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PERSONNEL & ADMINISTRATION

Project 2^b

PART V

VOL IV

MS # P-007

Hellmuth Reinhardt

Generalsmajor

Keenigstein, 25 Sep 1948

PERSONNEL & ADMINISTRATION

Project 2b

Part V: The Use of Psychological Tests in the
German Wehrmacht.

(German Wehrmacht Psychology from
1927 - 1942).

Translator: A. ROSENWALD

Editor: G. KAPLAN

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HEADQUARTERS
EUROPEAN COMMAND

Historical Division

1 September 1949

Subject: Personnel and Administration Project.

This Project was divided into two Topics, Project 2a and Project 2b and assigned to two Topic Leaders, namely Project 2a to Genmaj Kuel-ler-Hillebrand and Project 2b to Genmaj Reinhardt. The individual sub-jects have been dealt with by the Topic Leaders assisted by leading experts whose names will be found prior to each part.

Project 2a and 2b together represent the answers to the P&A Division Questionnaires. In answering the questionnaires, authors have departed from the original order in which the questions were placed. In order to facilitate the finding of answers to any specific question, the questionnaires have been cited in the manuscript with cross references showing where the subject has been dealt with.

The entire subject matter will be bound in six volumes, divided and subdivided as follows:

- Project 2a -- Parts I, II, III in Vol. I
- Part IV in Vol. II

- Project 2b -- Part I in Vol. I
- Parts II, III in Vol. II
- Part IV in Vol. III
- Part V in Vol. IV
- Part VI in Vol. V

The different volumes are being processed by this Branch as they are received from the Topic Leaders, without regard to their place within the order of the projects.

A list of titles is attached hereto, showing the names of authors
and contributors.

Daniel T. Murphy

DANIEL T. MURPHY

Major, Infantry

Chief, Operational History (German) Branch

Project 2-a

Topic Leader:

Genmaj Mueller-Hillebrand
 1936-1939 Org Dep of Army General Staff
 8.7.40-30.9.40 Gen Staff Officer in Wehrkreis Xdo (Corps Area Command) XVII
 16.4.42-25.10.42 Chief, Org Dep, Army Gen Staff

Having held the above assignments Genmaj Mueller-Hillebrand was eminently suited to treat the subject under discussion and to select assistants and authors most conversant with the material.

Part I Replacement of Army Casualties.

Author: Genmaj Mueller-Hillebrand

Assisted by:
 Obst Reckleben
 Adjutant & Officer Personnel Officer
 1943-45

Gen (med) Dr Hartleben
 1938-43 Chief, Medical Inspectorate,
 Organization Div, Army Gen Staff

Gen (med) Prof Dr Mueller
 1942-45 Chief, Central Archive for Wehrmacht Health Affairs

Part II Relief, Rotation, Leave

Author: Genmaj Mueller-Hillebrand

Assisted by:
 Genmaj Koerner
 1941-45 Branch Chief, Army Transportation Div, Army High Command (OKH)

Part III Training of Replacements for Field Forces

Author: Obst Zerbel
 Sept 42-Dec 44 Chief, Training Div, Army Gen Staff

Part IV Occupation & Military Government in Occupied Territories

Author: Genmaj Toope
 1941-42 Chief of Supplies, A Gp Nord (Russia)
 1942-43 Branch Chief, Army Supplies, Army High Command
 from 22 Jul 44 Army Quartermaster General

Assisted by:

Genlt Dr Speidel
1.8.40-25.3.42 Chief of Staff, Military
Government, France
15.10.43-5.9.44 Chief of Staff A Gp B

Intendant Genobst Kleeberger
1939-45 Army Chief Intendant *) , Army
High Command

Obst Leuthaeuser
Sep 43-Jan 45, Chief of Supplies,
Sixteenth Army

Genmaj Kleikamp
1941-42 38, A Gp South, (Russia)

Obst Neitrol
1941-43 General Staff Officer for Supplies
on several staffs in Russia

Obst Esmarich
1940-42 Gen Staff Officer, War Economics
Department, Berlin
1943-44 1a (Chief, Operations Div),
First Army

Project 2-b

Topic Leader:

Genmaj Reinhardt
1935-37 Assistant, Army General Office,
Army High Command
1940-41 Section Chief, Organization Div,
Army Gen Staff
1941-43 Chief of Staff, Army Gen Office
and of Commander, Replacement Army
Genmaj Reinhardt was chosen as topic leader
because of the singular opportunities
his assignments afforded him of gaining
experience on the matters dealt with in
this topic.

Part I Recruiting System of
German Armed Forces
in Peace and War

Author: Genmaj Reinhardt

Assisted by:

Genmaj von Falkenhayn
1939-41 Recruiting District Hq Commander

Genlt Hofmann
1935-38 Section Chief in War Ministry
1940-43 Division Chief in Army General Office

*) Intendant: Administrative official in uniform.

Genmaj Ritter von Kriebel
1934-38 Technical Staff Officer, Army
General Office,
1938-39 Technical Staff Officer, Recruiting
Area Headquarters

Gen (med) Prof Dr Mueller

Ministerialrat Dr Simoneit
1927-42 Leading Scientist in Army Personnel
Control Inspectorate

Genmaj Weidemann
1938-43 Division Chief, Army Gen Office
1943-44 Chief, Recruiting and Replacements

Part II Training & Assignment
of NCO's and EM in
German Army

Author: Genmaj Reinhardt

Assisted by:
Genmaj von Falkenhaya

Genmaj Hofmann

Part III Overall Control of
Man Power in Wartime

Author: Genmaj Reinhardt

Assisted by:
Genmaj Ritter von Kriebel

Genmaj Weidemann

Part IV Officer Replacements,
Officer Training,
Control of Officer
Assignments in German
Army

Author: Genmaj Reinhardt

Assisted by:
Genmaj Bachelin
1940-41 Division Chief, Army Personnel
Office
1943-45 Department Chief, Army Personnel
Office

Genmaj Devitz
1937-39 Instructor, Officer Candidate School
1940-41 Commander, Instruction Course,
Officer Candidate School
1944-45 Commander, Officer Candidate School

Genmaj von Falkenhaya

Gen Kuntzen
1933-38 Division Chief, Army Personnel
Office

Genmaj Munzel
1938-40 Technical Staff Officer, Officer
Recruiting Department
1943-45 Commander, Armored Forces School

Obst Otto
1935-42 Techn Staff Officer, Recruiting
Area Hq
1944-45 Techn Staff Officer, Armed Forces
Recruiting & Repl Office

Obstlt von Seydlitz
1943-45 Army Personnel Officer

Part V Application of Psycho-
logy in Examinations
in German Armed Forces

Author: Ministerialrat Dr Simoneit

Assisted by:
Genmaj Munzel

Part VI Employment of Women
in the German Army

Author: Intendant *) (Obst) Schalkhaeuser
1940-45 Chief Army Civilian
Personnel (Army High Command)

*) Intendant: Administrative official
in uniform.

MS # R-007

Franz H a l d e r

Koenigstein, 26 October 1948

Generalleutnant

Introductory Remarks on the Use of
Psychological Tests in the German Wehrmacht:

The subsequent report contains a clear and accurate picture of the development and application of military psychology in Germany between the two World Wars. Its particular emphasis is on the testing and selection of officer replacements and specialists.

Once the initial inadequacies of a relatively new program had been overcome before the recent war, military psychology became a valuable and generally dependable instrument for the evaluation of personalities by unit commanders, who still retained exclusive responsibility for their decisions. Undoubtedly, the application of this science was to be encouraged to promote systematic, undisturbed building-up of the peacetime Armed Forces. With the tremendous increase in the size of the wartime services, however, the system was not equal to the task. Organization, personnel, and method were not geared to a large-scale operation. Hence, when the question was presented to me, I did not oppose dissolution of the psychological tests for the duration of the war.

Otherwise, I quite agree with the preliminary remarks of Generalmajor Hellmuth Reinhardt, as well as with his footnotes to the statements of Dr. Simoneit, who wrote this study.

sgd Franz Halder

Elaborator:

Dr phil habil Max S i m o n e i t
former Ministerial Councilor and Scientific
Director of Wehrmacht Psychology in OKH

Preliminary remarks by

Generalmajor Hellmuth R e i n h a r d t

Collaborator:

Generalmajor Oskar M u n z e l
former Chief of Department in Army Personnel Office.

