949 the RSO of the contingent was asked to sort cards on which the names of the cadets appeared. An attempt was made to outline to him the best principles to follow in making ratings. (44) He was asked particularly not to refer back to PO ratings or to the corps school ratings, but to try to judge the cadets in terms of performance while under his own supervision. Whatever clues he used allowed him to give a rank order to the 67 candidates as well as suggested breaking points for rating in terms of A (Outstanding), B (Above average), C (Average), and E (Below average).

The criterion of success at university had been decided upon, so that it was necessary to go to the university and examine records of the 67 members of the validation group, and of another 51 students who had applied for COTC, had passed initial RSO screening, and had been interviewed by a PO but finally had been rejected by the University Contingent Board. The grades obtained in McGill courses only were recorded for the purpose of establishing these university ratings. Earlier records of those who took their senior matriculation in high school before entering McGill, or who transferred to McGill from another college, were not used as a basis of determining the "university grade". The system employed by McGill was used in obtaining four distinct grades. Students whose college marks averaged 80% or above were assigned a grade I (first class). Grade II (second class) was given to those whose work averaged between 65 and 79%

inclusive, and grade III (third class) was given to those whose scholastic average ranged from 50 to 64% inclusive. No demerits were made for those who had failed examinations and subsequently passed supplemental examinations. The last grade F (failure) was assigned to any student who was forced by low grades to repeat a year, or who was forced to leave university because of his poor scholastic showing. Those who simply dropped out of college for no apparent reason also were graded F, perhaps too arbitrarily, since those who left in good standing but because of financial troubles were graded according to their record at the time of leaving. An attempt was thus made to distinguish COTC casualties who simply dropped out of COTC, perhaps remaining in college, and those on the other hand who dropped out of university, and hence had to be struck off the contingent strength.

The Difficulties

Before presenting the results of the study outlined in the immediately preceding sections, it is appropriate to review some of the difficulties that appeared before and during the experimentation and fact-finding period, hence before any of the results were tabulated and analysed. Some indication of these difficulties has already been made, but they are sufficiently important to merit separate treatment, partly to indicate how some of them may affect the results, and partly to serve as a warning to future research workers. It must be admitted, however, that a number of the obstacles encountered were peculiar to this experiment and should not recur.

In 1947 and 1948, at the time the validation group was being assessed for acceptance into the COTC, and was being rated on

performance at the various corps schools, the whole COTC program was new and undeveloped. It might also be said that generally the Canadian Army was in the same state. In many instances various units and formations were under-staffed, and a number of persons in various posts were still somewhat unfamiliar with their new job. Some of the deficiencies in staff could be accounted for by the numbers that were away on courses. Officer jobs had not been subjected to analysis, so that there was only vague agreement concerning what should be expected of an officer. Selection for COTC was in an experimental stage. The Active Force personnel selection staff itself was preoccupied with numerous tasks other than COTC selection, not the least of which was training on the job in personnel selection duties. Only two of the dozen officers reporting on the applicants had previous OSAC experience, although all had previously been called upon to report on officer candidates at unit level during wartime. Generally speaking assessments were made with the thought of predicting the candidate's success as an officer, rather than as an officer cadet. The selection was aimed at performance of the man in any context, rather than his ability to get along in the COTC setting, at a particular corps school, under certain officers who probably would have a preformed, stereotyped, but undefined notion of a suitable officer.

Just as concrete goals for selection were lacking, so too were training and assessment procedures at the corps schools untried. Officers and NCOs assigned to COTC duties were starting on a new venture, and in a sense groping their way along, setting up procedures through "trial and error", though usually based on sound experience in other fields. It was not always apparent to the regimental staffs why certain tests and other procedures should be followed in selection

and assessment, so that at times documents were not made available, medical boards were not completed, testing and interviewing space was inadequate, insufficient time was allowed, appointments were not properly arranged and kept, and other similar obstacles confronted the Personnel Officers in their work. Furthermore the first year COTC program called for elementary, general military training, the kind that can usually be passed by other ranks as well as by officer cadets. There was little opportunity to assess the officer qualities, so that most of the ratings given indicated the cadets to be average.

The 118 students applying for entry were of two different categories, 67 veterans, 57% of the total, and 51 non-veterans, 43% of the total, and, when other things seemed equal, the veterans were given preference. This preference was being shown by the university authorities in entrance prerequisites, and was a conscious attitude on the part of most of the officers responsible for selection and later appraisal. In spite of this slight bias, only 61% of the veterans were accepted, as compared with 39% of the non-veterans, and it is reasonable to assume that the veterans actually were slightly more suitable for COTC because of their military experience and greater physical maturity. The veterans applying, 4 Navy, 27 Army, and 36 Air Force, should normally not have been interviewed before service documents were made available, but this formality was not observed. It is possible that some influence on overall test results may have been introduced, since nearly all veterans had been subjected to intelligence and other tests, likely to a greater extent than their non-veteran co-applicants. Certainly most of the ex-Army and Navy candidates would have had the M-test on some previous

occasion, though all were re-tested on applying for COTC. It is known that a number of them earned higher scores than they had made on their earlier test. In future years the proportion of veterans will have decreased to zero, so that there will not be two markedly different kinds of candidates to assess.

It was mentioned earlier in the chapter outlining COTC selection procedure, that a poor educational record was not to be used by the PO as a sole basis for recommending against acceptance of an applicant. Personnel officers felt frustrated because they could not get a more accurate account of educational background than was given by the applicant himself. Educational stability and progress loomed as a large factor in assessment because of the necessity for most candidates to be in certain faculties and to graduate before being commissioned.

The most important difficulty, and one which was not resolved, was the obtaining of test results on the rejected candidates. The experiment was planned after selections had been completed, but as originally conceived it was intended that the full battery of tests would be given to all of those who had applied for COTC. It was not possible, however, to get sufficient numbers of the rejected candidates to indicate a willingness to give their time to the cause of experimentation. Consequently none of the candidates who did not become members of the McGill Contingent, COTC, was given any tests other than the "M". It is therefore impossible to compare performance of the acceptees with that of the rejectees in a number of the functions designed to test the sensitivity of the normal methods of selection. From this disappointing experience others may well take heed: do the

complete battery of tests, interviews, or whatever other procedures are to be part of the experiment, at the time candidates are applying for COTC; do not expect rejected candidates to cooperate in an experimental plan.

CHAPTER V

The Experimental Results

Wastage

The experimental findings regarding sensitivity of the various tests can be better appreciated if a picture of what happened to the applicants is kept in mind. It will be easier to interpret the functions performed by the tests if more is known about the group tested. The original 118 eligible candidates was cut to 67 (57%) by the combined efforts of the POs and the Selection Board. After one practical phase the 67 was cut to 48, a 28% shrinkage in one year! At the end of the second practical phase another 10 had ceased to be effective, so that at the time of this report the number of originals still in the Contingent is 38, representing only 57%. The following table will make clear the wastage picture, and shows relative performance of veterans and non-veterans. To the left of the numbers in column one are shown the percentages obtained by the fraction: veteran divided by the total shown to the right, e.g. in table (b), (.63) represents $30/48$, the percentage of veterans effective after one year. The numbers are followed by percentages to indicate the proportion of the upper figure to the lower total, e.g. in table (a) the (.57) following 67 indicates that 67 is 57% of 118, or that 57% of all applicants were accepted.

Table V

Veteran, Non-Veteran and Total Wastage in COTC

	Veteran	Non-Vet	Total	Officer Cadets
	(.61) 41 (.61)	26 (.51)	67 (.57)	Accepted by Board in 1947
(a)	(.51) 26 (.39)	25 (.49)	51 (.43)	Rejected by Board
	(.57) 67	51	118	Total applicants
	(.63) 30 (.73)	18 (.69)	48 (.72)	Effective after one year
(b)	(.58) 11 (.27)	8 (.31)	19 (.28)	Casualties
	41	26	67	Total Officer Cadets
	(.66) 25 (.61)	13 (.50)	38 (.57)	Effective after two years
(c)	(.55) 16 (.39)	13 (.50)	29 (.43)	Casualties
	41	26	67	Total of original

There are two causes for this enormous wastage: (a) nineteen candidates (28%) failed in their university studies, (or dropped out of college for no apparent reason) see Table VI, page 83, and (b) ten candidates (15%) in good standing at the university dropped out of COTC. Only one of the 29 (43%) who became a casualty was failed in the military part of his training, and he was one of the 19 who failed university. The 28% failure at university of the accepted candidates is not nearly so drastic a figure as the 49% failure rate amongst the rejected candidates. The failure rate for the whole group was 37%, with the veterans in the accepted group doing relatively much better than the veterans in the rejected group (73% versus 38%), and slightly better than the accepted non-veterans (73% versus 69%). The non-veterans as a whole did slightly better at university than the veterans, 67% of them as compared with 60% of the veterans having been successful in

the period studied. The following tables will illustrate. Numbers and percentages are used in a similar manner to the method of the preceding tables.

Table VI

Veteran, Non-Veteran and Total Wastage in University

	Veteran	Non-Vet	Total	
	(.54) 40 (.60)	34 (.67)	74 (.63)	Passing at University
(a)	(.61) 27 (.40)	17 (.33)	44 (.37)	Failing at University
	67	51	118	Total applicants
	(.63) 30 (.73)	18 (.69)	48 (.72)	Passes - COTC cadets
(b)	(.58) 11 (.27)	8 (.31)	19 (.28)	Failures - COTC cadets
	(.61) 41	26	67	Total officer cadets
	(.39) 10 (.38)	16 (.64)	26 (.51)	Passes - Rejectees
(c)	(.64) 16 (.62)	9 (.36)	25 (.49)	Failures - Rejectees
	(.51) 26	25	51	Total Rejectees

It is obvious why 19 of the 29 COTC casualties left COTC - they failed at university and were thus forced to leave. But the picture is not so simple for the other 10. Eight of these 10 dropped out of COTC at the end of the first practical, or before the second practical phase. It bears repeating that they were not failures at university, nor had they done poorly in the COTC. Five of them were veterans, so no hypothesis about the lack of appeal to veterans of the training and treatment generally at the corps schools can be advanced. Two of the 10, neither of whom had been originally recommended for COTC by the

PO, withdrew because of their own poor health. One said he had to devote his spare time to attending to his sick mother. One found a very lucrative summer job. One had to work all his spare time during the scholastic year, and eventually dropped out of college because he could not finance his education. Four were struck off COTC strength at their own request, their reasons not being made very clear in two cases, although in the other two the cadets said they were content to be qualified as Lieutenants (RF) instead of going on to become Captains. The last one, although a casualty to the McGill Contingent, transferred from McGill to a College in Ontario, where he now is a member of another COTC contingent. These 10 casualties represent 15% of the original group, 43% of which became non-effective. There seems very little that can be done to avoid some of the above-mentioned casualties, but a few might be avoided if more emphasis were laid on probing the sincerity of the candidates' original intention of completing at least two years training.

These figures on casualties should point quite conclusively to the need for finding instruments, or developing techniques, or implementing a policy geared to a more careful assessment of scholastic ability, the principal, and indeed in the case of the McGill officer cadets, the only cause for COTC failure.

Since there were no failures on the purely military assessment, two interesting speculations can be made by way of explanation: (a) Either the selection of candidates in terms of the officer qualities of personality was so well done that no really poor candidates were sent forth, or (b) the assessment and rating done

at corps schools is not sufficiently sensitive to differentiate between the good and the poor cadet. It is not practical or scientific to accept the first speculation without having challenged the second. Corps school commanders and their assessment staffs have hardly had a chance to develop firm assessment procedures. Moreover there has been a tendency to give everyone a second chance, an attitude that is apparent from reading remarks in the ITRs. The first year practical program has been an easy one, not calling forth many leadership qualities in the cadets. Once a cadet passes first year, the "stamp of approval" thus given makes it "awkward" for a subsequent label of non-approval to be given.

The table on the following page is a summary of the overall personality ratings (See ITR page 5 item 21) given to 1124 cadets at eleven different corps schools during the summer of 1948. It includes candidates in all three practical phases of training. The Mean ratings are given, assuming "unsatisfactory" to be 1, and "outstanding" to be 5, on a linear scale.

From the table it might be concluded that candidates were of very good quality. Another interpretation is that the ratings tended too much toward the middle, and imply that the raters did not know the candidates very well, or were unfamiliar with rating methods, or were simply playing safe. Ratings bunched so much around the middle as these ratings were, that is 68% of the ratings using 27% of the scale, suggests study is needed on this aspect of assessment. It is here that one should think back to the rating system used at RMAC Sandhurst, where a forced distribution of ratings was employed. The application of such a system to the Canadian assessment program merits consideration.

Table VII
Corps School Overall Personality Ratings

	RCA	RCEME 2nd yr	RCOC	RC	Sigs	RCEME 1st yr 3rd yr	RCA AA	RCAC	RCAMC	RCIC	RCASC	RCE	%
UNSATISFACTORY	1	0	0	0	0	0	6	1	0	0	0	2	9 0.8
POOR	2	11	9	16	0	0	2	2	3	3	1	6	53 4.7
PASSABLE	3	59	39	45	32	32	50	109	21	42	45	62	508 45.2
GOOD	4	93	60	26	36	36	69	38	37	25	37	45	511 45.4
OUTSTANDING	5	6	6	3	5	5	12	0	3	3	3	0	42 3.7
NUMBER	169	51	114	90	73	73	139	150	64	73	86	115	1124 99.8
Average	3.56	3.96	3.55	3.18	3.63	3.63	3.57	3.23	3.63	3.38	3.49	3.30	3.47
Standard deviation													.68

It is of some interest to note that in the validation group university grades concluded in ratings using the lower extreme of the scale much more frequently than the RSO or corps school assessors. The following table VIIa illustrates this tendency, which of course will work toward lowering correlations between the PO ratings and most criteria of success. The grades E, V, S, (D+F) given by the PO, I, II, III, F given by the University and A, B, C, (E+F) given by the RSO or Corps School are tabulated, showing numbers of such grades given, and in parentheses the percentages that these represent. The N of 118 is total number of applicants, N of 67 represents original acceptees, and N of 48 the number attending the second practical phase, and N of 38 the number that now remain in COTC.

TABLE VIIa

Numbers and Percentages of Candidates Obtaining Various Ratings

Grades by University		I	II	III	F	Remarks
		E	V	S	(D+F)	
		A	B	C	(E+F)	N
PO	RSO & Corps School	8 (.07)	22 (.19)	29 (.25)	59 (.50)	118 All applicants 1947-48
Univ		4 (.04)	37 (.31)	33 (.28)	44 (.37)	118 Standing end of 1949
PO		1 (.02)	2 (.04)	4 (.08)	44 (.86)	51 Rejected
Univ		0 (.00)	14 (.27)	12 (.24)	25 (.49)	51 1949
PO		7 (.10)	20 (.30)	25 (.37)	15 (.22)	67 Original Rating 1947-48
Univ		4 (.06)	23 (.34)	21 (.31)	19 (.28)	67 Final Standing 1949
RSO		7 (.10)	13 (.19)	42 (.63)	5 (.07)	67 Before 2nd practical 1949
SG I		2 (.03)	20 (.30)	40 (.60)	5 (.07)	67 1948 - Corps School
OPR I		2 (.03)	34 (.51)	28 (.42)	3 (.04)	67 1948 - " "
PO		5 (.10)	14 (.29)	21 (.44)	8 (.17)	48 Original ratings on those who took Second practical 1949
Univ		3 (.06)	19 (.40)	18 (.38)	8 (.17)	48
RSO		4 (.08)	12 (.25)	31 (.65)	1 (.02)	48
SG II		2 (.04)	19 (.40)	23 (.48)	4 (.08)	48 1949 Corps School
OPR II		2 (.04)	25 (.52)	18 (.38)	3 (.06)	48 1949 " "
PO		2 (.11)	6 (.32)	4 (.21)	7 (.37)	19 Failed or dropped after 1st year
Univ		1 (.05)	4 (.21)	3 (.16)	11 (.58)	19 Original grades
RSO		3 (.16)	1 (.05)	11 (.58)	4 (.21)	19 " "
RSO		0 (.00)	1 (.05)	17 (.90)	1 (.05)	19 Grades in 1948
PO		3 (.08)	11 (.29)	18 (.47)	6 (.16)	38 Original PO grade of Effectives
SG II		2 (.05)	17 (.48)	17 (.45)	2 (.05)	38 1949 School grade "

Tests of Intelligence

The reader is invited to glance ahead at the two graphs and two inter-correlation matrices that follow immediately. The argument will be more readily followed if occasional reference is made to table VIIa. Graph I shows the distribution of total M-scores obtained respectively by the accepted and the rejected applicants for McGill COTC in 1947. Graph II pictures distributions of scores made by the accepted candidates on the parts and whole of each of the three tests, M, ACE and Closure. In all graphs vertical lines are drawn to show the number of casualties (university failures described on page 82) in each test-score range. Mean scores, standard deviations, and standard errors, are shown below as table VIII. The matrices show, in table IX, the coefficients, number of cases, and standard errors of correlations between the parts and wholes of the three tests; and in table X, between tests, sub-tests, and various ratings. The correlations are calculated using the Pearson Product-Moment Method as shortened for practical use by Jackson and Ferguson (45). The method is crude, but gives an "r" that is comparable for all the variables studied. It is sufficient to show trends, and is adequate for the present purpose.