Translator's Note:

The word "Wehrmachtpsychologie" when denoting a division of OKH has
been translated as "Wehrmacht Psychology". If it is meant to indicate
the particular branch of science, the denomination "military psychology"
has been used.

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PERSONNEL AND ADMINISTRATION.

(Project 2 b)

Part V. The Use of Psychological Tests
.....
in the Wehrmacht.Preliminary Remarks.

The question of the proper classification of a military man depends, aside from the traditional criteria of physical fitness and education, on such attributes as natural talents, spiritual well-being, and basic personality traits. Reference has been frequently made in the earlier portions of this study to the problem of selection, distribution, and training of replacements at all levels of rank. In this connection, "psychological tests" have been mentioned as a means for attaining this end. Because of the importance of this question - the issue of "getting the right man for the right job" - it was deemed advisable to treat the psychological tests and the general development of military psychology in the Wehrmacht in a separate portion of the overall project. (Personnel and Adm. Project 2 b. Parts I - IV.)

The following study has been written by the Scientific Director of the Wehrmacht Psychology in OKH, Ministerial Councilor Dr. Simonsit, who decisively influenced the development of this particular activity within the Wehrmacht between the two World Wars. By this treatment most

of the last questions of Chapter 1 c of the questionnaire of the Chairman of the Replacement Board (signed Geo.S.Price) dated 23 September 1947 have been answered. In addition, it also answers the questions under 1 a of the same questionnaire, concerning testing methods in Group II of the questionnaire of P & A Branch (signed W.H.Watters) dated 25 September 1947 and Question 2 of the questionnaire of the Chief of the Career Management Branch (signed John B. Murphy) dated 30 September 1947.

The value of the whole field of military psychology, especially with regard to psychological and psychotechnical testing, was often questioned within the Wehrmacht. Some preliminary remarks must, therefore, be made before detailed treatment of the subject by a qualified specialist. These observations will be based on conditions prevalent among Army troops.

In the evaluation of personalities of trained soldiers and of unassigned replacements of all ranks within the Army, special attention has always been paid to moral and spiritual traits and to those capacities acquired by education. Ascertainment of these imponderable qualities, which are obviously less measurable than those of physical prowess and acquired mental abilities, has traditionally devolved upon superior officers immediately responsible for their men. These evaluations were important to the responsible officers since they were themselves judged by other higher-ranking officers. This method, rooted in the traditions of the Prussian-German Army, was always efficient. Thus, it is entirely consistent that effort by psychologists to interfere with this prerogative of rank by scientific tests and examinations met with distrust and frequently with outright rejection. Disregarding those elements of the Army who opposed

innovations simply because they meant a change in status quo, it is possible to attribute to two major causes the negative attitude toward psychological and psychotechnical testing.

In the first place, a variety of factors combined to cast doubt on the validity of the tests. It was quite reasonable to doubt that the real inner self of a man could ever actually be recognized and correctly evaluated by any set of intricate tests. The extreme youth of most of the candidates presented several problems which seriously challenged the worth of the whole testing system. An initial hazard was the possibility of youthful candidates acting under pressures too great for their stage of development. Another was the undesirable degree of versatility on the part of some candidates which could give them higher scores than those earned by the candidate when potentialities had not yet developed. Also, there was the distinct possibility that the setting of arbitrary standards might screen out this latter element, thus eliminating potentially valuable personnel. Experience has shown that the most valuable Germanic type of personality develops gradually. Another factor causing suspicion of the validity of psychological testing was an inadequate knowledge of the methods of testing and, particularly, of the nature of evaluation. Some doubt, too, may have been contributed by a certain affectation of mystery surrounding the tests which frequently resulted in anxious and even biased attitudes on the parts of the candidates. Actual misjudgments sometimes confirmed this opinion, while the young and experimental nature of the science itself was never considered by the doubters.

The second major cause for the skepticism surrounding psychological

testing lay in the type of personnel administering the tests. It was pointed out that the acceptance or rejection of officer candidates was often placed in the hands of persons who had nothing to do with training and leading officers and were not held responsible for possible misjudgments. There is a certain amount of merit in this argument, especially when one considers the far-reaching claims of the psychologists with respect to the extent of their influence.

On the other hand, the possible value of progressive, forward-looking ideas must be recognized. Proponents of the system of psychological testing pointed out that their empirical science had to be applied over a period of time if positive results were to be obtained. Also, even the responsible superiors were not infallible. On the contrary, the rapid increase in the size of the Army was bound to cause the advancement to commanding positions of large numbers of officers who themselves would not have been considered suitable in normal times. In comparison, the results of psychological testing had proved their value. Unfortunately, documents covering verification of the suitability of the persons assigned are no longer available. From my own memory, however, I can say that in many instances disqualified officers or trainees were found to have been originally assigned by their commanders contrary to the advice of psychological examiners. On the other hand, a very high percentage of well-rated young officers had received high grades in psychological tests.

The opinion favoring psychological tests became predominant among those in authority. The principle, however, was retained that the ultimate decision remained with the responsible superior who used the results

of psychological tests only as an aid in helping him to form a judgment. This, beyond any doubt, was the correct solution. Thus, the achievements of modern science could be made use of, without discarding the old approved principles.

At the beginning of World War II, the entire field of military psychology was still in an evolutionary stage. It was not possible to point to a consolidated system based on adequate experience, and the speedy reconstruction of the Armed Forces could not be expected to depend on the recommendations of a young, relatively untried organization.

To a certain degree this was the reason why work in this field was discontinued during the war. Beside this practical reason there were others which are described in the subsequent account.

The position presented on the pages following is the work of an expert who has devoted his entire professional experience to this subject, and who, therefore, naturally regards everything from his point of view. This fact must be borne in mind. However, it must be recognized that his statements have generally been set forth in an impartial way.

At some points where corrections and explanations were deemed necessary, footnotes were added by the writer of these preliminary notes.

According to information received from the author of the following account, the most important source material on the subject of German military psychology -- particularly that concerning verification of the suitability of persons assigned -- was given to the American Professor Dr L. Ansbacher, University of Vermont, Burlington, Vermont. This scholar can be considered the American expert for evaluation of German military psychology.

Further material on military psychology is said to have been given to US Naval Technical Mission in Europe, c/o US Fleet Post Office, New York, N.Y.

The standard German manual for carrying out psychological tests was the Heeres Druckverschrift 26 "Richtlinien fuer die Psychologischen Pruefstellen" (Army Manual 26 "Regulations for Psychological Testing Agencies") (M Dv 143, LDv 26 for Navy and Airforce respectively).

sgd Hellmuth Reinhardt

GERMAN WEHRMACHT PSYCHOLOGY

(1927 - 1942)

1. Applied psychology in Germany after World War I.

The period of the first World War represented the first experience of the Wehrmacht in using psychological tests for drivers, radio operators, and fliers. Application of these tests was not a large-scale operation, however, and is not to be compared, for example, to the use of tests in the U.S. Army in 1917 and 1918, during which period an army of 1,800,000 men was tested.

After the termination of World War I, applied psychology in Germany was principally concerned with school reform, reorganization of the system of vocational guidance and an excessive supply of manpower. In this period the carefully cultivated German experimental psychology, forerunner of American psychology, was at its methodological peak. Accordingly, its services were placed at the disposal of German education, vocational guidance, and industries attempting to rebuild with carefully selected personnel.

Its reputation, wartime experience, and the employment by Americans of the Yerkes method served to convince individual officers of the 100,000-man army that military psychology should not be discarded. Tests were continued for drivers and radio operators from 1920 on and, in 1925, military psychology had reached a point at which a special staff was created in Berlin to do psychotechnical work for the Army. A year later, in 1926,

this staff conducted a few experimental tests with officer candidates in the Navy.

2. Psychotechnical task of Groener in 1927.

Results of tests given to naval officer candidates induced Reichswehrminister Groener to introduce tests for Army officer candidates as well as for drivers and radio operators, as a regular institution on 1 April 1927. The Navy followed this example.

Groener, a railway specialist himself, was always closely concerned with technical matters and was convinced of the usefulness of psychotechnical selection of specialists. A Social Democrat politically, his decision to introduce psychotechnical testing of officer candidates was further motivated by a desire to eliminate the historical privileges of the nobility and thus remain consistent with the democratic theme of the Weimar Republic. Selection of officer candidates should, he believed, depend not on family lineage, but on predetermined standards of education (graduation from secondary school) and of personal adaptability on the basis of psychotechnical testing. The question of whether the candidate's father was a laborer, a general, or a nobleman was immaterial to Groener.

With the introduction of this system, however, the role of unit commanding officers was not necessarily eliminated. It was still specified that the ultimate decision was reached in the Army Personnel Office after regimental commanders had submitted their opinions together with supporting records of educational qualifications and results of psychological tests. This was the major concession which the democratic minister was forced to

make to his tradition-bound colleagues, who remained unconvinced of the merits of psychological testing until striking examples forced them to accept it. Nevertheless, some officers in the highest positions in the Army were never able to accept limitation of the cherished prerogative of selecting their successors. An alliance of several interested, if incongruous, groups fought and eventually won the battle from adherents of military psychology. In this curious alliance were officers who opposed usurpation of their most highly valued prerogative, National Socialists fearing that party interest would be endangered, and fathers whose sons had been rejected for officer candidacy. By 1942 they had found a spokesman in Hitler's chief adjutant, Generalleutnant Schmidt, who, along with leaders of the Hitler Youth Organization, had repeatedly complained of Wehrmacht psychology. In 1942 the influence of Schmidt decisively swayed Hitler, and he ordered liquidation of Army and Luftwaffe Psychology.*)

*) This statement lacks objectivity. There was a tendency in the Army to reject the psychological tests on principle (compare the preliminary remarks). There is absolutely no reason to speak of a connection with other circles who opposed them for personal reasons. A specific statement of the reasons leading to liquidation of psychological tests in Army and Luftwaffe will be found in Chapter 9.

3. Change in the Nature of Psychotechnical Testing prior to 1930.

Results of psychotechnical testing of officer candidates had convinced us by 1930 of the following facts:

- a. There was no standard type of officer that could be set up as a model standard in psychotechnical examinations.
- b. There were various types of young men who were qualified for officers' careers and yet were not basically alike.

- c. Even the similarities existing between leading soldier-personalities like Blucher, Gneisenau, Clausewitz, Boyen, and Marwitz were too limited to permit the setting up of an ideal personality standard for the soldier's profession. The men cited had received identical military training, and yet their individual qualities could hardly be standardized under a single denominator.
- d. The moral qualities of a person do not lend themselves to psychotechnical evaluation.
- e. The situations used in psychotechnical testing were not genuinely motivated by conditions prevailing in everyday life.**)

**) The negative attitude of officers toward military psychology, beyond any doubt, to a great extent originated in the fact that the tests headed in a false direction. The first - and unfavorable - impression remained prevalent for many years.

As early as 1926 such considerations had caused German military psychologists to propose a fundamental organizational change to the Armed Forces Command. They believed that the use of pure psychotechnics should be applied to testing natural tendencies for special skills, such as driving an automobile, and that characterological methods should be used to give an overall estimate of personalities to be selected.

The new system would apply to testing at all levels of rank, whether for officer candidacy or for assignment as a specialist. Thus, an analysis of a person's specialized faculties would only be important after the character and moral qualities of his entire being have been evaluated.

Before proceeding to a more detailed account of psychological testing

in the Wehrmacht, it might be well to define the two types of tests given to German military personnel between the two World Wars. The term psychotechnical, as used in this study, refers to a method which uses technical means to measure a person's psychic faculties independently of each other. A characterological diagnosis, on the other hand, is an analysis which studies the subject's reactions in situations which are correctly motivated and standardized as closely as possible to conditions prevailing in real life. In such an analysis the subjective impression is as important as an objective analysis of symptoms.

Because of the considerations cited above, Wehrmacht Psychology decided to base every aptitude test in the Army on a main characterological test. If necessary, special psychotechnical tests could also be given. The use of this method provided us with decisive experiences up to 1930, but its further expansion and systematic consolidation had been greatly curtailed by 1933.

4. Psychological System of Selecting Officer Candidates.

a. Organization

Within this sphere of applied psychology for the Armed Forces, two branches, the Army and the Navy, were administered as a single unit while until 1941 the psychological needs of the third element, the Luftwaffe, were a responsibility of the Army. The central agency for all armed services psychology in Berlin was always attached to OKH and worked uniformly for all three elements. However, orders for testing within the Navy were channeled through an appropriate agency in OKH (Navy Headquarters) and a

similar situation existed within the Luftwaffe. Once the Luftwaffe Personnel Office had been reorganized, one of its members joined the central psychological unit and issued all orders for testing in the air arm of the German Armed Forces.

Until Luftwaffe Psychology was made entirely independent in 1941, scientific research for all branches of the Armed Forces was carried on uniformly by a central institution of the Army for this purpose. It was eventually named "Inspektion des Personalpruefwesens des Heeres" (in.P.) (Inspectorate for testing Army Personnel).

The financial responsibility for this center was shared proportionately by all three branches of the Armed Forces. The navy organized two testing centers of its own, at Kiel and Wilhelmshaven, and provided funds for them. As long as the Luftwaffe was joint user of Army's testing agencies, it also had to pay its part for the upkeep.

For each corps there was one psychological testing agency set up by the Army and receiving its scientific directives directly from the center in Berlin. There were but two psychologists in each testing unit in 1927. In 1929, each agency was subordinated to an inactive staff officer. The number of subordinate officers and psychologists increased steadily, and at the end of the period under review, testing agencies subordinate to corps employed colonels and brigadier generals -- some of them active staff officers -- as commanders, and eight psychologists as testers. Other persons working with the testing agencies included a psychiatrist assigned to the testing staff by the corps medical officer, and regimental commanders

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for whom officer candidates were being chosen.***)

***) Thus it was no permanent testing staff, but one that met from time to time and comprised permanent members of the psychological testing agency, detailed troop officers and one medical officer.

Psychologists employed by the central office and testing agencies were actually Army officials who ranked from government councilor up to ministerial councilor. The basis for their selection was a combination of scientific qualifications and military aptitude. Candidates for the position of psychologist were required to pass the examination for the doctor's degree in psychology. In 1941 this requirement was stiffened, and it became necessary for the would-be Army psychologist to pass an examination for a diploma in psychology, which examination could be taken only after a special government examination had been passed and a period of actual experience under Wehrmacht Psychology completed. The qualifications with regard to military aptitude were less rigid and no objective conditions were set. Reserve officer status was desired, but only present in one-third of the cases. In addition, the lack of objective standards forced the central agency to apply careful evaluation to psychologist candidates.****)

****) Beyond any doubt, this was a handicap for the organization. A further improvement of the psychological tests should have included practical experience in military service for the Wehrmacht psychologists. For attaining this, a reserve officer's training certainly was the appropriate way.

The Wehrmacht Psychological Center and the testing agencies were, so to speak, exterior agencies of personnel offices, which continued to act as the highest authoritative quarters of military-psychological channels. The Inspector of the Berlin Center, in the final analysis, therefore, the "Inspektion des Personalpruefwesens des Heeres" (Inspectorate for testing

Army Personnel) was attached to the Army Personnel Office in the capacity of advisor. The scientific director collaborated with him in the preparation of his reports.

b. Procedural Method.

Prior to World War II, psychological aptitude tests were given to all aspirants for careers as active officers, medical officers, ordnance staff officers, and, from time to time, to candidates desiring to become administrative military officials. On reporting, candidates had to present the following credentials: an autobiographical sketch; proof of graduation from high school; there were other educational stipulations for potential ordnance staff officer candidates. A police certificate of good conduct was also required, together with two references from a regiment of their choice, or from an independent unit, or from the Personnel Office; in the latter case the Personnel Office directed the candidate to a unit.