The M-test is the only one of the so-called "intelligence" tests that was applied to all applicants, 67 of whom were accepted and 51 rejected for the COTC. It may be seen that 29 candidates scored below 160, and that 12, or 41.5% of these, failed university. Of the 29, 4 were accepted, and one of them failed, while 25 were rejected out of which 11 failed. Thus 25% of the accepted as

GRAPH - I

M-SCORE DISTRIBUTION ACCEPTED

REJECTED APPLICANTS

--- REJECTED N-51

— ACCEPTED N-67

VERTICAL LINES INDICATE FREQUENCY OF FAILURE

UNIVERSITY
AMONG REJECTS
AMONG ACCEPTED

f

10

8

6

4

2

0

129

132

137

142

147

152

157

162

167

172

177

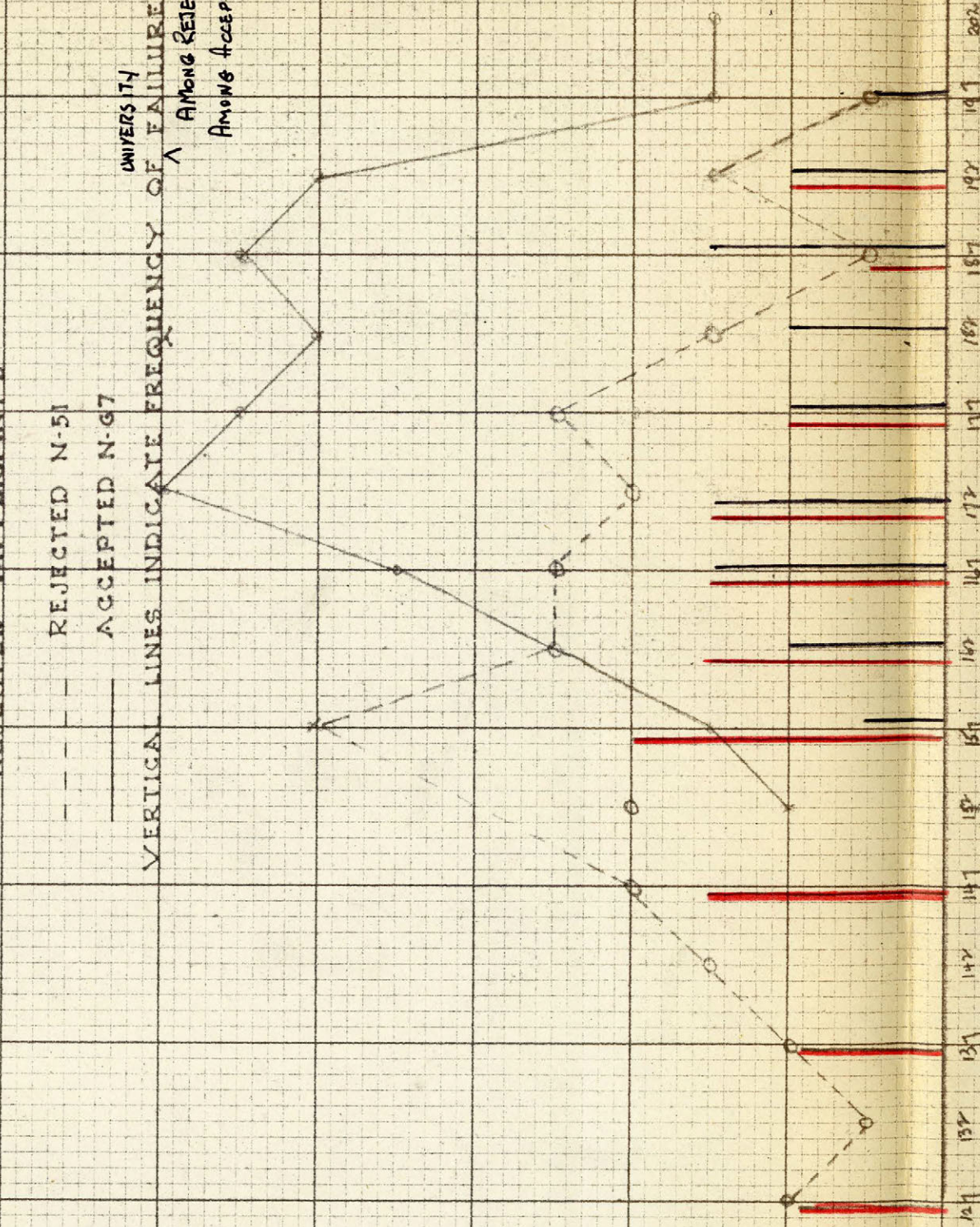
182

187

192

197

202



GRAPH II

SUB-TOTALS AND TOTAL SCORE ON "M", A.C.E. AND CLOSURE TESTS
UNIVERSITY OF A FAYOUMES

NOTE: VERTICAL RED LINES INDICATE FREQUENCY OF A FAYOUMES

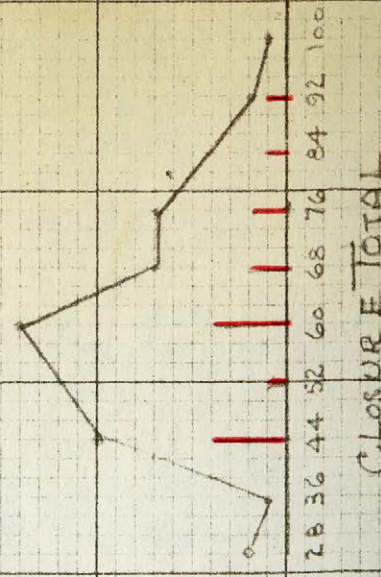
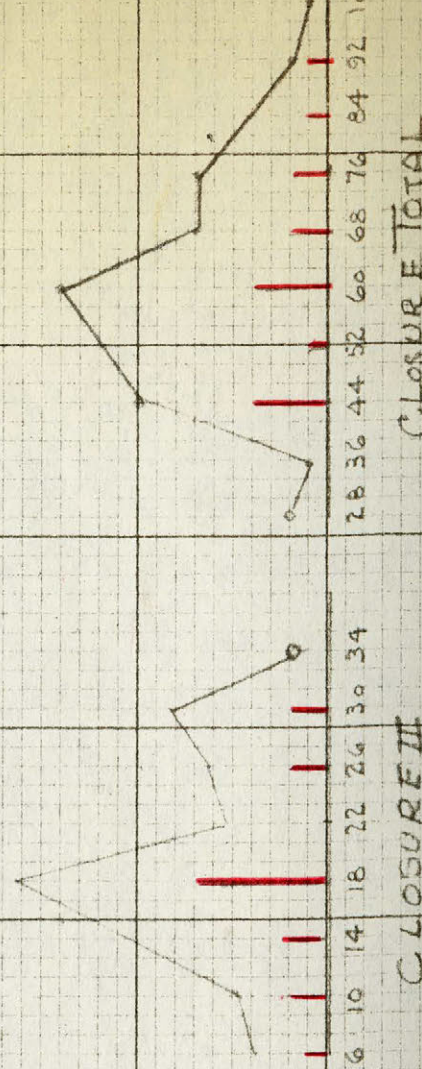
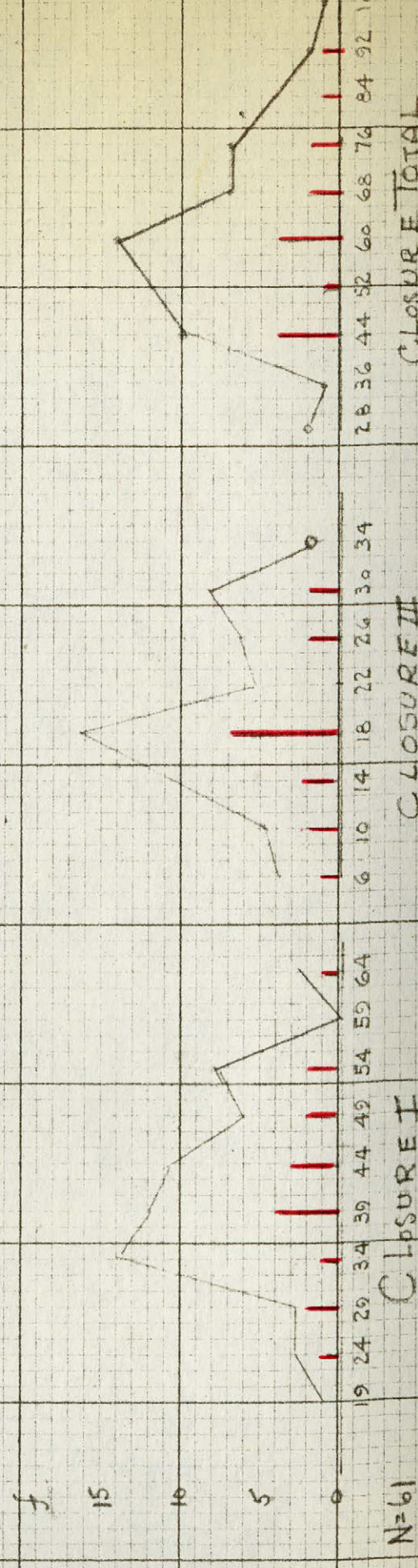
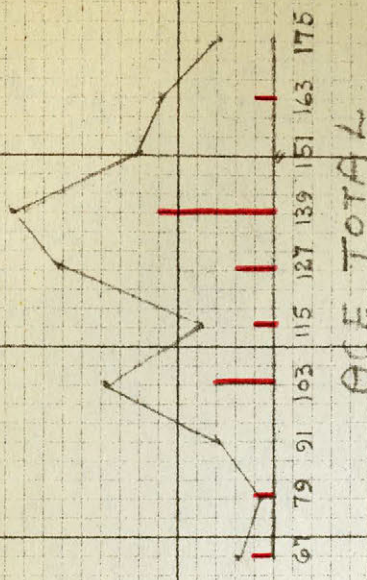
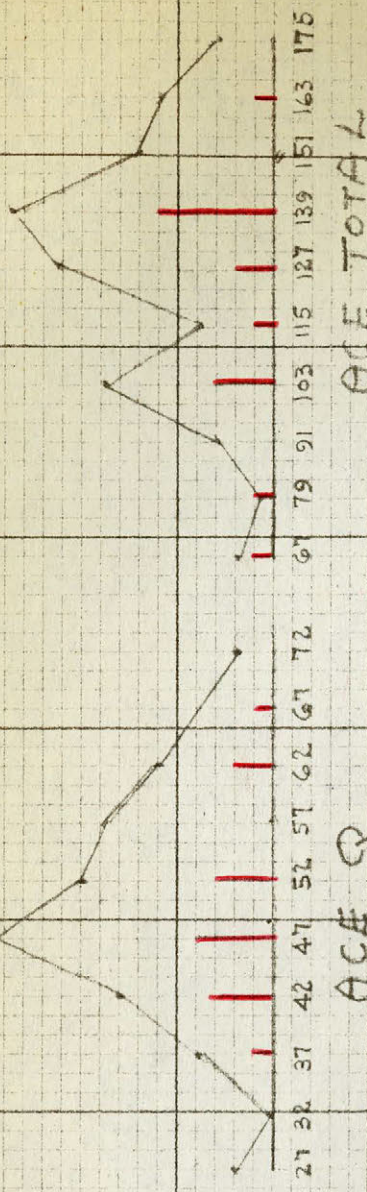
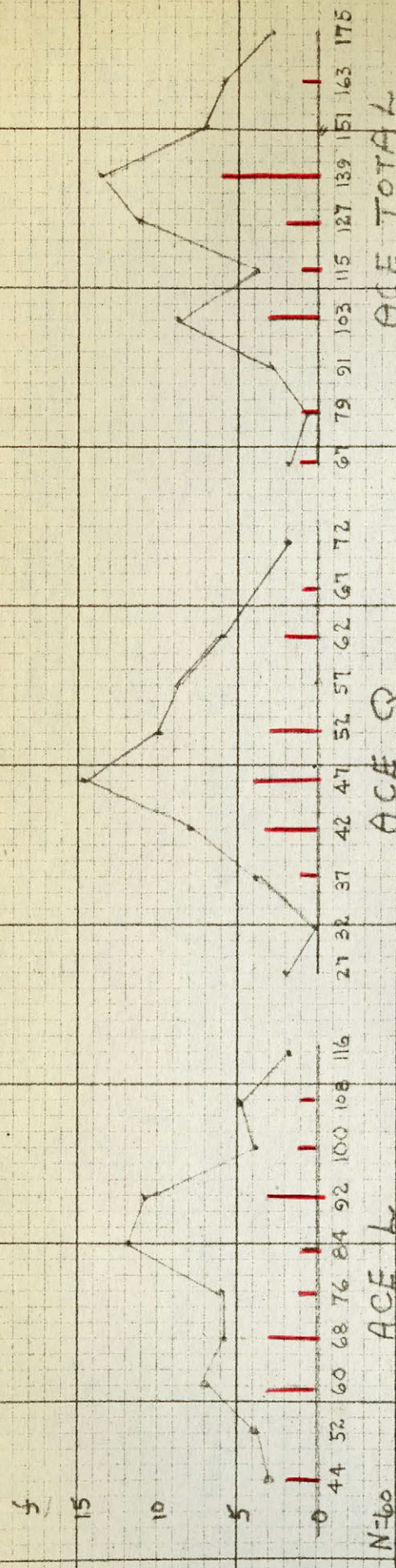
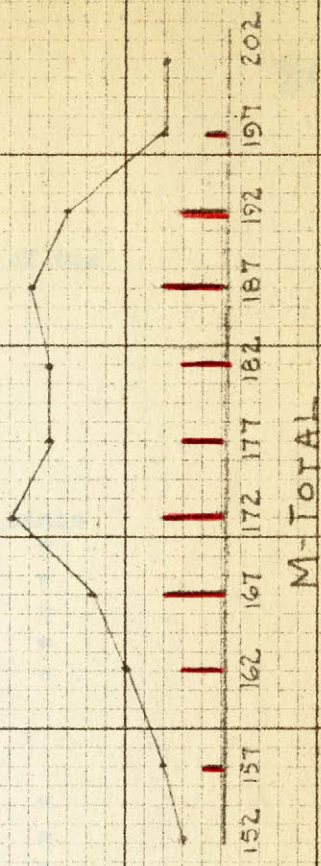
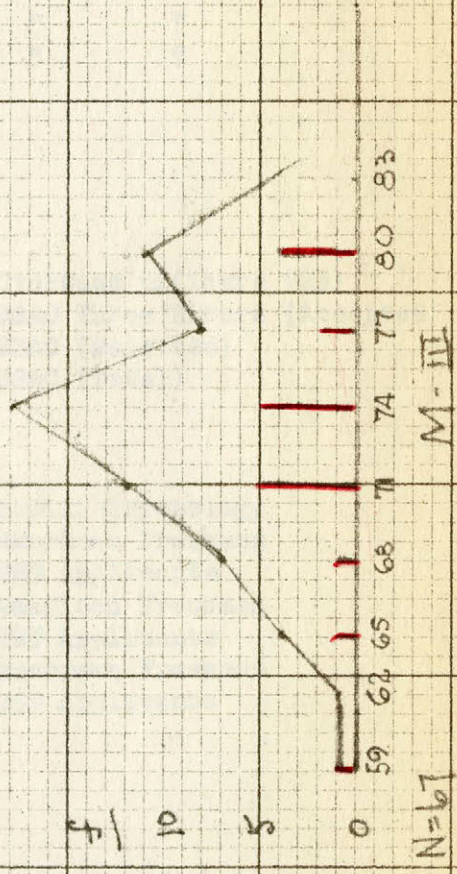
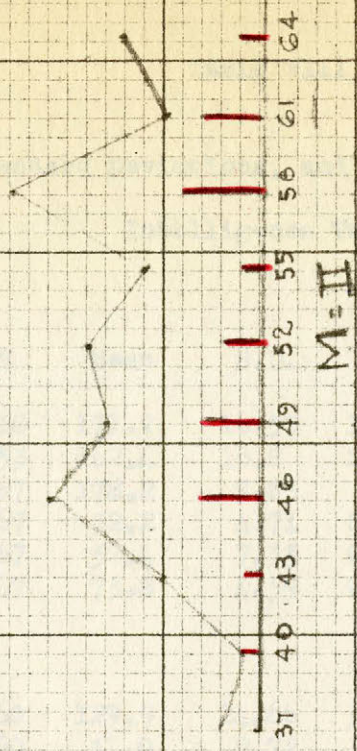
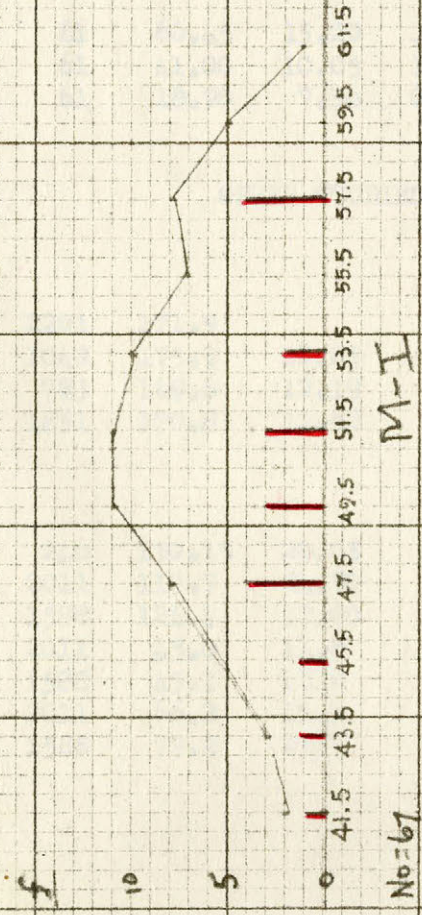