During the period of the 100,000-man army and until the outbreak of World War II the surplus of young applicants was large enough to permit preliminary selection of candidates. In 1939 an order from the Army Personnel Office specified a further limitation on selection of candidates by stating that all candidates would be given psychological tests.

The preliminary examination at unit level was carried out under the supervision of the commanding officer, who had the cooperation of a group of assigned officers including a medical officer. This stage of processing always consisted of a personal introduction to ascertain the conversational ability of the aspirant and a sports test for which no standards were fixed. In addition to these elements of the examination, many units gave so-called

intelligence tests, which were actually no more than an evaluation of the candidate's knowledge of school subjects and of his proficiency in writing and arithmetic. A prerequisite for admission to these tests was certification of physical fitness for military service by the medical officer.*****)

*****) The principles for testing and acceptance of officer candidates by the units are described in part IV of the report covering Project 2 b (Personnel and Administration).

Candidates selected after unit processing, reported to the Army Personnel Office, which transferred them to agencies for psychological testing. Before being examined, the candidates were summoned to spend two and a half days at the agencies, where they were given food and accommodations. This was deemed advisable from a psychological point of view so that the aspirants could familiarize themselves with the milieu of the testing agencies.

A majority decision did not cancel out the results of the tests, although the decision of each member of the board was recorded. The aptitude ratings of "fit", "fit for use in emergency", and "unfit" were pronounced only by the officers, while a detailed, descriptive evaluation of personality was developed and established exclusively by the psychologists. Nevertheless, constant collaboration between all of the examiners was maintained for two reasons. In the first place, each member of the board tried to raise the degree of objectivity of his own observation and judgment; and, in the second, the establishment of measurable average values could be expected only after an objective and honest interchange of views between the examiners. In the course of time, cooperation between officers and psychologists improved greatly and the differences between the two groups

lessened. The psychologists emphasized and solved the question: "What kind of a man is the examinee?", while the officers wrestled with the question: "Is the man described by the psychologists a suitable officer candidate?" The examining boards, whose scientist and soldier members often became firm friends and worked as well-organized teams, did not need to make pedantic discriminations between these principles in applying them. It was only in the theoretical planning that great emphasis was laid on keeping them all separate.

It was this lively and intelligent cooperation between officers and psychologists which characterized the sensitivity and humaneness of military psychological analysis. In German psychology, methods which assessed automatically and which were objective only on the surface were not tolerated. The experience gained in Germany proves that a sympathetic method of analyzing innate human qualities, if conducted on scientific lines, is actually more effective and more in conformity with conditions of actual life than the supposedly exact experimental technique, which is at best only successful with average types.

The candidates were informed of the results of examination later, when they had been checked by the respective personnel offices. The appraisals remained "secret" even within the Wehrmacht and were destroyed as soon as the candidate had been promoted to the rank of lieutenant. In the archives of the central agency, however, the entire material about the tests was retained indefinitely. (In the meantime, even this valuable scientific material was totally destroyed in the air attacks).

c. Psychological method.

Our aim was to combine practical knowledge about the human

character with scientific psychology. For the psychologist, it was essential to meet the candidate as naturally as during an encounter in everyday life. The instinctive feelings of sympathy or antipathy arising on this occasion are a part of the natural conditions of human contacts and may prevail in the beginning, but from a certain moment in the examination they must be suppressed. It is then that the continuous observation begins for the purpose of collecting symptoms of all theoretically realizable reactions to a variety of situations taken from practical life. Subsequent reflections on the results of this observation have to be carried out according to psycho-logical principles of practical everyday life and always with due consideration of the problem as a whole.

The external course of the examination was built within a scientific framework and consisted of a series of analyses of background, physical appearance, means of expression, working efficiency, and intrinsic character. The bases for the evaluation of means of expression were physiognomy, pantomime, diction, vocabulary, and graphology. The analysis of working efficiency was completed separately for mental and physical work, while the investigation of intrinsic character was carried out by conversation with the applicant. In general, these sub-units of the testing process blended into each other, but in some testing stations the organization was such that the different types of evaluation were kept widely apart and used separately.

The candidates were tested in groups of five over a period of two and a half days. Psychologically, it was essential to have an opportunity to observe them in corresponding situations on two consecutive days, to

and if they adapted themselves to the situation presented by the test.

On the first day the examination began with a personal introduction, during which the analysis of background and the study of physical appearance were begun. While this evaluation was going on, and during a subsequent phase of the testing, the analytical inquiry into the means of expression, comprising physiognomy, pantomime, diction, and vocabulary was carried out. The analysis of physiognomy was based on a film taken without the knowledge of the examinee. It showed the reaction of each candidate to a set of six different situations which were similar for all examinees.

On the morning of the first day a written test of mental qualities generally followed, the results of which were also used for graphological investigation.

The analysis of efficiency of working methods took place on the first afternoon and on the second morning. It consisted of two reaction tests of an experimental nature with objectively computed statistical average values. These were followed by technical problems which were given as working tests and had to be solved practically by hand, and by heavier physical tasks, the so-called order series, which could be increased to the point of physical exhaustion.

On the second morning action tests, the leader test and the discussion, both calling more for mental than physical prowess, were conducted. That afternoon was devoted to the remainder of the characterological examination, "exploration", interviews conducted by the psychiatrist member of the board of examiners in conjunction with one of the psychologists. On the third day, special or supplementary tests, such as those

given for Air Force officers, were given.

There were printed forms for all these tests, which certainly can be found in the archives delivered to the Allied forces.

At the end of the examination, the group of examinees, in the presence of the board of examiners, discussed in a common conference the experience they went through during the tests, their purport, as well as other questions and problems of life.

Once the examination was completed, each examiner independently recorded his observations and retired to a private chamber to reflect on the merits of the examinees. That evening they formulated their final opinions and, on the following morning, before examining the next group of aspirants, a final conference of examiners was held. In it, the individual cases were discussed for the final time, opinions of the psychologists were read and explained, and the ultimate decision as to the aptness of the candidates was reached by the officer members of the board. Official certificates and copies of them were immediately drawn up, and sent to both the Army Personnel Office and the candidate's unit. In addition, one copy was sent to the Berlin Center for its archives and two copies remained at the testing agency.

This specific, chronological account of the psychological testing of officer candidates has been necessary in order to show the working system of the testing stations. They were far less concerned with psychotechnical analyses of candidates than they were with ascertaining the characterological and personality traits of the examinee in a human and vivid atmosphere. In such characterological examinations it must be remembered that the final

entity is more than the sum of its parts. Everything depended on arranging the encounter of gifted and experienced psychologists with young men who were desirous of becoming officers, in a hearty and psychologically correct way. It was essential to cause the examinee to reveal his innermost nature in a natural and versatile way, and, from the symptoms observed thereby, as far as this is humanly possible, to discern the background and the depth of his soul. Considering the sympathetic way the examinations were carried out, it should not be surprising to anybody that important friendships sometimes developed between the psychologists and the examinees, which, in addition to the satisfaction gained from practising the art of psychological research, offered a certain gratification for the nerve-wracking and self-effacing work of the indefatigable psychologists.

The written opinion finally compiled did not have to fit into a predetermined pattern of desirable qualities nor into any sort of historical ideal or imaginary type of officer personality. The depth of youthful individualities, which proved to be a source of constant surprise, did not permit a general psychological plan to be established for the purpose of making appraisals. Of course, years of practice eventually forced a more or less consistent order into the evaluation and the following sequence was generally adopted: the physical picture, the sensual and emotional side of the subject, his spiritual nature, and the volitional side of his personality. However, it was the duty of every psychologist, in describing his case, to give sufficient attention to the main features of the examinee's individuality and to use it in formulating an opinion. Thus, the many facets of individual personality could be more accurately gauged

without having to conform to rigid predetermined standards.

Operating in such a flexible manner, the psychologist could emerge with an evaluation of the subject which was not bounded by the military requirements of the position sought. On the contrary, the description of each case was sufficiently free of purely military considerations to be able to give a good picture of the candidate's general aptitudes. If, however, it became necessary to discard some psychological criteria, the first to be eliminated would be those not essential to an evaluation of the military personality of the candidate.