TABLE VIII

Means, Standard Deviations, and Standard Errors of the
Intelligence Tests

<u>M-Test</u>	items	N	Mean	S.D.	S _m		
Total	211	118	171.2	16.50	1.51	All Applicants	
Total	211	53	162.4	16.8	2.23	Rejected	"
Total	211	67	178.2	7.85	0.96	Accepted	"
I	61	67	52.2	4.71	0.57	"	"
II	65	67	52.4	7.35	0.90	"	"
III	85	67	73.8	4.59	0.56	"	"
<u>ACE-Test</u>							
Total	200	60	129.9	24.66	3.18	"	"
Q	80	60	51.0	9.72	1.26	"	"
L	120	60	78.7	18.85	2.43	"	"
<u>Closure Test</u>							
Total	135	61	60.45	15.20	1.95	"	"
I	100	61	41.00	10.05	1.29	"	"
II	35	61	18.90	7.36	0.94	"	"

OTHER STUDIES

<u>M-Test</u>					
Total	2201	171.9			Overseas officers (23)
"	1048	175.9	12.25	.38	OSAC Three Rivers (Accepted)
"	783	169.6	12.19	.44	OSAC (Rejected)
"	1831	170.8	12.62	.30	OSAC (Total)
<u>ACE Test</u>					
Total	246	130.15	20.05		McGill Psychology
Total	2011	110.7	24.70		American Freshman
Total	1588	124.4	32.00		OSS Applicants
Q	2011	45.0	11.8		American Freshmen
Q	1588	45.1	12.8		OSS Applicants
L	2011	66.2	16.1		American Freshmen
L	1588	79.2	23.7		OSS Applicants

TABLE IX

Pearson Product-Moment Correlations: Tests
N and Standard Errors shown below

	M-Test			A C E			Closure			
	Total	Sub I	Sub II	Sub III	Total	Q	L	Total	I	II
M-Total		.72	.79	.63	.42	.34	.41	.27	.13	.24
Sub I	.67 .059		.26	.43	.50	.53	.43	.24	.12	.28
Sub II	.67 .046	.67 .114		.20	.01	-.07	.05	-.10	-.07	-.10
Sub III	.67 .074	.67 .099	.67 .117		.59	.37	.59	.45	.40	.47
A C E Total	.60 .106	.60 .097	.60 .129	.60 .084		.72	.93	.61	.46	.63
Sub Q	.60 .114	.60 .093	.60 .013	.60 .111	.60 .062		.45	.46	.39	.41
Sub L	.60 .107	.60 .105	.60 .129	.60 .084	.60 .017	.60 .103		.54	.37	.61
Closure Total	.61 .119	.61 .121	.61 .013	.61 .102	.57 .083	.57 .104	.57 .094		.91	.82
I	.61 .126	.61 .126	.61 .013	.61 .108	.57 .104	.57 .112	.57 .114	.61 .023		.57
II	.61 .121	.61 .118	.61 .013	.61 .099	.57 .079	.57 .110	.57 .083	.61 .042	.61 .086	

TABLE X

Pearson Product-Moment Correlations: Tests & Criteria Ratings
N and Standard Errors shown in right-hand table

	U	PO	RSO	OPR I	OPR II	SG I	SG II	U	PO	RSO	OPR I	OPR II	SG I	SG II
M-Total	.13	.42	.13	.14	.20	.21	.25	.67 .120	.67 .101	.67 .120	.67 .119	.48 .138	.67 .116	.48 .135
Sub I	.26	.55	.26	.26	.34	.27	.42	.67 .113	.67 .085	.67 .113	.67 .113	.48 .127	.67 .113	.48 .118
Sub II	-.02	.19	-.05			.03	-.14	.67 .012	.67 .117	.67 .012			.67 .122	.48 .014
Sub III	.10	.31	.21			.24	.37	.67 .121	.67 .110	.67 .116			.67 .115	.48 .124
A C E Total	.21	.34	.42	.26	.29	.30	.43	.60 .123	.60 .114	.60 .106	.60 .120	.46 .135	.60 .117	.45 .121
Sub Q	.21	.24	.20			.23	.34	.60 .123	.60 .121	.60 .123			.60 .122	.46 .130
Sub L	.18	.27	.39			.31	.40	.60 .124	.60 .119	.60 .109			.60 .116	.46 .123
Closure Total	.02	.19	.13			.13	.29	.61 .127	.61 .123	.61 .125			.61 .125	.47 .133
I	-.05	.09	.06			.07	.19	.61 .012	.61 .127	.61 .127			.61 .127	.47 .140
II	.13	.29	.20			.14	.29	.61 .126	.61 .117	.61 .123			.61 .125	.47 .133

compared with 44% of the rejected candidates scoring below 160 were university failures. At the same time, 8 below the critical score of 160, received second-class standing, and one a first-class standing; while only 29 of those scoring above 160 got a second-class, and 3 a first-class. That is, 31% of the low scorers got second-class or better, and 36% of the higher scorers obtained similar standing. There is a tendency for the high scorers to do better at university than the low scorers, as may be seen by the small correlation of .13. An inspection of the tabulated data (not shown) indicates that more of the higher grades were obtained by those with good M-scores, but quite a number of high scorers also failed. When all 118 applicants' M-scores and school grades are correlated, r is only .19. Thus, though the coefficient is kept low, the tendency is apparent. But more important is the evidence that a good or high score on the M-test is not a positive insurance against university failure, hence against COTC failure.

The graphs of all of the tests show clearly that failures occur throughout the whole test-score range, and in sufficient numbers at the higher levels to make it most difficult to settle on any critical score. It becomes necessary to seek other factors than M-test scores on which to base prognosis for university success. The higher percentage of failure amongst the candidates rejected for COTC - 49% versus 28% - suggests, when viewed in the light of test score results, that other factors actually were used to segregate the good from the poor.

Table X correlations are of a low order, but indicate that the

PO was considerably influenced by M-scores. Correlations between PO-rating and M-total are .55 for 118 applicants, and .42 for the 67 accepted candidates. From table VIII it may be noted that there is a difference between the average score of acceptees and rejectees of almost 16 points, a highly significant difference (critical ratio 6.5). This difference of 16 points is greater than the differences found during wartime at the two OSACs, and the S.D. of the mean of accepted is much smaller than that of the rejected applicants. The POs reports, which were influenced by M-score undoubtedly influenced the Selection Board (86% of those not recommended for COTC acceptance were not accepted). Let us examine the test results more closely. The relatively high PO - M-score correlations of .55 and .31 for sub-totals I and III, with the low .19 for sub-total II which cuts the correlation with total score to .42, bears particular comment. Sub-total II correlates to a low degree with sub-totals I and III (Table IX), but higher than either of these with total score, usually a good statistic for a sub-test. But its correlations with all other tests and sub-totals is near zero or slightly negative, as is the case of its correlations with all of the criteria (Table X). Whatever it is that sub-total II is measuring therefore has no value in prognosis of COTC success as judged by the only criteria available. Either (a) the criteria (university grades, RSO rating, and corps school grades over a 2-year period) are unsatisfactory measures of officer cadets' potentiality as officers, or (b) the M- sub-total II is a very poor instrument for predicting their success.

M- sub-total II has a larger standard deviation than the other two sub-totals, and is almost as large as that for the whole test, which is relatively small for good discriminatory potential.

TABLE X_a

Total & Sub-total scores on M and ACE for Technical and
Non-Technical Personnel

	M-1	M-2	M-3	M-Total
Applied Science N=20	52.9	55.0	76.9	184.8
Arts N=25 -	51.0	47.7	73.0	171.7
Difference	1.9	7.3	3.9	13.1
Technical Corps N=21	52.0	58.4	72.7	183.1
Non-Tech Corps - N=37	51.6	49.6	73.7	174.9
Difference	0.4	8.8	- 1.0	8.2
Dental, Medical N= 9	53.8	53.3	73.6	180.7
B.Sc. Students N=15	51.3	52.	74.3	177.6
	Q	L	ACE-Total	
Arts N=21	49.0	80.8	129.8	
Appl Sc N=19 -	49.6	70.7	120.3	
Difference	- .6	10.1	9.5	
Non-Tech Corps N=32	50.4	80.0	130.4	
Tech Corps - N=20	50.4	70.4	120.8	
Difference	.0	9.6	9.6	
Dental-Medical N=8	55.6	95.1	150.7	
B. Sc. Students N=12	52.3	79.4	131.7	

But if a larger variability might be desired to discriminate between members of a highly pre-selected group it should not come from a bimodal but from a rectangular distribution of scores. The graphs indicate such a bimodal tendency, particularly the total and sub-total II diagrams. It was therefore postulated that there may be two distinct groups amongst the applicants. As a means of checking, average test-scores were calculated for the cadets in applied science vs arts and commerce, and in technical corps vs non-technical arms and corps. The B. Sc., medical, and dental students were omitted from the first group, and those in Medical and Dental Corps from the second (See Table Xa and compare with Table VIII). One might postulate from total M-scores that the technical personnel are "brighter" than the non-technical, but a check, using the ACE, would reverse this. Moreover, the difference of M-total in favour of the technical personnel is almost all accounted for by the difference between their scores on sub-total II. Perhaps, assuming the relative general ability of the two groups to be about equal, the M-test sub-total II is measuring mechanical experience or interest, and this, or whatever else it is, has no direct bearing upon the success of a student at college nor on his success in COTC, although POs have assumed that a high score on sub-total II would be favourable to success as an officer in a highly mechanized army. Here again is indication of the need for a job analysis of officer jobs, and a clearer-cut agreement on what is desirable in an officer. Are our concepts regarding cadet and commissioned officer identical?

The ACE L-score does for the non-technical what the M- sub-total II does for the technical cadets. The arts students are able

to make a higher ACE total score than the applied science students, and this difference is almost totally accounted for by the higher L-score of the former. The standard deviation of M- sub-total II is relatively large in comparison to that of other sub-totals, and the same is true of the L-score variability. Thus each of these sub-totals gets more weight in the total test impression than an uninitiated interviewer would suspect (46). Note the highest coefficients of .79 for M- sub-total II, and .93 for L-score, when these tests are correlated with total scores.

Note that the correlation of Q with university grades is the same as these grades with total ACE. The best correlation in the M- sub-totals with university grades is the first, an unexpected result, since this sub-total is based on a non-verbal group of tests. Scores on this group have often been quoted as reflecting "native intelligence". It is interesting to note that both technical and non-technical cadets score about the same on M-I and also on Q. An investigation of the results that might have been obtained by correlating the combined scores of these two with university grades was not completed, but in view of the necessity for finding measures to predict university success, such might be done. It seemed more important at this time to investigate other factors than to labour "intelligence" measures, since in all sub-tests it is impossible to set critical scores that differentiate between passes and failures.

From the evidence of table X the ACE total has done a slightly better job than the M-total in predicting university and COTC success. With the exception of M-I the M- sub-totals

are less effective than the ACE sub-totals. The correlations between test scores and corps school grades are higher than between scores and university grades although differences are not significant. Correlations improve as the number of cadets decreases after the first practical phase - eleven of the 19 casualties having failed at university. There is the suggestion again that the tests are somewhat better predictors of degree of success than they are of failure. It could be argued that after a certain amount of "natural" selection (yielding a rather homogeneous group insofar as "intelligence" is concerned), success is more dependent upon other factors - motivation, work habits, social adjustment, personality. But in that there is an improving positive correlation between test scores and the criteria for judging success, and since the M- is less effective than the ACE test in its ability to predict, consideration should be given to using a test other than M for officer selection.

Perhaps the improving test-criteria correlation is due to more careful and more valid rating at the corps schools in the second phase of the validation group. This is a reasonable suggestion, since the school staffs should have profited by errors made in the first phase, and should have been able to grade on officer potential more readily in the second year by virtue of a training syllabus that allows more qualities to be expressed. In any case the correlations are no lower than were anticipated. The OSS report referred to earlier showed test scores to give correlations no better than those of the present study (47). The OSS group was less highly pre-selected and more variable than the McGill validation group.

The ACE applied to 246 McGill Psychology students yielded an average score of 130.15 with a standard deviation of 20.05, as compared to a mean of 129.9, S.D. 24.7 for the 60 officer cadets tested. Average M-scores for the 118 applicants and 67 accepted were 171.2 and 178.2 with standard deviations of 16.5 and 7.85, showing again the degree of homogeneity to which the COTC group had been reduced. Although the rejected candidates were not given ACE, it is probable that their scores would have averaged lower than 130. A sampling of 2,011 American college freshmen gave a mean of 110.7, S.D. 24.7, and the OSS group of 1588 a mean of 124.4, S.D. 32.0 (48).

Relatively fewer students are admitted to McGill than to most American Colleges and many other Canadian Colleges. Because of this preselection it is more difficult to differentiate between individuals, so that correlations would be low.

The Ferguson Closure (sometimes referred to as Completion) Test does not seem to be an adequate measure of the kind of "intelligence" required for success at COTC or at university. Closure II correlates higher than I with the best parts of other tests and with criteria, and might bear further study. Whatever correlations exist take the same general trend as do most recorded for M- and ACE, and add that much more weight to an interpretation of tendencies. The Test seems to measure much of the same abilities as are measured by ACE Total (and L) and M-III.

The Personality Tests

The SK Personality Questionnaire was given to 60 of the accepted cadets in the hopes that there might be a pattern to distinguish the good from the poor in terms of the 11 traits measured. It was not intended for use as a psychiatric screening device, but rather for the same purpose as the Values test, to try to get an insight into the kind of personality that would conform best to the officer cadet stereotype - if such exists.

The scores were tabulated and correlations calculated with the POs ratings, and with corps school overall personality and final grade. All of these correlations (Table XI) are small, but when taken with other data help to indicate a trend. SK scores were tabulated for two groups: (a) the twenty cadets whose combined corps school and university records indicated them to be performing consistently above the others, and (b) the twenty poorest cadets - 19 who failed university and one whose scholastic record was poor and who was graded C then E in the two practical phases.

A note of interest should be interjected here. As has already been indicated, some of the cadets did not keep appointments for tests and interviews. A number had to be contacted personally and some had to be threatened with disciplinary action if they did not appear for a final "follow-up" interview. It seems significant, in retrospect, that every one of the cadets classified as most successful attended all test sessions and kept appointments. On the other hand amongst the twenty poorest, 7, or 35% of them, missed two or more test sessions. As a result of their indifference,

only 16 SK and 16 Values test scores are available instead of the 20 planned for. This lack of responsibility or indifference should perhaps receive more attention at application time, and candidates should not be pressure-recruited.

Mean scores of the contrasting groups (M20 and M16) were tabulated and the differences converted into units of standard deviation. Thus a profile has been plotted using standard scores to show the differences between the two groups (Graph III). The tabulated data from which the graphs were constructed appear in table XI.

Individual scores differing by more than one S.D. from the mean were noted, and showed both the good (13.9%) and the poor cadets (12.4%) to have individuals differing considerably in either direction from the average of the group. For example on the Excitability Scale 3 of the best-cadet group were more than 1 S.D. above, while 2 were more than 1 S.D. below average. The algebraic sum of these greater-than-one-S.D. scorers is shown in the last column of table XI.

Table XII shows tabulations made, in much the same manner as described above, of scores made by the contrasting groups on the Values Test. The SK Chart and Values Test are somewhat related, and the tables and graph (Graph IV) of the Values scores should be studied and compared with those of the SK Chart.