It is not generally possible to decide which qualities and capabilities are most important in evaluating a military personality, since individual attributes cannot be isolated and considered out of the contexts of their natural relationship. To arrive at accurate decisions, two factors were always necessarily present: the true feeling of skilled representatives of the psychological profession for their calling, and the cumulative experience which Armed Forces psychologists gathered systematically by checking the results of their estimates. To cite an example, without intending to fix any universally applicable rules, I would mention the following soldierly qualities: good physical constitution; the ability to give attention to the details of a problem, rather than to apply oneself to its overall aspects; discipline of sentiments but not lack of sensibility; a regulating, not sensual, awareness of oneself; intelligent willpower based on sound instincts; the conscientious and moral courage to take risks; and, finally, an interest in human beings and a respect for their intrinsic value. Even with such a broad set of flexible criteria

however, it is still difficult to determine whether all officer-like characteristics are present in any one person. The German officer had to be both an excellent teacher and a hard fighter, and the qualifications necessary for both of these functions are not easily found in the same person.

By orienting officer candidate examinations toward an understanding of human nature considered as a whole, the testing method did not make provision for considering either the needs of the various branches of officer career service or of the various elements of the Armed Forces. During the discussion of an individual case, however, it was possible to mention these needs and to observe the examinee in terms of the special interests of certain branches. This is often necessary. In a ship's crew, for instance, there are frequent possibilities of personal conflicts. The chain of command of a highly-mechanized unit presents entirely different problems to the young officer from those prevailing in the infantry. Too, the ordnance officer must demonstrate more manual and technical skill than his colleagues in other branches, while a medical officer must obviously demonstrate more compassion for the fate and experience of fellow-men than an infantry officer. *****)

*****) This attempt at differentiation of the demands made upon officers in the various arms of the service, made here by the author, is open to controversy in some respects. It shows how difficult the problem is and what dangers there were when the psychologists, the majority of whom were without any practical experience in the profession themselves, started to establish standards.

At no time during the history of Wehrmacht Psychology were the special interests of the NSDAP (nazi party) taken into account. The demands

of the Hitler Youth Organization that their leaders be assigned without passing a test were rejected until 1941, and sons of high party leaders could as easily be classified "unfit" as the sons of generals holding high positions. In any case, a desire for objectivity and social justice cannot be denied to Wehrmacht Psychology. Hence, the NSDAP, particularly the Hitler Youth Organization and Adolf Hitler himself, always distrusted Wehrmacht Psychology.

5. Psychological System of Selecting Specialists.

a. Organization.

In addition to the selection of officer candidates, Wehrmacht Psychology stations also tested enlisted men for positions as specialists. Testing stations were equipped to handle examinations for the following classifications:

Radio operators;

Drivers of special vehicles;

Range-finder operators for flak artillery;

Sound range operators for flak artillery;

Fliers;

Gas sentries;

Signal personnel, mechanics, and gun pointers for the Navy; and

Non-commissioned officers.

Orders for conducting such examinations were given to the testing stations by the assigning units, but Wehrmacht Psychology attempted to play a more active role in drafting registration by military area

headquarters. However, it did not get central support for such a procedure and had to be satisfied with occasional employment by these headquarters.

The steadily increasing demands of units - particularly during the last war - could not be fulfilled by the inadequate facilities of Military Psychology. Because of this, the value of the entire organization decreased considerably and its relations with active troops were impaired.

There were no regulations concerning cooperation between the testing agencies, who were solely responsible for examinations, but units could cooperate whenever they considered it advisable. Also, tests for specialists were frequently given with portable equipment at the units. They were generally abridged examinations for large numbers of candidates and were conducted in cases of emergency. Although military psychologists frowned on them, these emergency examinations did help to establish a friendlier basis of cooperation between military psychologists and the units.

Central control from Berlin over the selection of specialists was less restrictive than in the case of the selection of officer candidates. The testing agencies were required to endeavor to satisfy the troops and to render them all possible help.

b. Psychological method.

Every specialist's test was to be preceded by an abridged basic personality examination according to the principles laid down for officer candidate tests. The psychologist was free to choose for this examination some of the characterological testing phases and the order series and the "explorations" were generally chosen. In spite of the somewhat standardized

psychotechnical special test, the psychologist was supposed to approach the specialist's examination equipped with an adequate knowledge of the candidate's nature. The reason for this advance information was that the possibilities for development of special skills and of their moral regulation could be estimated only from the point of view of the aspirant's intrinsic worth.

In the case of would-be specialists, a written intelligence test was added to the basic personality analysis. During the course of this test, more stress was laid on isolating the elementary factors of intelligence and mind -- such as attention, memory, extent of knowledge, and capacities for order and deduction -- than was the case in tests for officer candidacy. Whole books of proposals and compilations were worked out in Germany for this purpose. Wehrmacht Psychology also endeavored to develop intelligence tests which were not dependent on the extent of accumulated knowledge. In this respect, a helpful precedent was set by the inclusion of a practical thinking test in the officer candidate examination. For more comprehensive intelligence tests a copious book of exercises with analytical notes was at the disposal of psychologists.

All participants in a specialist's test were examined for proof of their technical skill. These investigations were made to evaluate three things: technical imaginative faculty, constructive talent, and practical knowledge of technical subjects. Aids employed in this examination were the following: technical films shown in conjunction with explanatory tables and specific tasks, technical tables, the Rybakoff tests, and mechanical devices which could be broken down and reassembled for testing

purposes. In addition, the affinity of the examinee to water, earth, wood, iron, and glass was observed.

Until the dissolution of Wehrmacht Psychology, the special tests were, in the narrow sense of the word, in the course of steady development. The well-developed fields of German perception and reaction psychology offered a solid and extensive basis for this development.

Aptitude examinations for persons desiring to become radio operators comprised tests of both sensory (receptive) and motor (reproductive) skills. Ability to discern radio signals was tested by means of a series of phonograph records which reproduced radio signals or their elements. These signals were combined according to principles of perception psychology and had to be reproduced or remembered by the examinee. Also, these oral tests could be coupled with reproduction exercises by which the sense of acoustic rhythm was studied both during hearing and reproduction.

In testing potential radio operators, considerations other than results of aptitude tests had also to be kept in mind. Because of the importance in this work of the overall makeup of a man, results of the special test were checked against the general picture of the examinee's personality, as judged by a basic characterological investigation. Thus, the basis for a prognosis was created and an evaluation of the candidate's possibilities for future development and training could be made.

For drivers of special vehicles, such as tanks, there were special tests for determining sound orientation, capacity for motor-sensory coordinations, mode of reaction, and motor sensitiveness for steering.

The applicant's faculty for locating sound could be tested either with or without earphones. Location of direct sound was tested before a sound wall about four square meters in size and giving forty sound stimuli. For determining the location of indirect sounds a sound detector was used. By adjusting this detector on zero the difference between acuity of the left and right ears could be compensated. However, the efficiency in both of these seemingly related spheres was by no means always positively correlated.

To clarify the functions of motor-sensory reactions, German Wehrmacht Psychology developed two types of reaction tests, one group for momentary and the other for continual reactions. In momentary tests, the examinee was instructed to show his reactions to variable acoustic and optical stimuli by either opening or closing his hand. The psychologist recording results of the test could use several criteria to judge the subject's aptitude. The number of correct and false reactions, the distribution of mistakes between acoustic and optical reactions, or at the different phases of reaction, the nature of the subject's attention, and the nature of attempts at correction were all evaluated. Thus, the characterological observer was furnished the symptoms for his analysis of objectively measured values which was gained by comparing the results with the registered statistical averages.

The continual reaction test was a half hour's combined efficiency demonstration during which the examinee reacted to varying optical and acoustic stimuli. The device used was a hand and foot lever arrangement which demanded five coordinated movements by the hands and two by the feet.

The Wehrmacht testing apparatus was constructed to register automatically all mistakes and omissions as well as additional and delayed reactions of the subject. In evaluating these reactions, the objectively measured efficiency values were also correlated with the observed symptoms of the examinee's entire behavior.