From the tabulated data and the graphs it is now possible to describe the COTC population in terms of the traits and values of the two tests. The most successful candidates in both COTC and university are primarily respectful of authority, cooperative,

TABLE XI

Miscellaneous Data on the SK Personality Questionnaire

Cf. Graph III

	Correlations: r_{Tn}			(n = 60)			$\frac{M_{60}-M_{20}}{S.D.}$	$\frac{M_{20}-M_{16}}{S.D.}$	Sum of Extremes
	PO	OPR-1	SG-1	Mean	S.D.	Sm			
Dist. Home	00	00	-.01	2.7	1.83	.24	.167	.278	1
Control	.16	.01	.05	21.7	4.1	.53	.147	.220	2
Co-op.	.11	-.04	.13	31.3	5.6	.72	.357	.312	-1
Gen. Act.	-.02	-.17	.03	25.2	8.5	1.09	-.035	.165	-1
Initiative	-.02	.01	.15	31.5	6.7	.86	-.269	.030	1
Emot. Control	-.33	-.07	-.09	8.67	5.6	.72	.023	-.114	-3
Excitability	.33	-.01	.08	22.7	7.1	.92	-.141	.434	7
Depression	-.25	.02	.03	18.2	10.0	1.3	-.315	-.145	4
Self-Interest	-.13	-.16	-.23	20.4	6.18	.8	-.214	-.600	-7
Self-Conscious.	-.12	.03	-.04	13.4	8.85	1.14	-.136	-.013	1
Defiant-Aggres.	-.21	.01	-.11	9.6	4.3	.55	-.186	-.104	2

TABLE XII

Miscellaneous Data on the Values Test

Cf. Graph IV

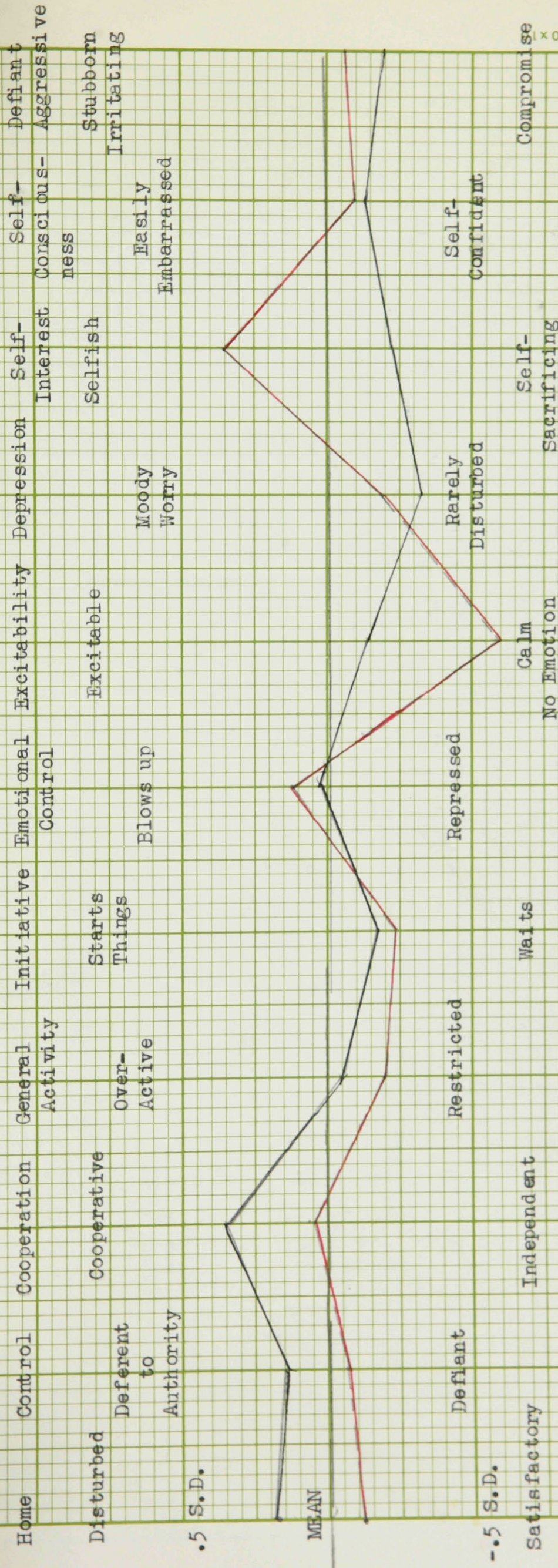
	Correlations with		(N= 61)		M ₆₁ -M ₂₀ S.D.	M ₂₀ -M ₁₆ S.D.	Sum of Extremes
	PO	SG-I	Mean	S.D.			
Theoretical	.01	-.03	31.4	6.00	-.033	.088	-4
Economic	.03	-.26	29.4	7.96	-.440	-.768	-6
Aesthetic	.04	.03	26.9	8.31	.084	-.036	-1
Social	-.10	.25	29.8	5.97	.352	1.020	3
Political	.04	-.15	32.6	6.12	-.392	-.900	-5
Religious	.00	.14	30.3	8.91	.280	.606	6

GRAPH III

SK Scores of Best and Poorest Officer Cadets

in Units of Standard Deviation

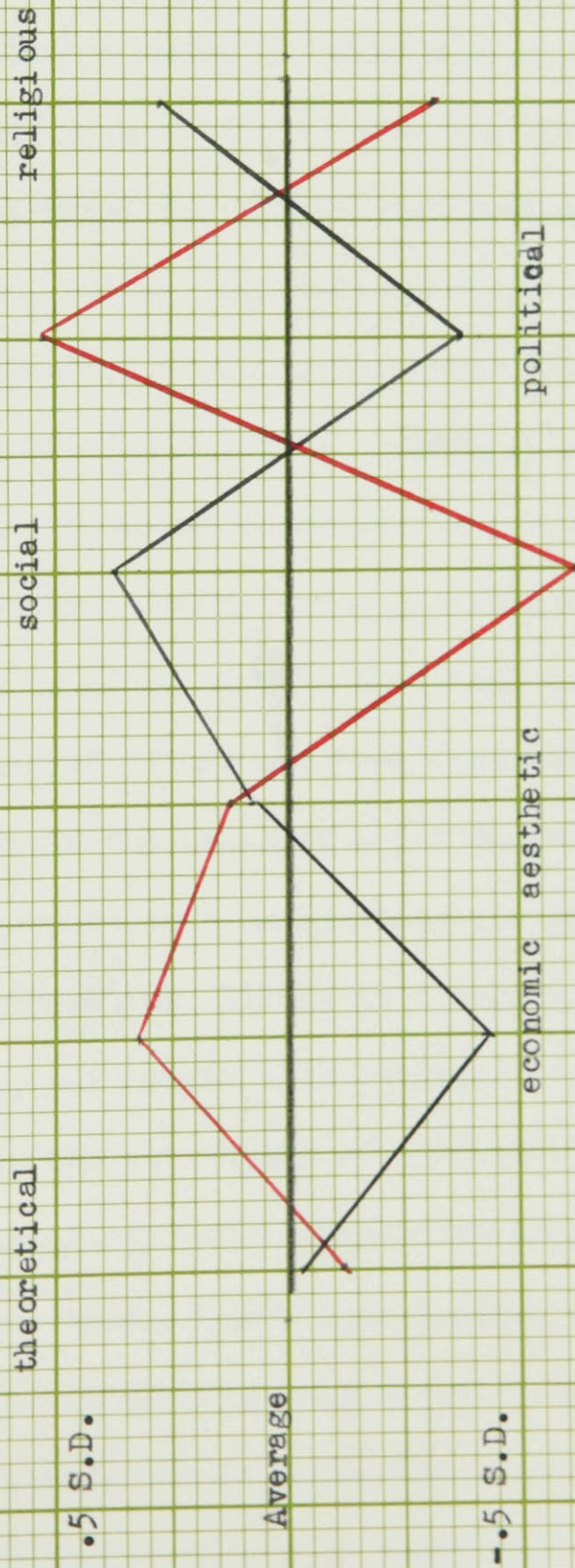
— BLACK represents Best



G R A P H IV

Values Scores of Best and Poorest Officer Cadets
in Units of Standard Deviation

— BLACK represents Best



alive and excitable, and self-sacrificing. Their values are non-economic, highly social, non-political, and religious. In contrast the university failures and COTC casualties are defiant, somewhat individualistic, restricted in their activities, calm or emotionally flat, and very selfish or inconsiderate of others. Their dominant values are economic and political at the expense of the social and religious.

The description given by the tests is quite well substantiated by the direction and relative size of the various coefficients of correlation (Pearson Product-Moment). The PO has favoured those who are somewhat deferent to, rather than defiant of, authority. He and corps school raters generally prefer the cooperative individual to the individualistic "lone wolf". Personality raters gave credit to those who showed varied interests ($r = -.17$). Final school grade correlated with test-demonstrated initiative. The PO tended to give a low rating to those lacking emotional control and a high rating to the "excitable". This may seem contradictory, but "excitable" is used here in the sense of a person being alive, more than a "dead stick", responsive to many stimuli, ready to adapt quickly to changing situations, likely to change mood in sympathy with the situation, philosophically curious. J.S.A. Bois (49) in describing some of the attributes of a counsellor emphasized the value of flexibility and multi-varied every-day experiences. "The wider the field of such experiences, and the higher and deeper you have oscillated on both sides of the average level, the better is your preparation to understand, to comfort, and to guide". Perhaps this description fits "excitability".

The trait just described is not to be confused with SK-Depression.

POs rated-down those who later indicated by their SK-score that they were moody, inclined to worry and magnify details. Both POs and corps school raters showed a dislike for the selfish, inconsiderate, shyster-like individuals, and favoured the ones who worked for the "good of the team". They were more partial to the self-assured as compared to the easily-embarrassed, indefinite individual, provided he was inclined to be compromising, rather than stubborn, or over-defiant and persistent to the point of irritation.

The POs did not seem to make their ratings correlate with any of the Allport-Vernon Values. On the other hand the corps school raters did not appreciate the economic-political group, but condoned the social-religious.

The PO seems to have recommended candidates acceptable to the corps school officers in terms of personality traits as measured by the SK-Questionnaire. Surprise might be registered by some that the "ideal" officer in COTC is a "softer" sort of individual than the one generally pictured in fiction. The emphasis on the social-religious rather than political-economic values reflects an awakening consciousness of the role of the officer as a counsellor to his men. The statistics do show that although the bulk of successful cadets tend toward this pattern, there are many individuals who are quite different. There is no thought of seeking critical scores in the personality tests. Some leaders are required whose values are primarily political-economic, provided of course that there is in them a proper balance of other traits. The trait-profile of an individual requires an astute judge to recognize the potential bully

from the leader. Assessing personality cannot be oversimplified: It is impossible to hold as many variables in mind as there are aspects of any single personality.

The conclusions to be taken from the evidence just presented must be only tentative. On the more positive side it may be said that the use of both the SK Chart and the Values Test could be very helpful to an interviewer. Remember that the group to which these tests were applied was already preselected. Tests and interviews had already been used to find disqualifying defects of function in 43% of the applicants. The Values and SK profiles of individuals could help to discriminate unusual personalities, and could aid in finding slight differences amongst the highly qualified group finally selected.

The following description has been constructed from the SK-Values profile of one of the individuals reported upon in Appendix D. The reader is invited to compare it with the report and with the profile of the successful cadets: This officer cadet is deferent to authority, very cooperative, quite active with varied interests, but rather calm and even tempered. He is very self-sacrificing. He has the scientific, critical or theoretical approach, is fairly kind, sympathetic, and unselfish, as opposed to being interested in power. He is quite religious, or mystical.

Another profile to illustrate the use that can be made of the tests on an individual diagnostic basis will suffice to show that the tests have positive merit: G..... is very respectful of authority, quite cooperative, has fair initiative, but lacks emotional control. He is not very responsive to his surroundings, is rarely disturbed,

very selfish, quite self-confident and cocky, yet compromising. He is extremely aesthetic, interested in personal prestige, and low in social-religious values. He may be interested in persons, but not in their welfare; he tends to be individualistic and self-sufficient. The man thus described by the tests was noted by the PO to be neat, extremely polite, but evasive and shallow. He had not stuck to any one direction in his studies, had avoided summer jobs to take it easy at summer resorts, had not participated in team sports, had associated more with women than men, had poor reading habits, no hobbies, and was not generally well-informed in spite of good institutional education. He was a student of Law at McGill, and applied for COTC because he thought the training and discipline would do him good. He was not recommended for COTC by the PO, but accepted for Infantry Training. He was the only training failure in the validation group, and failed his university course at the same time. Had the PO been armed with the profile given by the tests, he likely could have been more successful in convincing the Selection Board not to accept such a candidate.

The use of tests such as those just described can be of advantage to an interviewer. The time required to administer the tests, score and interpret them, would be well repaid. The interpretation requires study and implies that only properly trained "diagnosticians" should be used. None but highly trained or exceedingly "gifted" officers can be expected to make satisfactory assessments anyway, and their assessments stand a chance of being improved if the results of such devices as the SK and Values tests have been made available to them before their interview of

officer candidates. Answers to the test questions can be coloured by test-wise individuals who deliberately set out to falsify their credentials. But so can answers to questions during PO or Board interview. All methods of assessment get better results when applied to candidates who are intelligent, possess insight and are willing (50).

Comparison of the Ratings: PO, RSO, OPR, SG and University

The POs were asked in 1947 to rate candidates not only on a recommended - not recommended basis, but also on degree of suitability. The ratings given are shown in Table VIIa, page 88, and indicate that only 50% of all applicants were recommended. Actually 53% were accepted, some of those recommended being rejected, and some of those not recommended being accepted. A comparison with final ratings given by the corps schools reveals that the POs attempted to make finer distinctions than were made at the schools in either the first or second practical phases and that the PO standards are more severe than others. Correlation coefficients shown in Table XIII reveal, however, that the PO predicted degree of success remarkably well. The PO bases his predictions on tests, questionnaires and interviews that take about 3 hours of each candidate's time. The school assessors have over three months to observe the officer cadet.

It should be remembered that neither the PO nor the corps officer has been given clearly defined specifics on which to base judgments. There is actual disagreement as to what does count in making a man a good officer. The PO judgment regarding officer potential and regarding potential success or ability to obtain

TABLE XIII

INTERCORRELATIONS OF RATINGS

Showing Pearson "r" and N

	Univ	PO	RSO	OPR-I	OPR-II	SG-I	SG-II
Univ		.26	-	-	-	.38	.34
PO	67		.34	.27	.08	.29	.16
RSO	-	67		.53	-	.66	.24
OPR-I	-	67	67		.36	.84	-
OPR-II	-	48	-	48		-	.82
SG-I	67	67	67	67	-		.33
SG-II	48	48	48	-	48	48	

a passing grade at COTC are two different things - a situation that merits study. Let us examine for a moment some of the 6 officer cadets originally not recommended for COTC but who are now amongst the 38 still effective.

The first, originally rated D, was thought to be an aesthetic-religious fellow, impulsive, of poor appearance, somewhat authoritarian in his relationships. Actually he has been noted at corps school to be a hard worker, punctual and reliable. It is stated that he is "solid", but "outwardly colourless and lacking in enthusiasm". He was graded C in the first phase and C-minus in the second, with the remarks, "Not recommended for training employment. Suitable for a post requiring earnest endeavour".

The second was again rated D. He is a small, wiry Jewish ex-Armoured Corps Other Rank who is smart, a good student, but not well motivated for COTC. He shirked responsibility during wartime, avoided taking command of a tank when offered the opportunity. He would like to be an officer in peacetime, felt that the COTC program was "good summer employment", and that he might have difficulty because of his race and small stature. "They won't break me!" was his attitude. In his ITR it was stated during the first phase that "he is handicapped by stature - results in inferiority complex. Average showing; could improve". He was one of the few paraded because of poor showing in G.M.T., but obtained good marks in theoretical subjects, particularly wireless, a subject in which he was already qualified. At the end of the first phase he transferred from Armoured Corps to Engineers and repeated the first practical phase.

Will these men be good officers? The other four cases show contradictions in assessment. One was specially allocated to Medical Corps during wartime because of religious scruples, but is now in COTC, training in Service Corps. They can pass the COTC syllabus, but are they the "ideal" we are seeking?

The PO-Univ correlation of .26 and PO-SG-I of .29 indicate that assessment for COTC and for university have something in common. Note that these correlations are considerably larger than the M-test correlations with success ($r_{.92}$), and imply that factors other than test-measured "intelligence" have entered into the ratings. It will be remembered that POs were asked not to assess candidates on scholastic aptitude, but on other qualities needed by an officer. Since practically all the COTC failures relate to university failure, the PO is being harshly judged by the correlations obtained, especially since, as will be shown in the next section, the PO might very well have increased his rating average by attending more to the educational factors.

In the light of some of the above-mentioned factors it is not surprising to find the correlations low, and satisfying to see them positive. The drop from .29 to .16 between PO-SG ratings from first to second phase may in part be accounted for by the fact that of the 19 casualties between years, 11 failed university and 6 of them had not been recommended for COTC by the PO. Thus more selection and homogenizing had taken place, so that refinements of differentiation would be more difficult.

The SG-Univ correlations are fairly substantial. Perhaps the two ratings are not independent, for undoubtedly some influence would be bearing on the corps school assessors who could not help

knowing that certain candidates were having scholastic difficulties because of arrangements made for them to write supplemental examinations. Pressure from above on corps school commanders would possibly work in the other direction, however, for it might be "face-saving" to grant a pass mark to a candidate who did not merit it, but who was to be struck off strength anyway because of university failure. The pressure is ever present not to have a high rate of failure, and each F-rating has to be carefully defended (see Appendix A Special Report Form).

The RSO correlations with other criteria ratings are higher than those obtained by the PO or University. The RSO ratings actually are not very revealing because they were made after the rater was influenced by PO reports and SG results. Note that the RSO-SG correlation drops from .66 to .24 in the second year. That is, ratings made on candidates already judged must have influenced the ratings given, but no such advantage appears in the second year. The ratings given after one practical phase correlate considerably less with the "unknown" SG results of the second phase. This may mean that the candidates actually changed during the year, but can be better accounted for by the facts that (a) the school ratings were not given by the same raters, (b) all raters should have improved with experience and training, and (c) the activities of the second phase seem better adapted to letting the cadet express the qualities being rated. There were many non-committal C's, more given in the first (60%) than in the second (48%) year.

Note the relatively low correlations between SG-SG and OPR-OPR ratings - again explained in part by the factors mentioned in the

last paragraph. This brings to mind the story of the several blind men who described an elephant; one said that it was like a spear, having touched only its tusk; another felt its tail and likened it to a rope; another leaned on its body, and compared it to a wall. The problem of understanding people is always a problem of partial understanding; assessments can be done relatively well, but never completely. There are as many different opinions as there are people expressing them.