For testing motor sensitiveness for steering (actually a measurement of the reactions of the examinee's motor nerve system) a driving stand was used to simulate actual driving conditions. The candidate operated this device in accordance with what was happening on a motion picture screen immediately in front of him. The film being shown was of a typical street scene, and the driver-candidate experienced such critical moments as meeting vehicles advancing from the opposite direction, encountering children playing in the street, and coping with jaywalkers. The illusion was attained to a very high degree by the use of this driving stand, and was actually increased by suggestions of the testing psychologists.

It was possible to give this test of steering ability in conjunction with another of micro-motion in which the examinee guided a pencil along a curved line on an endless paper band. It has been determined, however, that men do not always develop similar abilities in macro-motion as they do in micro-motion. To replace the automobile steering with a pencil steering test would, therefore, be inadvisable for purposes of testing a person's sensitiveness for steering. The relations between reactions in micro- and macro-motions can disclose interesting information for studying the whole personality.

In selecting men for the positions of range-finder operator for flak artillery, testers were particularly concerned with discerning the subject's faculty of perspective vision, a necessary adjunct to a natural tendency of objectivity and responsibility. To a considerable extent the presence of this faculty depended on the man considered as a whole. The basic characterological examination produced adequate information about the entire nature of the subject's personality, but the total picture had necessarily to include an analysis of his essential characteristics to enable us to judge him accurately for the function of range-finder operator. Wehrmacht Psychology did not depend alone on these results, but checked findings by special tests of perception psychology.

A simple stereoscope may be used for general determination of the faculty of perspective vision. To evaluate gradations of ability within this particular faculty, the same instrument may be used with the stereoscopic series and a basic test of total personality whenever large numbers of examinees have to be tested. To analyze this aptitude even more accurately in the light of its possibilities for future development and training, Wehrmacht Psychology developed the following tests on the basis of research in perception psychology done by the Harburg Psychological Institute: the Hering drop instrument, the thread haploscope, and the prismatic glass test performed by means of the Jash rod instrument.

By use of the Hering drop instrument, the examinee was able to observe the path of falling three-millimeter nickel balls and decide whether they fall level to, in front of, or behind a vertical "needle". The objective basis for evaluation was computed by recording the number of correct

estimates and the differences in their distances from the needle.

The thread haploscope was the basis for a similar test in which the relations in space between three black threads had to be estimated. In such tests, an important problem was that of how to differentiate between pure observation and estimation. In other words, the tester had actually to decide what the examinee had seen incorrectly and what he had merely estimated incorrectly. In an analysis of the whole personality, such investigations could also be fertile in differentiating true "perceivers" from "estimators" i.e., those examinees who tend toward speculative thinking and who, by logical reasoning, try to ascertain the relative locations of the objects. However, the needs of the service for flak artillery range-finder operators was not such that the "estimators" could be eliminated immediately and the "perceivers" declared fit. On the contrary, the nature of flak devices was such that demands for both estimation and true perception were made on operators.

For the demands of flak range-finding operation the power of perceptive objectivity is essential. To approach a solution to this problem, psychologists devised a test given by means of prismatic glasses. These glasses were constructed in such a way that they caused the illusion of a rod screwed vertically into a wall to appear bent. The examinee had to attempt to balance against this optical illusion by using a mechanism which actually caused the rod to bend in the opposite direction. The amount of actual bending to make the rod appear vertical again showed the degree of the illusion. For purposes of the analysis, the effect of the optical illusion as perceived by a man's normal eye passed for objectivity, while

vertical and horizontal rows on a stimulant wall. By moving this lever the lights could be shut off, so that it was possible to cause short or long, angular or shortened diagonal movements. The real value of the tests lay in the observation which could be made of the examinee rather than in the measurable time necessary for carrying out the series of stimuli. It was of particular interest to observe whether the aspirant was equal to the situations presented by the test, whether the nature of the work fitted his natural tendencies, or whether he had sufficient functional means at his disposal to solve the given problem. In this respect, it is taken for granted that only those persons naturally predisposed for it, possess high motor sensibility.

In an overall evaluation of aptitude for flying, a combination of standards was used. The facility of motor sensibility had to be coupled with a certainty of reaction, described later in this section, a firmness of consciousness in any kind of quick movements, and an instinctive sense of space as distinguished from one acquired through training. Flying instinct, that characteristic described by fliers as being located more in the seat than in the head, is actually a blending of all the psychical powers inherent in man.

Gauging an examinee's suitability for night flying brought even more factors into the picture than those previously mentioned. A fundamental problem was that of whether the flying instinct in night flying was replaced by the flier's reliance upon his instruments. The discipline of psychology could be seriously challenged here, for a distinction had to be drawn between men who act instinctively and those who tend to discard sentiment

in favor of the guidance of scientific instruments. To ascertain the nature of the innermost reaches of the minds of these men was a problem for Wehrmacht Psychology.

With these considerations in mind, German military psychologists devised a revolving chair with head cabin for testing purposes. When seated in it, the examinee was subjected to varying speeds of rotation during which he had to estimate the direction of the movement, the number of turns, and the position of guiding points in the room. The reckoning that he was forced to do had to be done without any non-personal aids such as rotary wind or visual and acoustic points of supports. An interview about the experience followed the test and served as an introduction to an analysis of the candidate's reactions. The rules of Mach covering such revolving chair tests were followed in this analysis. It was intended later to replace the hand-driven revolving chair by a revolving tent with automatic drive. Although a model was actually built, it was never put into actual operation.

A requirement in the testing of all pilot candidates was successful completion of a test of space orientation. This analysis in itself was valuable to testers, but another reason for giving the test was that the peculiar nature of this capacity can disclose certain new features of the entire character of the examinee. For this test, an orientation tent, three meters in diameter, was used, which was absolutely round and made of black linen. It had a linoleum-covered wooden floor, and the whole tent could easily be turned around a vertical pillar. There were no prominent points in space inside the tent which could have enabled the candidate to orient himself, but a compass-card permitted any direction in space to be

determined. The compass-card was fixed to the central pillar, and its needle turned with every revolution of the tent, causing a similar needle over a compass-card outside the tent also to move.

Before entering the tent, the examinee committed to memory several outstanding points in space within the test room. Once in the tent, he revolved with it in a direction calculated to disorient him from any pre-conceived idea of how he was situated originally. This number of reverse turns varied with the individual, but the effect of disorientation was usually obtained after completion of five rotations. Having lost his sense of direction, the candidate was shown a prominent point in space from outside the tent with the help of the hand of the compass-card. Starting from this point, he had to rebuild a scheme of the main points of the testing room in his mind. The manner in which he did this, whether perceptually, intellectually or even with the help of his memory of movement, was as vital to the evaluation as the actual skill in orientation.

A supplementary means of examining the candidate's sense of direction was an interpretation of aerial photography in which the examinee was asked to recognize terrain pictures taken from the air on a map of scale 1:100,000. After this phase, another "exploration" (of the results) followed, as in the case of every psychological test.

Gas sentries were selected by means of a systematic series of tests of their sense of smell after they had passed an intelligence examination. For this work, results of a personality test were not important and were used only when the candidate showed certain dangerous deficiencies in sense of smell.

The Navy attached great importance to psychological testing of specialists. It required signal men, radio operators, range finder operators, sound detector operators, mechanics and gun pointers to pass aptitude tests. These examinations were carried out by means of a selection, or a combination, of the methods described above for testing specialists.

Once the Army had reorganized schools for the training of noncommissioned officers, it used aptitude tests for the selection of candidates. In addition, a combination of the individual methods used in testing officer candidates was employed.

6. Other Uses of Wehrmacht Psychology.

Over and above the function of selecting personnel, German military psychology served several other useful purposes. One of its most valuable was that of improving the evaluation of the entire personality of German youth to ascertain its aptitude for military service. This research was not concerned with individual characteristics but considered other factors having some bearing on the German military mind.

Included in this category were studies of the character traits of German tribes, studies of the lineal backgrounds of families which have produced famous German soldiers, research into the cultural achievements of German soldiers to determine the moral standard of the German soldier, and, finally, comparative psychological studies of German peoples. Results of these analyses were intended also to help the General Staff formulate man power policy.

In addition, statistical data on the aptitude tests themselves

supplemented these investigations and provided us with an excellent insight into interesting sociological problems.