An important pair of correlations to be noted are those of .84 and .82 that show the dependency of SG on OPR. This high correlation emphasizes the importance of raters being trained in ability to recognize personality differences. An inspection of the ratings given on the 10 personality factors (see ITR page 5 in Appendix A) indicates that the halo effect is very pronounced in many cases. It does not appear that the factors were rated one at a time. It seems logical to expect most cadets to rate high on some of the factors and low on others, but generally the ratings were all of the same order. It is quite common for 9-10 fours or threes to precede an OPR of four or three, and not always possible to find out which one of the factors rated most influenced the raters. Sometimes the remarks on the ITR give a clue, and frequently factor four - industry, energy, perseverance - carried great weight. It is not safe to say more without making a detailed study, but the impression still persists - perhaps another halo at work.

The Interview and PO Reports

An attempt has been made to show the influence of tests of intelligence and personality in creating a foundation on which to base a rating. The chief instrument used by the PO is an interview, and this is synthesized into a total picture presented to the Selection Board in a report. A technique used overseas to study reasons for rejection at the OSAC was reviewed earlier in this report, see Table III and Appendix E. The fruitfulness of the technique need not be limited to studying causes for rejection; by using the same method much can be learned about validity of interviews and adequacy of the PO reports. Consequently 118 Personnel Selection Reports prepared in 1947 have been analysed, taking particular care to track down material that came from the interviews. The results of the analysis is partially tabulated in Table XIV that follows. Appendix (E) may be taken as a guide to defining the items 3-11 except for a few changed emphases. Being an orphan was not recorded as a negative factor in item 3 unless it occurred at an early age; the emphasis was on divorce, disharmony, unhappiness and poverty. Item 9 was checked only when poor motivation for or lack of appreciation of COTC was indicated. Differentiation was made between those who had a logical reason for wanting COTC, and those who had no goals in mind. In item 1, columns one and two show that 25 of the rejected and 4 of the accepted candidates scored below 160 on the M-test; column three shows not just that 19 were able to score more than 160, but that "intelligence" of the candidates seemed particularly good no matter what the M-score. A check was made in item 2 wherever the PO brought out clearly in his report that the

TABLE XIV

An Analysis of Personnel Selection Reports

	N=51 , Rejectees	N=67 Acceptees					
		Negative		Positive			
		N	%	N	%		
1. M-score below 160	25	.49	4	.06	19	.28	Notably alert
2. Poor Educational record	24	.47	15	.22	27	.40	Good Educ Prep
3. Broken Background	17	.33	9	.13	7	.10	Good Home
4. Occupational Instability	1	.02	0	.00	4	.06	Stable Work
5. Military Instability	15	.29	3	.04	13	.19	Good Military
6. Poor Personality	44	.86	25	.37	51	.76	Good Personality
7. Lack of Leadership	32	.63	9	.13	37	.55	Leadership Experience
8. Weak in Group Sports	19	.37	9	.13	37	.55	Team Sports
9. Poor Army Attitude	26	.51	5	.07	46	.69	Good Attitude
10. PO Grading Fail	44	.86	15	.22	52	.78	Recommended
11. Psychiatric Referral	8	.16	2	.03	-	-	--
12. University Failed	25	.49	19	.28	48	.72	Passed University
13. No Phase 2 (1949)	-	-	19	.28	48	.72	Completed Phase 2
14. Veterans in Group	26	.51	41	.61	41	.61	Total Veterans

candidate's educational record was poor, e.g. those who repeated school grades, or had a number of supplementals to write, or usually stood low in their class, or shifted from one course to another, or showed lack of culture and general information about world events, etc. Item 12 indicates the number of university failures in the group. Item 13 shows the number of casualties between first and second practical phases, and item 14 is a reminder of the heavy enrolment of veterans in the period studied. The first two columns show the factors negatively, and the last column positively. Factor 9, leadership, for instance, was reported in 32 cases as a reason for rejecting rejectees, and only 9 times as "unfavourable to" the accepted candidates; on the other hand it was given 37 times as a positive factor in accepting those finally chosen.

Intelligence, insofar as it is measured by M-score, was a decided factor in rejection, and from the evidence quite justifiably used. It bears repeating that the test was not used as a means of distinguishing fine gradations of intelligence among highly intelligent persons, but rather as a means of satisfying the assessor that the particular candidate actually came up to a certain "reasonable" level. If finer discrimination is needed in testing "intelligence", a new test designed for use at the officer candidate level is required.

The PO pointed out that 47% of the candidates rejected had faulty educational preparation. Fifteen, or 22 percent of the accepted candidates also were noted as having poor educational backgrounds, and 11 of the 15 so earmarked actually failed university. Broken home background appeared considerably more often in the rejected group. Occupational background was of

no particular consequence in COTC selection because the students have done only summer work. Military instability was a factor of importance in this group, but only because there were many veterans. Poor personality appears as a very important factor. Note that a fairly high percentage of the accepted candidates had been checked as having poor personality. It will be recalled that 15 of the accepted candidates had not been recommended by the PO, and 6 of them failed. Another reason for the high (37%) incidence of poor personality reported in the accepted candidates is that several had one or another "deficiency" that was clearly pointed to as a handicap, but at the same time they may have had compensating positive personality factors to outweigh the negative. Lack of leadership experience was a factor in rejection just as presence of such experience was often mentioned as a factor in recommending a candidate. The same is true of participation in team sports.

Fifty-one per-cent of the rejected were said to have poor motivation or attitude. Sixty-nine percent of the accepted had a good attitude or appreciation. Reports indicate some "halo" around the candidates who indicated a desire to eventually become Active Force or even Reserve Force officers. This factor of motivation should be explored further in view of the 10 drop-outs, representing 15% of the originally accepted, or 21% of the 48 eligible to continue COTC by virtue of satisfactory corps school grades and university standing. Ten twenty-ninths of all casualties, or 35%, were of the "drop-out" category.

Let us examine some of these factors from other angles. M-score alone is not an accurate predictor of success. Of 29

scoring below 160, 25 were rejected, and 12 of them failed university; but 13 passed, 6 with second-class average. Of the 4 accepted, 2 dropped out of COTC, but all 4 passed in college, 1 of them with a first-class average. This means that the failure rate for low M-scorers was 41.5% as compared with an overall failure rate of 37%. Failure therefore is greatly dependent on other factors than ability to reach the critical 160 M-score.

Poor educational record is very important. Thirty-nine (24 not in and 15 in COTC) had doubtful educational preparation, and 26 failed, i.e. 67%. Seventy-two percent of the accepted candidates in this category failed, and 68% of the rejectees. Therefore this factor should receive very careful attention at selection level. It is not practical for the COTC Selection Board to depend on the university representative to be the sole judge of educational prognosis. The university probably could cut its failure rate if applicants were screened more carefully.

Sixty-one percent of applicants with broken homes failed university, 64% of the rejectees and 45% of the acceptees. But in addition to the university failures, drop-outs bring the COTC casualty total of those with broken homes to 56%. This factor therefore warrants careful assessment at selection level.

Poor personality has been quoted very frequently, 71% of those failing university having been classified in this category. Twelve of the 25 accepted candidates who had poor personality are now out of the COTC.

Half of those having poor appreciation or attitude toward COTC failed university. Two of the 5 accepted for COTC failed, and 2 more dropped out, making an 80% casualty rate on this factor. Actually

the POs did not overwork the factor of motivation, and accepted any plausible answer to the question as "satisfactory motivation". The Army must be responsible for encouraging and giving enthusiasm to those who do not start with such a feeling. It is suggested that the accomplishment quotient of many cadets is very low, for they lack sufficient incentive. There has been a good deal of hope placed on intrinsic motivation, although the extrinsic has not been neglected. Improved quality of the products of COTC may be expected if more realistic extrinsic motivation is provided. It is not enough to "lead horses to the water".

The PO recommended against accepting 44 of the 51 rejected. Actually 22 (50%) of the 44 failed university. Also 9 of the 15 accepted candidates are no longer in COTC, so that we can be sure that at least 31 (53%) of the 59 not recommended would not have succeeded at COTC. Undoubtedly many of the rejectees who did not fail university would have been COTC casualties, so that the PO prediction of COTC potential is quite significant.

Ten applicants were referred to a psychiatrist, and two of them were found suitable for COTC. These two are still effective. Of the 8 not accepted, 6 failed university. This implies again that personality has a great deal to do with success both at COTC and in university, and that a fair degree of accuracy is possible in predicting the ones least likely to succeed.

All of the above is strong evidence for the continued use of the interviewing technique. There can be no serious thought given to substituting tests and critical scores as devices to replace the interview. Tests presuppose an atomistic or mechanistic philosophy contrary to the configurational "whole

personality" approach taken by those engaged in Canadian Army selection of personnel. But the tests do very definitely aid the interviewer, and should receive more attention than they do because of the evidence of the bias they create in the mind of most POs.

The degree of "correct recommendations" made by different POs in predicting success showed clearly that the more experienced and psychologically trained officers made a better average. A few of the reports were poorly written both from the point of view of style and content. The case-study, clinical approach requires a well-trained interviewer-interpreter. In unskilled hands the reports take on the aspect of a meaningless chronology or become confusion of fact and fiction, or of guesswork and misinterpretation. The method itself provides a framework within which the "psychologist" can place all of his observations gathered by other methods; it is his final affirmation of the individuality and uniqueness of every personality. It is, then, the most comprehensive of all methods used in the study of personality, and lies closest to the starting point of common sense. As such, a good report, written by a properly trained observer, is of great service to the persons actually responsible for making selection decisions.

CHAPTER VI

Conclusions and Suggestions

Personnel selection is the scientific art of drawing sufficient conclusions from insufficient evidence. There are nearly as many differing opinions as there are people expressing them. But a review of the historical experience shows that the present program for COTC selection is based on fairly firm precedent, and embodies the best of the old that can be adapted to the new peacetime setting. The experimental results show that the COTC selection method is essentially sound, that its results are fairly satisfactory, but that there are several ways in which changed emphasis could lead to improved results. Before outlining the conclusions, the following cautionary preface is given in order to emphasize their limitations.

The results must be interpreted in the knowledge that the number of cases in the experimental group is relatively small. The conclusions drawn from the evidence of performance of a small and possibly unrepresentative segment of the whole COTC must be viewed in the light of this sampling bias. The "conclusions" had better be described as "suggestions" when they are applied to the whole field of officer selection or even to COTC generally. In making comparisons between this particular 1947 validation group and the present or future COTC population, it should be remembered that the McGill group contained a large proportion of Veterans, a situation that no longer exists. The COTC was in its first "experimental" year when the present study was started, and improvements have already been noted, many of them

conforming to suggestions now to be made. Again, the conclusions are drawn from statistical results that are not generally considered "highly significant". The method of calculating correlations, particularly those between test results and ratings, is crude, and most of the correlation coefficients small. Percentage results are somewhat more significant. In any case certain trends are noted, and seem strong enough to merit consideration for remedial action.

General Conclusions

Stated very broadly, it is possible to conclude that (a) COTC selection can be improved, (b) the philosophy or aim of the program is not fully understood, (c) the specifics required of an officer are not agreed upon, (d) the criteria by which officer cadet success is judged are not sufficiently reliable, (e) the University Selection Board is very dependent upon the Personnel Officer, and (f) the Personnel Officer should be given more time, better accommodation, more training, "sharper tools" and additional "props" to aid him in his interview.

Selection and later assessment can be improved only if everyone concerned with the program has a better understanding of the purpose of the program. There is a rating halo around cadets who indicate interest in becoming AF officers. It is not clear what is the attitude toward those preparing to be RF officers as compared with that toward the eventual Supplementary Reserve officers, or toward those who seem to have no future military interests.

The specifics required of an officer and of an officer cadet are not agreed upon. Personnel Officers seem to have a different concept of "officer" from that possessed by Selection Boards and

corps school raters. Analysis of officer jobs and consequent study of the characteristics and values actually wanted in an officer would lead to better selection. Selection cannot be accurate if those doing the selection do not know what it is they are supposed to select.

Corps schools are dependent upon higher formations giving clearer answers to the purpose of the program and defining the specifics just mentioned. Training and rating officers and NCOs require more instruction in rating methods. Their gradings are not very sensitive, and do not agree sufficiently well from year to year. Consideration should be given to a "forced distribution" rating system. More attention to both intrinsic and extrinsic motivational factors should result in higher accomplishment quotients of the cadets under training.

The University Selection Board is quite dependent upon the PO, and perhaps should devote more time to independent assessment. The onus of deciding suitability, or of selecting or rejecting, rests on this Board. Because of the "stamp of approval" it gives to an accepted candidate, he is likely to "pass" his COTC training. Once he is accepted, the "machine" is concerned with training him rather than failing him, and because of the schools' willingness to blame the "system" rather than the man, "second-tries" are prevalent. Thus many cadets are "nursed" and "carried" to "successful" completion of the COTC program.

The Personnel Officer is considered the specialist advisor, and therefore his reports carry considerable weight. He is dependent upon the other members of the selection, assessment and training team to give him leads, tell him what they want. In order to make his

selections more valid, he needs better specifications, but in order to select more accurately to either the present "general" or to future "more definite" specifications, he needs to work under more ideal conditions. Candidates must be tested and interviewed under more favourable physical circumstances. They must also be better prepared to give more time and cooperative attention to the necessary tests and interviews if they are to be properly differentiated. RSOs must make available to the PO certain documents, such as medical report, transcript of education, application form, etc. In addition the PO must be given opportunity to apply more and better tests to aid him.

Specific Conclusions.

Let us now review some of the more specific conclusions. The study of wastage showed two distinct types of COTC casualties: educational failures and drop-outs. This suggested the necessity of taking more care to predict educational aptitude and motivation. Educational success was shown to be related to intelligence level, but to be more related to personality factors. All of these factors were measured to some degree by the intelligence and personality tests and to a larger degree by the interview.

The intelligence tests are useful to obtain verification of "level" rather than fine discrimination between highly preselected individuals. M- sub-total II, segregates candidates into two groups, the technical and the non-technical. The technical-applied-science cadets make a higher score on M-II than do the non-technical-arts-commerce group. The same group scores higher on M-total, and the higher total score is nearly all accounted for by the higher M-II score. But M-II has a very low correlation with university grades

and other criteria of success. In much the same way, the ACE total is higher for the non-technical group, almost all the difference being accounted for by their higher score on ACE-L. But ACE-L correlates with the criteria of success much more than M-II. The ACE generally correlates better with success than does the M, although M-I measures quite well throughout. This suggests that the M-test is not as good a measure for judging COTC and university success as is the ACE test. It is possible that prediction results might be improved by a revised interpretation of the pattern of scores for technical and non-technical applicants, but before such is done further experimentation on larger numbers is required. For the present it is fair to say that considerable doubt is thrown upon the value of the M-test to COTC selection because of the sub-total II, and that better results could be expected from a test more carefully prepared for use at the officer level.

In all the "intelligence" tests failure at university was not as related to total test scores as to the number of people scoring in particular score ranges. High scorers failed. Low scorers passed. In general the high scorers who passed did better in university than the low scorers who passed. There were many more university failures in the very low M-test score range, but the critical score of 160 appears high. The ACE and Closure tests were not given to the rejectees, a serious handicap in judging the tests. No critical scores could be properly set to segregate the passes and failures amongst the group already preselected by the M-test and other selection factors. It would appear that the tests are most useful to determine general level of ability, but once a candidate reaches a reasonable level, success is more dependent on his previous habits and on personality

factors which can be measured by personality tests and an interview. Hence setting of "high" critical scores must be done only after careful study and then on the basis of calculated consequences - an M-score of 160 does not guarantee a candidate's success, nor does a score somewhat below that level indicate that he could not succeed at university and at COTC.

The personality tests are useful to show personal interests, motives and evaluative attitudes. They show the successful group of COTC cadets to be more respectful of authority, more cooperative, more alive and "excitable", and much less selfish than the poorer group. Their dominant values are the social-religious, as opposed to the economic-political. This implies that the man seeking personal power and wealth generally would not become a good member of the military team whose byword is "service". There are definitely different combinations of dominant traits that form what might be construed as a good pattern in some individuals, but the interpretation of these patterns requires considerable skill - no less skill, however, than writing a synthetic case history based mainly on an interview. The personality tests could be a decided aid to the interviewer. The experimental results on these tests was very satisfactory, but even more positive results might have been obtained if all applicants rather than just the selected cadets had been tested. Further experimentation in this area should be fruitful.

The interview proved to be the most revealing of all the tools to gauge COTC potentiality of an applicant. But the interview can be better directed if certain relative background material is available to the interviewer. The Personality Questionnaire was of some use in detecting unstable persons, but the one in general use in 1947

is not sufficiently subtle, although it helped in extreme cases where the respondent was cooperative. Because of the positive results obtained by using the SK Test, further research, and refinement of a questionnaire for use on officer-level candidates is suggested. The use by the PO of an autobiographical form was a distinct aid to him in his interviews.

Although the interview proved to be the most valuable of all the "props" used in assessment, analysis of PO reports revealed certain areas that had been neglected, and pointed to the need for having skilled interviewers. The more technically trained and mature interviewers were considerably more successful in their prediction "batting averages". Insofar as assessment is a "scientific art", the scientific aspect must come through training in psychological methods, and the art through proper selection of mature, experienced counsellors of the type mentioned by Bois in his P.A.P.Q. Presidential Address (49). Good results cannot be expected from hastily trained young regimental officers.

The somewhat neglected or insufficiently stressed areas of investigation are: broken home background, motivation for COTC, and educational record. Success in COTC is heavily dependent upon success in university. The interview disclosed some applicants with very shaky scholastic achievement - most of whom became university and COTC casualties. This factor must receive more stress in the interview, and carry more weight in the final judgment regarding COTC acceptance. It is not satisfactory to assume that because a candidate is in college his school record is satisfactory. Failure can be predicted with a fair amount of success.

The evidence shows that good educational record and good "intelligence" scores are not sufficient assurance for eventual success in university or in COTC. Personality factors have a very pronounced effect on the casualty rate. This must be recognized in assessment for COTC, and could have bearing on university selection methods. The point becomes more important in view of the greater number of scholarships and bursaries being offered, and the likelihood that still more will be offered in the future. Articles appearing on March 13, 1950, in the London newspaper, The Times, show clearly that Britain is experiencing embarrassment over the poor choice of candidates for higher education at state expense. Some State scholars "...were no good at all. Their health was hopeless, and they had no physique, and they made one despair!" There were suggestions made to hold a qualifying examination "in health, personality, and spirit to discover the quality of the candidate apart from his specialist attainments". Such screening devices are practical, as shown by the COTC selection techniques.

Whatever has been said about COTC selection procedures can apply to officer selection generally. The use of a test to establish a reasonable level of general ability, a personality test or questionnaire, an autobiographical form, accurate information about certain minimum vital statistics, a pertinent medical record, and a clear statement of what the candidate is being selected for, when followed by an interview given by a properly accredited personnel officer, should be quite adequate for most selection purposes.

Biographies cannot be written in advance - but a man's past and present can be used to predict his future.

Original
Duplicate
Triplicate

CANADIAN OFFICERS' TRAINING CORPS
INDIVIDUAL TRAINING RECORD

Officer Cadet_____

Contingent_____

Corps_____

CANADIAN OFFICERS' TRAINING CORPS INDIVIDUAL TRAINING RECORD

PHOTOGRAPH

PART I — Personal, Military and Academic Particulars (Detail to be completed at Contingent)

- 1 Contingent _____ Corps _____
- 2 Surname _____
- 3 Christian Names _____
- 4 Home Address _____
- 5 University Address _____ Telephone _____
- 6 Date of Birth _____ 7 Religion _____
- 8 Married ☐ Single ☐
- 9 Next of Kin _____ Relationship _____
Address _____

- 10 Hobbies _____
- 11 Sports _____
- 12 Languages _____
(indicate degree of fluency)
- 13 University Faculty _____ Course _____
- 14 Course commenced 19 _____ Ends 19 _____ Duration _____ (Years)
- 15 Military Experience (a) Service (Include service in Royal Canadian Army Cadets)

(b) Qualifications

- 16 I desire to qualify as: (Check space applicable)
(a) A Captain Reserve Force or a Lieutenant Active Force (subject to further training) ☐
by attending three theoretical phases and three practical phases.
(b) A Lieutenant Reserve Force by attending three theoretical phases and two practical phases. ☐

CANADIAN OFFICERS' TRAINING CORPS INDIVIDUAL TRAINING RECORD

Officer Cadet.....

Contingent..... Corps.....

17 Upon successful completion of the programme, I desire to enter

Active Force ☐ Reserve Force ☐ Undecided ☐

18 The foregoing particulars are, to the best of my knowledge and belief, correct.

Signed_____ (Officer Cadet)

Date_____

19 Medical Category Y.O.B._____ P/U/L/H/E/M/S
/ / / / / / /

Signed_____ (Medical Officer)

Date_____

20 Remarks by University Selection Board

- (a) We have interviewed this candidate.
- (b) He is suitable in all respects to enter the COTC.
- (c) We have allocated him to_____ (Corps)

Signed_____ Chairman

Date_____

21 Taken on strength COTC

Part I Order_____ dated_____

Part II Order_____ dated_____

CANADIAN OFFICERS' TRAINING CORPS
INDIVIDUAL TRAINING RECORD

Officer Cadet.....

Contingent..... Corps.....

PART II — (a) Final Assessment — 1st Theoretical Phase
(Detail to be completed at the Contingent)

Completed ☐ Did Not Complete ☐

Remarks

☐ Initials of Officer Cadet Officer Commanding
..... Contingent

Date..... Date.....

(b) Final Assessment — 2nd Theoretical Phase

Completed ☐ Did Not Complete ☐

Remarks

☐ Initials of Officer Cadet Officer Commanding
..... Contingent

Date..... Date.....

(c) Final Assessment — 3rd Theoretical Phase

Completed ☐ Did Not Complete ☐

Remarks

☐ Initials of Officer Cadet Officer Commanding
..... Contingent

Date..... Date.....

CANADIAN OFFICERS' TRAINING CORPS
INDIVIDUAL TRAINING RECORD

Officer Cadet.....

Contingent..... Corps.....

PART III — Military Qualifications
(Detail to be completed at Corps School)

.....PRACTICAL PHASE.....(Year)
Commenced.....
Ended.....

Course Reports (1).....Course, From.....To.....

..... Officer i/c.....
Chief Instructor

Initials
of Officer
Cadet

..... Commandant,
Corps School
Date.....

(2).....Course, From.....To.....

..... Officer i/c.....
Chief Instructor

Initials
of Officer
Cadet

..... Commandant,
Corps School
Date.....

(3).....Course, From.....To.....

..... Officer i/c.....
Chief Instructor

Initials
of Officer
Cadet

..... Commandant,
Corps School
Date.....

(See Overleaf)

(4) Course, From To

..... Officer i/c.....
Chief Instructor

Initials
of Officer
Cadet

..... Commandant,
Corps School

Date.....

(5) Course, From To

..... Officer i/c.....
Chief Instructor

Initials
of Officer
Cadet

..... Commandant,
Corps School

Date.....

(6) Course, From To

..... Officer i/c.....
Chief Instructor

Initials
of Officer
Cadet

..... Commandant,
Corps School

Date.....

CANADIAN OFFICERS' TRAINING CORPS
INDIVIDUAL TRAINING RECORD

Officer Cadet.....

Contingent..... Corps.....

PART IV — Personal Evaluation
(Detail to be completed at Corps School)

.....PRACTICAL PHASE.....(Year)

Commenced.....

Ended.....

A PERSONAL QUALITIES

Notes: You have observed the cadet at work and at play. Consider to what degree he has shown these qualities. Place a check mark (✓) in one of the five descriptive spaces opposite each quality. Mark according to your convictions. Mark the good man high and the poor man low.

QUALITIES CHARACTERISTIC OF "A GOOD MAN"	NOT EVIDENT	LITTLE EVIDENCE	SOME EVIDENCE	CLEAR EVIDENCE	HIGHLY EVIDENT
1 Favourable appearance and bearing					
2 Tact, courtesy and discretion					
3 Poise, self confidence, self reliance					
4 Industry, Energy, Perseverance					
5 Coolness, Stability, self possession					
6 Obedience, punctuality, reliability					
7 Popularity or group acceptability					
8 Personal force, individuality, initiative					
9 Clarity and logic in speaking					
10 Clarity and logic in writing					

B QUALITIES ASSOCIATED WITH LEADERSHIP

Notes: These are uncommon qualities, characteristic of the few men who become true leaders in all walks of life. You will observe them more or less by chance and will need to keep an alert and open eye to catch them. You cannot hope to rate all cadets on these as you have on the first ten in the personal qualities. When you see evidence of this kind make a brief note of the occasion and circumstance in the blank space to the right of the quality stated.

(See Overleaf)

QUALITIES	BRIEF REMARKS
11 Maturity, humour, realism, sense of proportions	
12 Adaptability to new ideas or methods	
13 Insight into human nature and human problems	
14 Realization of own Strengths and Weaknesses	
15 Capacity for decisive or ruthless action when necessary	
16 Ability to exploit opportunities	
17 Originality, resourcefulness, inventiveness	
18 Foresight, imagination, situational appreciation	
19 Ability to work on principle, stick to main objective, keep clear of trivia and details	
20 Ability to organize, administer, control, promote efficiency of method	

C OVERALL RATING

21 The evaluation of the personal characteristics of this man is:

Unsatisfactory ☐ Poor ☐ Passable ☐
Good ☐ Outstanding ☐

☐ Initials
of Cadet(date)

.....
Commandant

.....(date) School

NOTE: Insert (a), (b) or (c) at top of page in the same manner as for page 4.

CANADIAN OFFICERS' TRAINING CORPS
INDIVIDUAL TRAINING RECORD

Officer Cadet.....

Contingent..... Corps.....

PART V — (a) Final Assessment — 1st Practical Phase
(Detail to be completed at Corps School from Parts III and IV)

Passed ☐ Failed ☐ Rating ☐

Remarks

☐ Initials
of Officer
Cadet Commandant Corps School

Date..... Date.....

(b) Final Assessment — 2nd Practical Phase

Passed ☐ Failed ☐ Rating ☐

Remarks

☐ Initials
of Officer
Cadet Commandant Corps School

Date..... Date.....

(c) Final Assessment — 3rd Practical Phase

Passed ☐ Failed ☐ Rating ☐

Remarks

☐ Initials
of Officer
Cadet Commandant Corps School

Date..... Date.....

RATING A — Outstanding B — Above Average C — Average E — Below Average

NOTE: "Each practical phase report will be based on the reports contained in Parts III and IV."

CANADIAN OFFICERS' TRAINING CORPS
INDIVIDUAL TRAINING RECORD

Officer Cadet.....

Contingent..... Corps.....

PART VI

1 Annual Review by University Selection Board
(To be completed at commencement of each University Year by COs of Contingents)

Date of Review	Previous University Year Results		Detail from Part II Completed Previous Theoretical Phase		Detail from Part V Previous Practical Phase Results		Will continue C.O.T.C. Training	Initials of Chairman
	(Passed) (Failed)	Year	(Yes) (No)	Year	(Passed) (Failed)	Year		

2 Officer Cadet.....has successfully completed three theoretical
and.....practical phases and is qualified as.....(rank) in the
.....Force of the Canadian Army.

3 He was commissioned in the.....(Corps) on the.....(date)

He graduated with.....(degree) on.....(date)

.....
(Officer Commanding)

Date.....Contingent
COTC

ANNEXURE II
to Section 4-15-1 to
the Instructions for University Contingents of
The Canadian Officers' Training Corps

SPECIAL REPORT

ON

Officer Cadet _____

Contingent _____ Corps _____

(To be completed by the Resident Staff Officer when the officer cadet

- (a) fails to complete the Theoretical Phase and is considered unsuitable for further training, or
- (b) submits a voluntary request to discontinue training).

Officer Cadet _____

- (a) is considered unsuitable for further training,
- (b) has submitted a voluntary request to discontinue training,

for the following reasons:

I recommend that Officer Cadet _____ be SOS COTC strength.

Officer Cadet

Resident Staff Officer

Date: _____

Contingent

Date: _____

(2)

ANNEXURE II
to Section 4-15-1 to
the Instructions for University Contingents of
The Canadian Officers' Training Corps

(To be completed by Officer Commanding University Contingent)

Officer Cadet _____

(a) is considered unsuitable for further training,

(b) has submitted a voluntary request to discontinue COTC training,

and is therefore required to discontinue COTC training and will be SOS _____

_____ Contingent _____
(Date)

Officer Commanding

Date: _____

Contingent

Note:

(a) Words not applicable will be deleted.

(b) Reasons given will be specific.

(c) The officer cadet will affix his signature in full in the space provided. Should he be unwilling to give his signature, he will be given the opportunity of protesting this report in accordance with Para 417 (a) KR Can 1939. The proceedings resulting therefrom will be attached to the original copy of the Individual Training Record. Decisions on protests will be notified to all concerned by Army Headquarters.

(d) Completion of this annexure will constitute authority to SOS the officer cadet concerned except in cases where the officer cadet protests. In these latter cases authority of the highest authority reviewing the protest will be required before an officer cadet will be SOS.

ROYAL MILITARY ACADEMY SANDHURSTSTANDING ORDERS FOR TESTS, EXAMS, AND THE PRODUCTION OF REPORTSOBJECT

1. The objects of the system which has been evolved for testing, examining, and reporting on Officer Cadets at the RMA Sandhurst, are as follows:-
 - (a) To ensure maximum fairness and simplicity.
 - (b) To give approximately equal weight to the judgement of both the abstract qualities and the educational attainments of all cadets.

FOUNDATIONS OF SCHEME

2. The foundations upon which the system is built are as follows:-
 - (a) (i) An ORDER OF MERIT of a COMPLETE INTAKE will be produced only at the end of the third term, and this Order of Merit will be the Passing-Out Order.
 - (ii) At the end of the Junior and Intermediate Terms every Officer Cadet will be given:-
 - An Educational Grade (Civilian plus Military Studies)
 - A Character Grade

Added together these two produce a Combined Grade.
 - (b) Official Reports will be of three kinds:-
 - (i) Verbal Reports:- The responsibility of College Commanders direct to the Commandant at any time that either a "stocktaking" general report is required, or in the form of a special adverse report.
 - (ii) Half Term Reports and Special Reports:- Written reports with the object of warning every Cadet likely to drop a term or be returned to his unit that he is within the danger area.

(iii) End of Term Reports:- Written reports co-ordinated by College Commanders on every Cadet and recording all-round ability and improvement.

(c) (i) EXAMINATIONS are set at the conclusion of study of any subject, or phase of a subject, or at the end of the third term, with the sole object of providing a means by which the educational qualifications of the Officer Cadet can be assessed and counted towards the FINAL ORDER OF MERIT.

(ii) TESTS are set during, or at the end of the first or second term, with the object of assessing the EDUCATIONAL STANDARD of the Officer Cadet, and count solely towards his passage from the first to the second term, or from the second to the third term; in no case do the marks or grading of a test count towards the final Order of Merit.

(d) Apart from any examinations which may be set during the first or second term, every Officer Cadet will have a completely fresh start at the beginning of the second and third terms, in that marks attained in tests during the first or second term do NOT count in any way during the second or third term; similarly an assessment of abstract qualities will be made each term with due weight given to the improvement that he may have made.

3. The application of this system and what it involves are tabulated in Appendices to this Order:-

Appendix "A" - Summary of Reports

Appendix "B" - RMA Report Form

4. The Report Folio of a Cadet whilst at the RMA Sandhurst includes appropriate spaces for reports and a summary of attainments.

GRADING

5. In order to eradicate as far as is possible the inequalities and unfairness of examination marking, a system of grading will be employed: the method by which this will be done is as follows:-

(a) The results of any test or exam set in any subject will, when published, be shown in nine grades, of which Grade 9 is the top and Grade 1 is the bottom; within each of these nine grades the Cadets will be considered as equal.

(b) At the end of each term the overall educational grading of the Intake will be achieved by applying the grading system to the aggregate of all results.

- (c) The assessment (which is part of the Report Form) of the officer qualities of a Cadet results in each Officer Cadet being given a grade between inclusive 1 and 9. The marking of abstract qualities is of immense importance, and will not only be checked by more than one officer, but will also be checked by the College Comd, using the Standard Distribution as an approximate guide.
- (d) In this way each Cadet will be given an overall educational grading between 1 and 9, and an overall abstract quality grading between 1 and 9, and he will, therefore, also achieve a final grading of from 2 to 18 when character and educational gradings are added together.
(an explanation of this grading system is given in Appendix "C").

MEASUREMENTS OF ABSTRACT QUALITIES

- 6. Although the measurement and evaluation of abstract qualities is only for use at the end of term unless the Officer Cadet happens to merit a special report, it is most desirable that the system should be continuously borne in mind if the end-of-term evaluation is to be really accurate.

(K.S.K. Maunsell)

Mar 48

MSKM/SB

Brigadier,
Chief Instructor,
Royal Military Academy Sandhurst.

DISTRIBUTION

Commandant	OLD College (15)	Methods	(3)
CI	NEW College (15)	Faculty of Science	
Director of Studies	VICTORY College (15)	and Maths	(6)
AA & QMG	D & M Wing (3)	Faculty of Modern	
Adjutant	FT & H Wing (3)	Studies	(6)
GSO II	Sigs Wing (3)		
GSO III			

Issued with RMAS/110/G dated Mar 48

SUMMARY OF REPORTS

Type of Report	When Required	On whom	Purpose of Report	To be initiated by	For submission to	REMARKS
1. HALF-TERM (written)	Approx 10th week of each term	Any Officer Cadet considered to be in the danger area for Drop or RTU.	To record in writing the summary of any Officer Cadet who MAY drop or be RTU'd at the end of the term.	Coy Comds.	College Comd who will co-ordinate complete report.	The College Comd will interview each Cadet, who will sign the report. All reports when complete will be taken by College Comds to the Commandant.
2. SPECIAL (written)	ONLY if a likely Drop or RTU and has NOT had a half-term report.		As for Serial 1.			
3. END OF TERM (written)	20th week of each term.	All Officer Cadets	To record the progress of each Cadet during the current term.	As for Serial 1	As for Serial 1	This report will record the general overall standard reached by the Officer Cadet.

NAME.....

INITIALS.....