As the results of such investigations accumulated, psychologists were frequently invited to participate in actual courses in the training and instruction of officers. However, it was only in the Wehrmacht Academy that military psychology was ever introduced, since efforts to include it in the program of the officer candidate schools were unsuccessful. To compensate for the lack of such training, opportunities were presented for assiduous officers to study military psychology at the testing centers. Many officers availed themselves of this privilege.

Another interesting contribution of military psychology which stemmed from ever-increasing cooperation between officers and psychologists was its use in the handling of the "enfant terribles" among the soldiers. Many officers called upon the services of psychology to investigate character and to obtain advice on the handling of these men. In addition, psychologists were used as experts in legal proceeding before courts martials, while soldiers themselves sought and obtained sympathetic advice on various problems from military psychologists.

One of the lesser contributions of Wehrmacht Psychology was its attempt to help the Army Ordnance Office in developing weapons, instruments, and machine tools in accordance with established psychological principles. In trying to do these things, we found that German engineers were themselves abreast of the Army's needs and needed little aid. Some psychotechnical inquiries into problems of design were also carried out by the testing center in Berlin, but no productive results were obtained.

Thus, a branch of applied science, military psychology, was developed. Its purpose and use went far beyond the scope of simple aptitude psychology and, during the period under review it became a systematized scientific discipline under the direction of M. Simoneit, scientific director of Wehrmacht Psychology from 1930 to 1942. (Publishers Bernard and Graefe, Berlin, second edition, 1940).^{*} Throughout this period it was always useful in every domain of the Wehrmacht by its particular stress on the basic psychological principle of the domination of the human element in all military affairs. Hence, nobody will ever be able to question its reputation as the stronghold of humanitarianism.

7. Checking Correctness of Aptitude Tests.

As a general rule, the results of psychological aptitude tests were used only as a guide by individual commanders and were in no way decisive, either with regard to officer candidates or enlisted replacements. Some commanders made extensive use of these findings in forming opinions of their officers, while others chose to scoff at this possible encroachment on their prerogative of selecting and classifying personnel. Hitler, always opposed to Wehrmacht Psychology, frequently ordered reports on the number of commanders being influenced by psychology. When, in 1941, it was reported that between eighty and ninety percent of them were adherents of Wehrmacht Psychology, he declared this fact to be a danger capable of destroying the faculty of appraising a man intuitively.

On their part, the personnel offices stressed the necessity of protecting freedom of action of officers responsible for personnel selection.

^{*} Bernard & Graefe, Berlin, 1933: WEHRMACHTPSYCHOLOGY by Dr Max SIMONEIT (Second edition 1940).

The psychologists respected this point of view and endeavored to help officers to retain a simple, natural attitude toward men, but an attitude refined and deepened by psychological considerations.

Because commanders in charge of making appointments were not bound to heed psychological opinions, a number of candidates classified as "unfit" by testing agencies were admitted to officer candidate schools. Although psychologists disapproved of these selections, the presence of such candidates made it possible to check records of the careers of these men against those of officers who had been labeled "fit". By the presence of "unfit" candidates as officers, it was possible to make a convincing series of parallel checks on the merits of testing.

Verifying the suitability of assigned officer candidates, was done to ascertain whether the psychological appraisals were confirmed in practice during the period of training. It was further intended to give instructing officers an opportunity to consider their trainees in the light of psychological criteria.

The checks consisted of the following measures:

- a. Independently of the psychological opinions, which remained "secret", the instructors tried to get to know the officer candidates well. Their observations were put down in writing;
- b. At the end of the first phase of training with the troops, a conference was arranged with the psychologists of the nearest testing agency. During this conference, the opinions of the testing agency were compared with those made in the Army, and were classified into groups of conformity (plus groups), partial conformity

(plus-minus groups) and non-conformity (minus). The figures for each group were recorded statistically;

- c. The faculties of the officer candidate's schools, in which the candidates were trained subsequent to the first stage of training with the troops, tried to get to know the candidates well, again independently of the psychological opinions. The instructors, too, put their observations down in writing;
- d. Shortly before termination of the training period, a check-up of the suitability of candidates was undertaken between the psychologists of the Berlin center and the competent officers of the schools, and the estimates were compared with each other. In this case, a grouping according to conformity, partial conformity and non-conformity was also made and the results classified statistically;
- e. This method of cross-checking candidates was repeated at the conclusion of the next stage of officer candidate training, the period during which candidates actually worked with troops;
- f. Results obtained at both phases of training were not totaled into an overall evaluation of the candidate but were kept separately. Interesting cases of conformity or non-conformity were, of course, studied by comparisons made during the various training periods;
- g. Special occurrences, such as serious offenses or dismissal because of failure in performance of duty, were immediately recorded and used in examining the whole case;
- h. During the war, exceptionally heroic deeds, recognized by high

awards, were examined in the light of recorded psychological opinions.

This system of checking the correctness of aptitude tests was used during the period from 1938 to 1942, though not in its complete form during the war, and enabled the personnel offices to get a well-founded opinion of the value of psychological aptitude tests. The fact that these offices continued to use Wehrmacht Psychology during the period from 1937 to 1942 resulted from the verification of tests made of persons assigned; these must accordingly have given satisfaction.

For building up and utilizing the statistics of verifications the following considerations were prevalent:

- a. The evaluation formed as a result of the psychological tests consisted of two parts. The first was a psychological opinion comprising the overall description of the candidate's personality and was prepared independently of its actual purpose as an analysis of his suitability for a military career. The other section was the actual decision regarding the candidate's aptitude as arrived at by the collaborating officers. Since any conclusion regarding the candidate's aptitude was more dependent on his performance as a soldier than on his psychological makeup, verification did not consist of a mere statistical comparison of these two opinions. It was considered more important to reexamine the psychological description of the personal nature. Hence, the predominance of purely military, rather than psychological considerations became the central theme in all deliberations

- on verification. The question of whether the co-examining officers had drawn correct conclusions from the psychological description of the candidate's innate character was of secondary interest;
- b. Taking into consideration the above deliberations, the officers and psychologists cooperating in checking the correctness of aptitude tests had to agree on how the individual case was to be statistically classified;
 - c. The fact that judgments formed at the units or in the school were considered as objective standards in the training was not ideal from a scientific viewpoint, because the troops were liable to errors at least to the same extent as the psychologists. However, since Wehrmacht Psychology was in the service of the Army this source of errors had to be tolerated;
 - d. In any case, if Wehrmacht Psychology wanted to be recognized as practical, it had to prove that the group of officer candidates which had been judged "unfit" in aptitude tests and nevertheless had been accepted, contained more unfit candidates than the group designed as "fit" at the examination.

The checks made over a period of several years showed that this proportion was seldom more unfavorable than one to eight. That is, in the group consisting of men accepted notwithstanding the fact that they had been designated "unfit" on the basis of the tests, there were eight times more actual failures than in the group which had been classified by the psychological testing agencies as "fit". The ratio in favor of Wehrmacht Psychology decreased when, owing to the increase in size of the Army

psychological organization, the quality of psychologists deteriorated.

If the proportion of conformity and non-conformity were considered alone, the percentage of conformity cases fluctuated between 80 and 90. In this connection, the source of error could usually be ascertained and future mistakes more easily avoided.

The majority of the mistakes were not due to psychology as such, but rather to the individual psychologists. The number of mistakes could have been reduced by an extension of training, practice and above all, by a profounder self-knowledge on the part of the psychologists. In the majority of cases mistakes were made in evaluating the subject's will-power. Estimates of intellectual talents, temperament and emotional life, and even of moral qualities, were carried out with much greater accuracy.

As far as similar comparisons were made in appraising the holders of the Knight's Cross during the war, they produced like results, although there were cases in which the subject was not equally fit for peacetime and wartime tasks. Hence, some purely adventurous natures were not correctly evaluated. Of the first-class fliers, Moelders was estimated correctly, but Wiek wrongly. From a psychological viewpoint it was especially interesting to recognize in verification how, in the case of Wiek, the psychologist analyzing him had "turned the key in the wrong direction".

A more elementary system of verification was used in the selection of specialists. The percentage of counted cases of conformity was 90 - 95.