ROYAL MILITARY ACADEMY SANDHURST

REPORT FORM - PAGE ONE - CHARACTER ASSESSMENT

Type of Report: End of term / half term / special

Term: Junior / Intermediate / Senior

(Note: - Strike out inapplicable headings)

Intake No..... Dropped from Intake No..... (if applicable)

Serials 1 to 7 are completed in the Junior Term

" 1 to 11 " " " Intermediate Term

" 1 to 13 " " " Senior Term

	Best Few	Better than most	Satis- factory	Not up to the Standard of the Majority	Last Few	Absent (Aver- aged)
MARKS	5	4	3	2	1	
1. His common sense						
2. His application to work						
3. His sustained loyalty to his College and Company						
4. The effort he has made to maintain or achieve an all-round games and athletic ability						
5. His quickness in grasping a point						
6. His reliability and dependability						
7. His general and sustained enthusiasm outside his work						
	JUNIOR TERM			GRADE ALLOTTED		
8. His ability to remain cheerful in the face of adversity, criticism, or ragging						
9. His prominence as a leader						
10. His ability to work harmoniously as a member of a team, Pl. or Coy.						
11. His willingness to accept responsibility						
	INTERMEDIATE TERM			GRADE ALLOTTED		
12. The soundness and discrimination of his judgment.						
13. His ability to act on his own initiative						
	SENIOR TERM			GRADE ALLOTTED		

GENERAL REPORT:-

(a) Has he any particularly prominent characteristics?
(It is in no way adverse to say No)

(b) What general progress has he made during the period covered by this report?

(c) General Remarks: (to include a report on CONDUCT, ABILITY, PERSONAL QUALITIES, and PROGRESS).

MARKS	Best Few	Better than most	Battle-Factory	Not up to the Standard of the Majority	Last Few	Absent (Average)
	2	4	3	2	1	

(d) IN YOUR OPINION, IS HE LIKELY TO MAKE AN OFFICER? - or

(e) DO YOU THINK IT IS TOO SOON TO EXPRESS AN OPINION?

Signed.....

O.C..... Coy.

date.....

THIS REPORT WILL BE SEEN AND SIGNED BY THE OFFICER CADET CONCERNED

I have seen and understood this Report.

Signed.....

date.....

COLLEGE COMMANDER'S INITIALS:-

NAME.....

INITIALS.....

ROYAL MILITARY ACADEMY SANDHURST

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REPORT FORM - PAGE TWO - EDUCATIONAL ASSESSMENT

Type of Report: END OF TERM / HALF TERM / SPECIAL

Term: JUNIOR / INTERMEDIATE / SENIOR

(Note: Strike out inapplicable headings)

INTAKE No..... DROPPED FROM INTAKE No..... (if applicable)

Spaces for inserting report slips:-

(STICK HERE)

(STICK HERE)

(STICK HERE)

(STICK HERE)

(STICK HERE)

(STICK HERE)

(STICK HERE)

(STICK HERE)

(STICK HERE)

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(STICK HERE)

(STICK HERE)

Notes: Spaces above for 12 Report Slips.

Top $\frac{1}{4}$ in. of each Report Slip to be attached to this sheet
between pairs of lines indicated above.

For order in which Report Slips are to be attached, see list
overleaf. In the case of a "Special" or "Half-Term" Report,
it may be necessary to use a second "Page Two" to carry the
Wings' and M.O.'s Special Reports.

NOTES ON ORDER IN WHICH REPORT SLIPS WILL BE ATTACHED

- TO "PAGE TWO" -
1. NORMAL END-OF-TERM REPORT - in following order:-

Science.
 Mathematics.
 Modern Subjects (Obligatory).
 Modern Subjects (Special, if any).
 Languages (Obligatory).
 Languages (Special, if any).

(Intake Instructor's Reports on following):-

Introduction to Military Subjects.
 Tactics.
 Organisation.
 Administration.
 Map Reading.
 Military History.
 Military Law.

Platoon Commanders Report.

2. SPECIAL OR HALF-TERM REPORT - as above, plus the following additional "special" reports in the order shown, (attached to a separate (and second) "Page Two":-

Fitness Training and Hygiene Wing Report.
 Signal Communications Wing Report.
 Drill and Weapon Training Wing Report.
 Driving and Maintenance Wing Report.
 Medical Officer's Report.

Notes: Spaces above for 15 Report Slips.
 Top 7 in. of each Report Slip to be attached to this sheet between pairs of lines indicated above.
 For order in which Report Slips are to be attached, see list overleaf. In the case of a "Special" or "Half-Term" Report, it may be necessary to use a second "Page Two" to carry the Wings' and M.O.'s Special Reports.

Issued with RMAS/110/G dated Mar 48

GRADING AND STANDARD DISTRIBUTION

1. The Standard Distribution of varying numbers of candidates into nine different grades is shown in the table below:

<u>No. of Candidates</u>		25	30	35	40	45	50	60	70	80	90	100
TOP:	GRADE 9	1	1	1	1	1	2	2	2	2	3	3
	8	2	2	3	3	3	3	4	5	6	6	7
	7	3	4	4	5	6	6	7	8	10	11	12
	6	4	5	6	7	8	9	11	13	14	16	18
	5	5	6	7	8	9	10	12	14	16	18	20
	4	4	5	6	7	8	9	11	13	14	16	18
	3	3	4	4	5	6	6	7	8	10	11	12
	2	2	2	3	3	3	3	4	5	6	6	7
	1	1	1	1	1	1	2	2	2	2	3	3
<u>No. of Candidates</u>		25	30	35	40	45	50	60	70	80	90	100

2. In applying these figures certain facts must be taken into account:-

- A distribution taken for totals of approximately 30 candidates can only be taken as a guide. The number of candidates is insufficient for the standard distribution to be implicitly applied.
- Standard distribution for attainments in different subjects do vary, e.g. experience shows that there are more "very good" and "very bad" candidates in scientific subjects than there are in literary subjects; further, experience also shows that even where the standard distribution cannot implicitly be employed, the symmetry of the distribution remains unimpaired, e.g. if the numbers in the top grades are increased, so also are the numbers in the lower grades.
- Experience shows also that a standard distribution is equally applicable whether the results of an examination are being considered - be they Mathematical, Historical or Military - or character is being assessed.

3. The result of the acceptance of this principle is that Subject Committees and Heads of Dept are immediately provided with a very fair means whereby they can, and indeed, must, check their results.

Reports consisted of the following paragraphs:

- (i) Para 1 covered the period of childhood, excluding school and its activities. The following information was usually included: Date and place of birth, parents' nationality, racial origin, religion and health, occupations of father and siblings, health of siblings and relationships between them and between candidate and parents, candidate's appraisal of personality of father and mother and of general atmosphere at home, candidate's early health history.
- (ii) Para 2 dealt with schooling and school years. The following information was usually included: Age at commencement and leaving of school, types of school (Public, Private, Rural, Technical, etc.), candidate's rating of himself as student (in terms of average, better than average, etc.), strong and weak subjects, adjustment to school environment (attitude to teachers and other students, delinquencies, prizes), extra-curricular activities (sports, clubs), home life at this period, special interests, hobbies, health, specific reasons for school leaving.
- (iii) Para 3 was devoted to civilian work years. It included the following: occupations in chronological order, beginning with early jobs in school holidays and after school hours, names and locations of employers, wages and working conditions, reasons for job choices and changes, candidate's estimate of his own progress and statement of his post-war civilian intentions and ambitions, any further education, night school correspondence, Cdn Legion, etc., unless already included in para 2, adult sports, clubs, reading interests; hobbies, general social life and any special interests; civil hospitalizations, accidents, general health record; attitudes to adult world at this time (political and religious attitudes and activities); marital status; candidate's estimate of success of his marriage and appraisal of wife's personality; Wife's age, health, racial origin, religion, and attitudes to soldier's service and to his application for a commission; number of children, their ages, sex, health; location of soldier's family and their financial status.
- (iv) Para 4 reported the candidate's military career. The following information was included: NPAM service, (duties, rank, unit, reasons for change if any); reasons for enlistment and choice of unit, where relevant; date of attestation; promotions dated to the month; demotions and reasons; courses (subject, dates, grade); trade qualifications; crime (dates, offences, punishments, candidate's explanation); hospitalization; changes of duty, company, unit or corps, and reasons; combatant experience and reactions to it; events leading to application for and appearance at OCTU; stated attitude to war

in general, to fighting Germans, Japs, to commissioned service; preference as regards posting and type of commissioned employment; attitude to present unit and its officers; opinions on morale, methods of discipline, and qualities necessary in an officer.

- (v) The above paras were recorded largely or wholly in the presence of the candidate and were confined to statements of facts and opinion as made by the candidate. Para 5 was written after the candidate's departure and contained a brief summarizing of the significant factors of the candidate's career followed by an appraisal of his personality. The following factors were usually discussed: Intelligence (especially in comparison with accomplishment, cultural interests and ambitions); extent of education and amount of retention; stability in civil work and social relationships; evidence of leadership in civil and army record; judgments as to his stimulus value, bearing, energy, morale, combativeness, independence, knowledge of others and himself, sense of responsibility, alertness, persistence, adaptability, tact; special aptitudes and suitabilities in commissioned rank; any other outstanding characteristics, especially in relation to formative experiences in civil life; any outside factors weighing for or against his suitability (e.g. present personal worries about home, marriage or health; motivation for commission supplied by family; suitability for special duties); health record. In cases where the PO decided to refer the candidate to the Psychiatrist the health record would be summarized in this para with special attention to such "psychiatric pointers" as the following: history of "nervousness, breakdown, headache, sinusitis, rheumatism, vague or undiagnosed complaints of illnesses, "accident proneness", head injuries, enuresis, constipation, indigestion, dizziness, fits, heart palpitations tendency to fatigue, frequent visits to M.O. or doctors, frequent resort to medicines, drug addiction, heavy smoking, tics, specific fears (of darkness, crowds, confined space, diseases, heights, animals), compulsive tendencies, anxiety, depressions, loss of memory, ideas of reference, marked shyness, seclusive tendencies, vagueness, taciturnity, emotional indifference, irrelevance in speech, tendency to cry during interview or be over-excited or tense, marked evasiveness and glibness in interview, lying, record of civil and or military crime, sexual abnormality, anti-social attitudes, mental deterioration, emotional violence, etc.
- (vi) Grading Method: At the end of his report the PO graded the candidate for one or more specific arms. Grading systems changed with changes of routine in the Board; the latest system operated on a 5-point scale: "E" (excellent), "V" (very good), "S" (Suitable), "D" (discussable), "F" (fail). "D" was not used as a final grade; a PO applied it to cases where he was in genuine doubt and felt himself in need of further opinion before recording his final grade. Thus he might place "F" or

"S" after his "D" as a result of observing the candidate in field tests or group discussion, or after conferring with the Psychiatrist or hearing the discussion in the final Board meeting. POs were instructed, however, to base their grading as much as possible on their own interview of the candidate, to avoid being unduly influenced by other opinions before the Board met, and to avoid making "D" ratings when their opinions were definitely for pass or failure.

Personnel Selection Report

To: O.C. McGill Cont. COTC Type of Referral: COTC candidate

R.253965 Ex-F/Sgt. W...., W.D.

Revised Examination "M"	Form "B"	17 Nov 47	English
168 Group II 14 16 16	21 31	14 22 34	46 52 70

FAMILY BACKGROUND: Father and mother both died about 1940 when W... was just entering HS. The father's store in small town (income about \$3,000.) was sold, and he lived with relatives in Abbotsford and attended Granby HS for 3 yrs, indifferent student. Brother is now in 2nd year law after 3 yrs Army.

EDUCATIONAL: 1931-34 Milbourne, Que. grade school
 1934-40 Richmond, Que. public school
 1940-43 Grade X, Granby, Que. High School
 1946-47 Sir Geo Williams, Mtl, Jr Matric obtained
 Out of school 1939-40 on account of parents death.
 Now - B Sc I - pre-Engineering - Electrical. Aver. 65%.

OCCUPATIONAL: 1939-42 - summers - farm labour, haying, spraying.
 1947 - 4 mos. Office staff, summer hotel, French River, Ont. \$75./mo and board.

MILITARY: Enlisted 29 Jun 1943, age 18, in RCAF. Completed wireless course and gunnery course, qualified as Wireless Air Gunner with rank of Sgt. Flew operationally in RAF India Command and with Ceylon Air Forces from Cocos Island. Operated radio equipment in Liberator aircraft. Disch Apr 5, 1946 with rank of F/Sgt. "I wish to serve in the RCCS due to previous experience in this type of work and the interest I have in radio and communications". Has no notion of RF or AF, wants COTC because of Pay and because feels would like the service life.

Appraisal: W... is a 6'2" - 176 lbs, 22 year old ex-RCAF F/Sgt who saw operational service attached to RAF in India. He was W.A.G., enjoyed the work. Apparently at no time has he had chance to show leadership, and actually seems very retiring. He did have to manage a small staff at the summer hotel last year, and sometimes had to work fast getting accounts ready. Says pressure annoys him, but that it sometimes brings out the best in him.

His school years were rather flat. He took some part in sports, was never enthusiastic, claiming lack of time. He took HS course and jr. matric. after discharge, and found the work difficult, finally obtaining only 65% though he had already a grade X standing. He is now having difficulties in studies, having failed trig exam, and though he likes physics, says thinks results were "A little better than in trig". Note he has an M-score that puts him in the lowest 30% of the McGill group.

(continued on next page)

He spends 4-5 hours studying, yet is having indifferent success.

His social participation is weak. He has the odd glass of beer, an occasional date, but seems generally content to lead a quiet, studious life. His reading habits are poor, confined to an occasional glance at newspapers. Studies take up his time.

The whole picture is one of a colourless individual, one not very fast, not very sure of himself. When younger and growing fast, he fainted a few times. Now the sight of blood disturbs him. He has no well thought out plan, seems to be just getting by from day to day. It must be said that he is steady and reliable, as indicated in service record, summer jobs, and attention to work. But he lacks drive and enthusiasm, and at best could be considered barely suitable, and this only because he seems not yet to have reached peak of maturation.

RECOMMENDATION: Not recommended for COTC training (OF)

H.Q. Quebec Command 20 Nov 47 Personnel Officer.

Follow-up 4 May 48 From the above it may be concluded that PO did not recommend him. He has, however, been selected by the Contingent Board, and is proceeding. There apparently is a shortage of candidates for RC Sigs. Thus it is important that his progress be checked and adequate follow-up report prepared.

Recommendation: Proceeding, but not recommended by PO.

<u>Follow-up</u>	<u>March 1949</u>	ACE Total Score	103
		Q	44
		L	59
		Closure Test Total	56
		I	37
		II	19

Rated E by RSO		
OPR rating	3	
Corps School Grade	E	
University Grade	F	Entrance exam average 66% in 1947
		B Sc I 2 third class
		5 failures - Chemistry, English, Physics & Mathematics.

Follow-up - March 1947

ACE Total	161
Q	67
L	94

Closure Total	84
I	53
II	31

BSO Grading C

Overall personality ratings	4	(1st phase)
" "	5	(2nd phase)
Corps School Grades	B	(1st phase)
" "	A	(2nd phase)
University Grade	I	First Class Average.

Personnel Selection Report

To: O.C. McGill COTC Cont

Type of Referral: COTC Candidate

F.20528 Ex-Cpl P., H.Q.

Revised Examination "M" "B" re-test 17 Nov 47 English
 174 II 17 17 21 22 24 12 26 35 55 46 73

FAMILY BACKGROUND: Father and mother have 9th grade education, live on 4 acre farm just out of Kentville, N.S. There are 3 bros and 1 sister. The boys quit school, one in grade 8, other 2 in grade 9. Two sisters, now married, had grade XI. The family is poor, making just enough to live. Only the youngest brother is now at home. P... says the parents stressed the need for education, but even he quit school at 16 in Grade XI (wrd HS), and joined the Army because tried to get civvy job and was told he was too young and so he decided to prove his worth by entering service.

EDUCATION: Grades I - VIII in village school, followed by H.S. at Kentville, N.S., Grade XI partially completed. After discharge took tutorial refresher at Veteran's School in Pictou, getting Jr Matric. Entered Dawson Jan 47 and completed 1st year B. Sc with one supp (analytic geometry) still to write off. Now in Eng I, planning to be architect.

VOCATIONAL: 1938 - 3 mos on farm
 1939 - 2 mos at Nursery
 1940 - 2 mos picking apples

MILITARY: Enlisted 1 Mar 41 at Halifax, N.S. (underage - 16) and promoted Cpl after 1½ yrs service. Served as Clerk III in RCA. Was gunner in AA Bty in Dartmouth and Labrador, going O/S in Sep 43. Transferred O/S to RCAC and worked as Clerk in Adv HQ of CRM. Served in Belgium Oct-Nov 44, then in France at Calais Transit Camp as Unit Clerk. Disch 14 Mar 46. Says wants RCEME, but has very little mechanical experience, is only beginning Eng course leading to architecture. Says COTC would be good summer employment, that it would regive a life he liked, and anyway if he does not do well in architecture he'd like to get into Army.

OTHER RELEVANT INFORMATION: P... is a neat 5'11" - 165 lbs 23 year old pleasant mild-mannered, talkative, frank, ex-Cpl who comes from poor home, and has a decided intention to prove he can compete. He had little social life to build him up in case of meeting people, no club or group membership except Army. His participation in athletics is almost nil. Says coordination was not A-1, that he enjoyed other things such as swimming, shooting or listening to music. He is very introspective, self-critical, and kept a diary amounting to several volumes. He put quite a lot into the diary, but I did not discuss it with him.

(continued on next page)

He has taken a little psychology and perhaps because too frank when discussing himself during interview. His personal health questionnaire led to discussions that show him to be too much concerned over his health. Amongst other things he sought the counsel of a psychiatrist while he was O/S, and says he was diagnosed as an "anxiety neurosis" case. He dreams and worries, sometimes has upsetting dreams that awaken him in a cold sweat. He was all too willing to talk about himself and I find it hard to know whether he is really worried about himself. It would appear that after leaving the interview with the understanding that he would be further screened by a psychiatrist he heard the interviewer say "Do you think he's all right?" to another interviewer, and believes the question implied that he is not well. Consequently he is now wondering, and does require counsel.