8. Psychological organization within the Wehrmacht during World War II.

The use of psychology for the purpose of personnel selection is most beneficial in times when the supply of personnel is greater than demand. Whenever the demand for personnel exceeds the supply, psychological selection becomes far less useful, though it fully retains its importance for distribution of personnel according to specific qualifications.

During the past war, an additional circumstance was that Hitler preferred front qualifications to everything else, so that in selecting suitable officer candidates the psychological point of view was pushed into the background. For selection of active officer candidates, the personnel offices retained the psychological aptitude tests and, during the war, many commanders again continued to request the advice of psychological testing agencies in the selection of reserve officers.

During the war, selection of specialists became even more important, and the Luftwaffe, in particular, after making itself independent of Wehrmacht Psychology in 1941, built up its own aptitude tests.

Prior to World War II, the number of completed tests was as follows:

1930 : 2 940	1934 : 19 354
1931 : 3 485	1935 : 39 654
1932 : 6 838	1936 : 81 640
1933 : 10 852	1937 : 115 825
1938 : 150 552.	

The facilities for making psychological tests were strained to the utmost. One psychologist can be expected to complete at the most one thousand scientifically justifiable tests in a year and even this number

can be maintained only during exceptional times and not consecutively for many years.

In view of the enormous task faced by Germany in the second World War, even the number of tests made in 1938 was inadequate. Hence, the organization of Wehrmacht Psychology was enlarged to the extent allowed by the number of trained psychologists available in Germany. That is, almost all of the specially trained psychologists in Germany -- including the university professors -- were in the employ of Wehrmacht Psychology as reserve psychologists with the rank of "military administration councillor".

At the end of the year 1938 there were 43 field grade officers and 171 qualified psychologists within the organization of Wehrmacht Psychology. During the first years of World War II, these numbers increased to approximately 70 officers and 350 qualified psychologists. Due to the size of this organizational framework it was no longer possible to make sure that all of the psychologists were qualified from the military viewpoint, as had been done in peacetime. In time of war their scientific and personal qualifications alone were decisive. The result was that scarcely one-third of the military psychologists were either reserve officers or reserve officer candidates. Since scarcely one-third of them were members of the NSDAP (Nazi party), at a time when the Reich Ministry of Interior demanded that 70 percent of the employees of every government agency be members of the party, Wehrmacht Psychology had two "weak points" in the estimation of Hitler and NSDAP. In 1941, on orders of Army Personnel Office, unsuccessful efforts were made to correct this situation.

8. Liquidation of Army and Luftwaffe Psychology in 1943.

In spite of its many years of outstanding service and the development of its scientific methods, Wehrmacht Psychology remained a controversial institution whose merits were debated heatedly in all three branches of the Armed Forces, as well as among the general public in Germany. The NSDAP constantly raked the fires of opposition within the Wehrmacht, because preferential treatment was not given to leaders of the Hitler Youth Organization and, during the war, to other party functionaries applying for reserve officer status. As long as the opposition had no advocate in Hitler's entourage, it was relatively harmless, but it became dangerous when Hitler's chief adjutant, Genlt Schmundt, an opponent of Wehrmacht Psychology, became Chief of the Army Personnel Office.

The personnel offices of the three branches of the Armed Forces, and several commanding generals and admirals knew, however, what a modern and practical aid they possessed in Wehrmacht Psychology, and continued to support it. They also tried to convince Genlt Schmundt of the efficacy and objectivity of the Wehrmacht Psychology Organization, but the attitude in Hitler's headquarters remained unfriendly. To increase this animosity Field Marshal Keitel had become antagonistic to Wehrmacht Psychology because of an appraisal of his son which he did not like. Later, when the Commander of the Replacement Training Army joined this opposition for the same reason, the struggle of psychologists for their good cause became more and more difficult. To be sure, the inspectors in charge of the personnel testing, Genlt von Voss and Genlt Foltmann, succeeded in repelling many attacks, but some weaknesses of Wehrmacht Psychology unfortunately became

apparent at this time. The number of the tests necessary in wartime had become so great that the psychological testing agencies were no longer able to cope with them. This weakness alienated some units and gradually cooled their former enthusiasm for military psychology.

By the beginning of 1942 even the supporters of Wehrmacht Psychology had begun to doubt the wisdom of retaining psychological testing in time of war. Their reasoning was based on several factors, among which were the facts that every German had to serve in time of war, that the mettle of officers could be tested only under actual frontline conditions, and that the psychological testing facilities of the Wehrmacht were inadequate in the face of the numbers of specialists needed for wartime duties. The question presented was whether Wehrmacht testing should be suspended for the duration of the war and an organizational framework maintained for peacetime work. A substantial argument in this connection was that party opposition was becoming increasingly stronger.

The actual dissolution of Wehrmacht Psychology was not caused directly by these factors, but came instead from within the Luftwaffe. Reichsmarschall Goering, then Commander-in-Chief of the air arm, learned on an inspection trip through Germany that graduates of secondary schools were so afraid of psychological aptitude tests that they were becoming reluctant to volunteer for Luftwaffe service. In or about May, 1942, he impulsively issued an order to Field Marshal Milch for the immediate liquidation of Luftwaffe Psychology. Since the greater part of testing work done by military psychology consisted of selecting personnel for the Luftwaffe, General Inf Keitel, Chief of Army Personnel Office, was faced with a

difficult problem. His course of action was to send a questionnaire to specialized units, asking them to express their opinions as to the advisability of retaining psychological aptitude tests. His desire to retain them received no encouragement from the units questioned, since it had been their experience that Wehrmacht Psychology was inadequate for the tremendous task it faced in wartime. So, receiving no support from the troops, Keitel yielded to the pressure of Schmundt, who already had obtained Hitler's order for dissolution. Even at that late date, it would have been possible for the Commander of the Replacement Training Army to retain psychological testing for selection and allocation of specialists within the Replacement Army by submitting or at least defending such a proposal in Hitler's headquarters. *) He refused to attempt to salvage any part of Wehrmacht Psychology, however, and its dissolution was ordered for 1 July 1943.

*) Because the Commander of the Replacement Training Army could have intervened only on account of specialist selection (officer candidates selection did not belong to his competency), his negative attitude was justified already by the fact that - as described above - this task could not be managed during war on account of the huge number of persons involved.

The Navy was convinced, however, that it could not do without psychological guidance in the distribution of specialists, and, contrary to the directives from Hitler, retained its organization up to the collapse of Germany in May 1945.

Going to the events of war we were not able to save the instruments, installations, archives and libraries of Wehrmacht Psychology. The famous collection of characterological films with action shots of all German high

school graduates who wanted to become active officers during the period from 1927 to 1941 were burned in an air attack on the Hermann Goering Barracks in Berlin-Reinickendorf. The main library in the Army-Historical Branch of OKs was destroyed by fire in the western part of Berlin, and the remaining archives are said either to have been burned in the Reich library in Potsdam, or seized by the Russians.

The files of Navy Psychology have probably been delivered to American agencies by University Professor Dr Udo Undeutsch (Institute of Psychology of Mainz University).

The files of the scientific director of Wehrmacht Psychology, the author of this report, disappeared from his house during the Russian occupation. Since Germany's collapse, he has not been able to visit his house in the French sector in Berlin to look for his files there.

Nothing definite is known to me about the fate of testing agencies situated in the garrisons of corps headquarters. In many cases, the instruments and equipment belonging to the installations were given to the medical authorities of the same garrisons and together with their own equipment, were lost in the confusion of the general catastrophe.

Thus, a scientific organization was destroyed which, although it had not yet reached perfection, was nevertheless in the course of hopeful development. Results of the work of Wehrmacht Psychology had been eagerly awaited by members of the profession in all parts of the world, because this experiment represented the first real opportunity of attempting the use of applied psychology on a nation-wide scale. Also, in its broad implications it was directed at the solution of an entirely nonmilitary problem: What

is man and what is his fundamental nature? The answer to this question could be applied in any field of human endeavor.

Unfortunately, the German people lack the means of conducting this promising experiment on a scale even the size of that used in the days of the Weimar Republic. However, due recognition should certainly be made for the work done in that period.