Before final appraisal it should be pointed out that he was kidded a great deal by older soldiers when he first entered the Army. He seems more aesthetic than military, but might perhaps be suitable in technical corps. His choice of architecture is not surprising, but he says "was made because a book he read indicated he probably would not succeed" and he wants now to prove he can.

RECOMMENDATIONS: Refer to M.O. re Psych appraisal and return to PO for final appraisal.

Not recommended for COTC.

H.Q. Quebec Command

20 Nov 47

Personnel Officer.

Follow-up - 1 Dec 47. The psychiatric report of 28 Nov 47 makes no diagnosis or lowering of profile, but expresses positively the opinion that P... is not suitable for COTC. It is also the psychiatrist's opinion that P... would benefit from psychotherapy. This point might well be brought to the attention of Dawson medical officer.

Follow-up - March 1950. Not accepted for COTC. P... dropped out of university for unknown reasons.

FURTHER ASPECTS OF OFFICER CANDIDATE SELECTION PROCEDURESREASONS FOR REJECTION AT 1 CS & AC

1. During the three days that a candidate is at the Centre, he is given a series of interviews and tests and it is on the composite picture emerging from these that he is finally judged by the Board. During the first 99 intakes (18 Jul 43 to 29 Oct 44), totalling 3608 candidates, only 1274 (or 35.3%) were accepted. The following is a brief study of the principal reasons for non-acceptance of candidates at the Centre. It is based on the records of 300

candidates who failed to come up to the Centre's standards. In order to understand the terminology in this study it is necessary to have an overall picture of what happens to a candidate while he is at the Centre. The following is a brief statement on the various tests.

2. MTO Tests and MI: The MTO tests, 4 in number, are outdoor or field tests, and are administered and graded by Military Testing Officers. Test 1 is a fairly simple obstacle course, but while he is doing it the candidate also submits to three simple tests of memory and observation, designed to measure his ability to remember instructions while under physical stress. MTOs 2 and 3 are both group tests, excellently conceived to bring out a candidate's group value and natural leadership qualities. (These two tests have been lumped together for convenience sake). MTO 4 is again an individual test which estimates a candidate's ability to handle simple practical problems and to grasp new situations. The MI, or military interview, is also given by an MTO or a Deputy President, and its purpose is to evaluate a candidate's military experience and to estimate his military potentialities.

3. Educational Percentile: The EP is arrived at through a series of educational tests in simple mathematics, general knowledge, and English grammar, composition, and textual interpretation. The results are totalled, and then reduced to an Educational Percentile, based on the results obtained by candidates at this Centre. An EP of 50 is average and, for purposes of this study, an EP of 35 or lower is considered as one of the possible factors contributing to failure.

4. Intelligence Percentile: Nearly all candidates arriving at the Centre have already been "M" tested, and the IP is obtained by taking the "M" score, adding to it the results of the CAS test and a Figure Analogies Test (both given to candidates on their arrival here), and reducing the total to a percentile based on results obtained here. The average IP of successful candidates has been approximately 64 and that of rejected candidates, 42.

For purposes of this study, therefore, an IP of 30 or lower has been taken as one of the possible causes of rejection. From an earlier study it has been definitely proved that the lower the IP the fewer the chances of being given a "suitable" rating. For example, of candidates with IP's ranging from 75-100, a percentage of 49.06 was passed by the Board, but of those with IP's from 1-24, only 12.38 passed the Board.

5. SPO Interviews and Psychiatric Referrals: The techniques of the SPO interview at the Centre have already been fully explained in Observations of Selection of Personnel Techniques at 1 Cdn Selection and Appraisal Centre (published by SP Section as Psychological Memorandum #3). Here it need only be said that the average SP interview lasts for about an hour, and in it the candidate's background, education, work history, military career, and personality are thoroughly investigated and appraised. If, in interview, the SPO finds reason to doubt the candidate's stability, especially in the role of an officer, the candidate is then referred to a psychiatrist for further appraisal.

6. Materials Studied: For the purposes of this study the SPO reports on 300 rejected candidates and 100 successful candidates were examined. These reports contain not only the SPO's history of the candidate and an analysis of his personality but also the MTO and MI gradings, as well as the psychiatrist's report. Gradings of 'D' (Discussable) and 'F' (Failure) are included, for a 'D' is always considered to be borderline at the best, and weighs heavily against a candidate. In the lumping of MTO 2 and 3, the grading was considered as a 'D' if there was a 'D' given on one of the tests and a higher grading on the other, and a 'F' on either test indicates a noticeable deficiency in group value, in personality, or in leadership. In reading through the SPO reports certain factors that might weigh definitely against the candidate were noted. The most important were as follows:

- (a) Broken Background: This was checked when the candidate lost either or both parents when he was young; when there was a separation or divorce; when the home situation was so intolerably unhappy as to leave an indelible impression on his mind; in cases of extreme poverty and hardship, combined with definite unhappiness, etc.
- (b) Occupational Instability: This was checked only when the candidate's work history was definitely erratic and of sufficient duration to lead to the conclusion that the instability was fairly basic. It was not checked, for example, when the candidate's work history was limited to summer occupations, or to a few jobs while waiting to attain age for enlistment.

- (c) Army Instability: This was checked when the MFU-6 showed a number of entries; or when the candidate had experienced a number of reversions for no good reasons; or when the candidate had shown a tendency to switch from one arm of the service to another as a result of being "browned off", restless, etc.
- (d) Poor Personality: This is a very prominent, but a very evasive factor. It is, however, a factor that has been carefully studied by SPOs at this Centre inasmuch as a personality estimate is included in every SPO report. In this study, a check for poor personality was made when the SPO specifically stated in his report that the candidate was lacking in those personality characteristics expected of an officer: general alertness, neatness, good bearing, good speech, decisiveness, clarity of thinking, awareness, general pleasantness of manner, poise, self-assurance in the presence of superior officers, well defined ambitions, maturity, etc. In nearly all reports concrete evidence is presented by specific statements on personality deficiencies. The SPO has not merely stated: "This candidate has a poor personality".
- (e) Lack of Leadership Experience: This does not refer only to lack of leadership experience in the army, but also to the lack of any evident leadership in civilian life. The item has been checked when the candidate's military career has shown no promotion, or very slow promotion (for example, when a candidate has reached the rank of A/Cpl after 4 years in the army); when the promotion has been on technical grounds alone and the candidate has had no experience in man-management; or when the candidate, in civil life, has given no evidence of leadership in social organizations, school activities, or group athletics.
- (f) Limited Participation in Sports: This has been checked when the candidate's history contains no record of an active interest in group sports - football, hockey, basketball, rugby, etc. It usually indicates poor group value, and avoidance of situations involving a certain element of physical risk, a lack of drive.
- (g) Poor Army Attitude: A check has been made here when the candidate has definitely shown an abnormal fear towards going into action, an unwillingness to accept the higher responsibilities inevitably linked with the acceptance of commissioned rank, a stated desire to avoid continued service after the European conflict is finished, an inordinate desire to return home at the earliest opportunity or, more generally, a poor appreciation of the role of a commissioned officer.

(surname) (initials) (Ht) (Wt) (Age) (Birthdate) (Birthplace)

1. FAMILY BACKGROUND:

Father is: living
dead

(his education)

(his occupation)

Mother is: living
dead

(education)

(occupational training)

Ages of brothers

Ages of sisters

If married, wife's age is

(her education)

(occupational trg)

2. EDUCATIONAL HISTORY: State when started school, where, type of school, grades skipped or failed, preferred subjects, last grade completed, etc.

3. OCCUPATIONAL RECORD: List date and length of various jobs and describe jobs, e.g.

1937	3 mos	Golf caddy
1938	4 mos	Bell hop, summer hotel
1940-46	5 yrs 2 mos	RCNVR, see below
1946-49	3 yrs	Clerk typist - brokerage firm

4. MILITARY HISTORY: Date of enlistment, NAVY, ARMY or AIR FORCE, regimental number, courses completed, ranks held, duties performed, areas of service, decorations, anything of special note, date of discharge. What corps do you wish to serve in and why?

5. CLUBS, SOCIETIES or ORGANIZATIONS: Give names and purpose of organization, your office and your interest in it. (Scouts, debating, etc.).

6. SPORTS: List all sports you have participated in, making clear whether you did or do take an active role. In which are you interested in now as a spectator?

7. HOBBIES: List hobbies and explain your interest and participation.

8. What do you think an employer or supervisor ought to know about you in order to fully appreciate your potentialities?

PERSONAL INVENTORY

Name _____ Age _____

Address _____

Date _____ Are you married? _____

In this questionnaire you are asked to give some information about yourself which will help others to understand you. This information has to do with your habits, attitudes, likes and dislikes, problems and so on. Frank and honest answers to these questions will be useful in deciding what kind of work you are best fitted to do.

Each question is followed by the words (yes and (no). Put a circle around (yes) if your answer is (yes) to the question. Put a circle around (no) if your answer is (no) to the question asked. Answer every question. If you are not sure, give the answer which you think is closest to the truth.

-
1. Do you ever have a headache?..... yes no
 2. Do you often feel faint?..... yes no
 3. Do you have hot or cold spells?..... yes no
 4. Have you fainted more than twice in your life?..... yes no
 5. Do strange people make you afraid?..... yes no
 6. Do you often have spells of dizziness?..... yes no
 7. Do you get all nervous and shaky when approached
by a boss or foreman?..... yes no
 8. Does the sight of blood make you want to faint?..... yes no
 9. Does your work fall to pieces when a boss or
superior is watching you?..... yes no
 10. Are you afraid to be alone with no friends near you? yes no
 11. Do you feel nervous or dizzy right now?..... yes no
 12. Do you always get orders and directions wrong?..... yes no

- 13. Does your thinking become completely mixed up
when you have to do things quickly?..... yes no
- 14. Do you always sweat and tremble a lot during
inspections or examinations?..... yes no
- 15. Do you wish that you always had someone at your
side to advise you?..... yes no
- 16. Do you do things very slowly in order to be sure
that you are doing them right?..... yes no
- 17. Does it bother you to eat anywhere except in
your home?..... yes no
- 18. Is it always difficult for you to make up your mind? yes no
- 19. Do you usually feel cheerful and happy?..... yes no
- 20. Do you always have a bad time no matter what
you are doing?..... yes no
- 21. Do you often feel miserable and blue?..... yes no
- 22. Does life usually look entirely hopeless?..... yes no
- 23. Are your emotions usually dead?..... yes no
- 24. Are you usually quiet and sad while at a party?..... yes no
- 25. Do you often wish you were dead and away from it all? yes no
- 26. Are you considered a nervous person?..... yes no
- 27. Do you have any unusual fears?..... yes no
- 28. Do you often have difficulty in falling asleep
or staying asleep?..... yes no
- 29. Does every little thing get on your nerves
and wear you out?..... yes no
- 30. Do you worry frequently?..... yes no
- 31. Did you ever have a nervous breakdown?..... yes no
- 32. Were you ever a patient in a mental hospital?..... yes no
- 33. Do you get out of breath long before anyone else?... yes no
- 34. Do you have pains in the heart or chest?..... yes no
- 35. Does your heart often race like mad for no
good reason?..... yes no

36. Do you often have difficulty in breathing?..... yes no
37. Are you often bothered by a thumping of the heart?.. yes no
38. Do you often suddenly become frightened while
you are thinking?..... yes no
39. Do you often shake or tremble?..... yes no
40. Are you often awakened out of your sleep by
frightening dreams?..... yes no
41. Do you always become scared at sudden movements
or noises at night?..... yes no
42. Do sudden noises make you jump and shake badly?..... yes no
43. Do you tremble or feel weak every time someone
shouts at you?..... yes no
44. Are you keyed up and jittery all the time?..... yes no
45. Do you have very disturbing or frightening
thoughts that keep coming back in your mind?..... yes no
46. Do you suffer badly from frequent severe headaches?. yes no
47. Do you sweat a great deal even in cold weather?..... yes no
48. Are you often bothered by severe itching?..... yes no
49. Do you stutter?..... yes no
50. Have you at times had a twitching of the face,
head or shoulders?..... yes no
51. Were you a bed wetter between the ages of
8 to 14 years?..... yes no
52. Do cold hands or feet bother you, even in warm
weather?..... yes no
53. Do you have asthma?..... yes no
54. Do you wet the bed?..... yes no
55. Are you a sleep walker?..... yes no
56. Have you ever had a fit or convulsion?..... yes no
57. Do you often have pains in the back which make
it hard for you to keep up with your work?..... yes no

58. Do you sometimes find yourself unable to use
your eyes because of pain?..... yes no
59. Is your body always in very poor condition?..... yes no
60. Do severe pains and aches often make it impossible
for you to do your work?..... yes no
61. Do you get spells of exhaustion or fatigue?..... yes no
62. Do you wear yourself out worrying about your health? yes no
63. Do you have weak or painful feet which generally
make you miserable?..... yes no
64. Do you frequently get up tired in the morning?..... yes no
65. Do you often have pain or pressure in the head
which make it hard for you to do your work?..... yes no
66. Are you always in poor health and unhappy?..... yes no
67. Are you always too tired and exhausted even to eat?. yes no
68. Is your appetite good?..... yes no
69. Are you always constipated?..... yes no
70. Do you often get sick to your stomach?..... yes no
71. Do you often have an upset stomach?..... yes no
72. Do you suffer from indigestion?..... yes no
73. Do you always have stomach trouble?..... yes no
74. Do your stomach and intestines work badly?..... yes no
75. Do bad pains in the stomach double you up after
every meal?..... yes no
76. Do you usually have trouble in digesting food?..... yes no
77. Has any doctor ever told you that you had ulcers
of the stomach?..... yes no
78. Do you suffer badly from frequent loose bowel
movements?..... yes no
79. Do people usually misunderstand you?..... yes no
80. Do you have the feeling of being watched while
you are at work?..... yes no
81. Have you usually been treated fairly?..... yes no
82. Do you have the feeling that people are watching
you or talking about you in the street?..... yes no

83. Do people usually pick on you?..... yes no
84. Are you extremely shy or sensitive?..... yes no
85. Are you easily upset or irritated?..... yes no
86. Do you make friends easily?..... yes no
87. Do you go all to pieces if you don't constantly
control yourself?..... yes no
88. Were you ever sent to reform school?..... yes no
89. Have you ever been in serious trouble or lost
your job because of drinking?..... yes no
90. Have you been arrested more than three times?..... yes no
91. Have you ever taken dope regularly? (morphine,
reefers, etc.)?..... yes no
92. Do your enemies go to great lengths to annoy you?... yes no
93. Does it make you angry to have anyone tell you
what to do?..... yes no
94. Do you often drown your sorrows in drink?..... yes no
95. Do you always do things on sudden impulse?..... yes no
96. Do people always lie to you?..... yes no
97. Do you flare up in anger if you cannot have the
things you want right away?..... yes no
98. Do you dislike women and girls?..... yes no
99. Do you always have to be on your guard with friends? yes no
100. Do you often get into a violent rage?..... yes no
101. If an enemy were describing you, write down what you
think he would say:
102. Describe yourself as you think YOU are:

FACORS	Meaning of Low Percentiles	SCORE	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	Meaning of High Percentiles
HOME	Disturbed Home Life	1	20 - 9			8 - 5	4 - 3			2		1	Satisfactory Home Life
CONTROL	Defiance of authority	23	0-8	9-10	11-12	13-14	15-16	17-19	20-21	22-	23-24	25	Deference to authority
CO-OPERATION	Individualist Independent Lone Worker	27	0-7	8-10	11-13	14-17	18-21	22-25	26-29	29-31	32-35	36	Eager to co-operate with workers at all levels
GENERAL ACTIVITY	Restricted in activities; may be inert	33	0-6	7-8	9-12	13-16	17-21	22-25	26-30	31-34	35-36	37	Overactive; scattered energies; maybe jitterbug
INITIATIVE	Starts nothing looks to others for leadership	39	0-7	8-9	10-14	15-19	20-23	24-29	30-33	34-37	38-41	42	Often starts things gets life into situations
EMOTIONAL CONTROL	Little or no control; blows up easily	4	-17	16-15	14-13	12-11	10	9	8	7	6-4	3-0	Overcontrol; nearly unnatural repression
EXCITABILITY	Always calm little or no expression of emotion	23	0-10	11	12-13	14-15	16-19	20-24	25-27	28-30	31-33	34	Excitable; tense; unduly nervous
DEPRESSION	Rarely disturbed	11	0-6	7-9	10-14	15-17	18-22	23-28	29-32	33-36	37-40	41	Moody; a worrier; magnifies details
SELF-INTEREST	Unduly self-sacrificing; maybe a reformer	12	0-8	9-10	11-13	14-15	16-21	22-26	27-28	29-30	31-32	33	Looking out for self without regard for others; maybe a shyster
SELF-ConsciousNESS	Very Self-confident maybe cocky	5	0-9	10-13	14-18	19-21	22-26	27-32	33-37	38-41	42-45	46	Easily embarrassed confused; never positive
DEFIANT AGGRESSIVENESS	Compromising	6	0-10	-11	12-13	14-15	16-19	20-23	-24	25-26	-27	28	Stubborn; defiant; persistent to the point of irritating others

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