

MS # D-003

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF MILITARY HISTORY
WASHINGTON 25, D.C.

I T A L I A N W A R P R O D U C T I O N

SUBSEQUENT TO 13 September 1943

Originally Prepared for Headquarters European Command
Office of the Chief Historian

Subject : Italian War Production (13 Sep 43 - 1945)

Title : Die Kriegsproduktion Italiens nach dem 13. September
1943

Author : Genmaj Dr Ing LEYERS

Sheets : 30, + charts

Analysis : A discussion of the organization and operation
of Italian industry under the direction of the
Speer Ministry. Author explains the mission
and responsibilities of the German supervisory
commission, the coordination of Italian and
German industry, the difficulties hampering
Italian production, and the practical results
achieved.

Circumstances : This report is a copy of one prepared by the
author in the summer of 1945 for a Major Hare,
of the military headquarters in Caserts (AFHQ?).

Revd by 7734 : 25 Mar 47

Identifying No: D-003

Table of Contents

	<u>Page</u>
I. Organization of the German Ministry of Armament and War Production	1
II. Coordination and Evaluation of the Italian Output in the Planning of German War Production	4
III. Difficulties in Maintaining the Production Level of the Italian Industry	8
IV. Transfer of Industrial Plants	27
V. Collaboration and Attitude of Italian Industrialists	32

I. Organization of the German Ministry of Armament and War Production

A. The German Ministry of Armament and War Production

On 13 September 1943 Hitler charged Speer, the German Minister of Armament and War Production, with the responsibility of exploiting Italy on behalf of the German war effort. As a result of this order the Ministry of Armament and War Production became the agency which alone controlled war production in Italy and in territories under the jurisdiction of the Supreme Commissar Alpine Approaches, and the Supreme Commissar Adriatic Coastal Approaches.

At the time the Ministry of Armament and War Production was delegated this power, it had already worked for almost two years on the principle of industrial self-administration. The application of this principle meant that the industrialists, organized into special committees and pools, were given a voice on a rather high level within the framework of the Ministry of Armament and War Production and were charged with the responsibility of planning, allocating raw materials, production, and meeting deadlines. The military agencies (for example, the Ministry of War in World War I, and later the Ordnance Office, Armed Forces Economic Office, and others), which had previously been responsible for these contracts retained the mere formality of allocating orders to the plants, accepting delivery, as well as balancing the accounts and paying for the orders.

B. The Plenipotentiary for Armament and War Production - PAWP

In Italy the implementation of Hitler's order was carried out under the direction of the Ministry of Armament and War Production. In place of

MS # D-003

the policy which had until now been pursued in other occupied countries making war production an intricate part of the military administration and controlling it upon a bureaucratic basis, the German Minister of Armament and War Production appointed a plenipotentiary for Italy who was directly responsible to him. The choice of a high-ranking officer, General Meyers, was based upon the desire to lend appropriate emphasis to economic needs in dealing with the military agencies in control of the area, in particular the Army whose interests, in part, ran along entirely different lines.

The staff of the Plenipotentiary for Armament and War Production was appointed by the Minister for Armament and War Production and consisted mainly of leading economists in the various branches of industry. Under the Armament Industry Co-ordinator, who was also an industrialist, they were solely responsible in their respective fields for the planning of production as well as the application of these plans. The military matters which had to be handled were co-ordinated by the Plenipotentiary for Armament and War Production (see Sketch 1), and dealt with in the field offices, armament offices and their subordinate departments, as well as by representatives of the services of the Wehrmacht who had been assigned to this task.

The establishment of this organization denoted the first attempt to place sole responsibility upon industry in areas outside of Germany.

A loose co-ordination with the German military administration ensued only to the extent that the Ministry of Armament and War Production as a special group of the general economy was interested in the creation and maintenance of productive capacity. In consequence, the Plenipotentiary for Armament and War Production was interested, for example, in the clothing and rations of Italian workers.

MS # D-003

C. Mission

The mission assigned to the Plenipotentiary for Armament and War Production, based upon Hitler's order of 13 September 1943, was as follows:

1. Converting, integrating, and co-ordinating the Italian industry within the scope of German war production.
2. Keeping production facilities out of the enemy's reach.
3. Seizing materiel which was not needed in Italy in order to eliminate shortages in Germany.

In integrating and co-ordinating the Italian industry it became evident that so far the latter had done little to adjust itself to the production needs of total war, and that Italian production could never compare with that of Germany. In addition, the Italian industrialists had been hoarding great quantities of raw materials which had been requisitioned from Germany and were far in excess of any previous estimates; the Italians made every effort to prevent German agencies from obtaining a clear picture, and it was only too evident that they were preparing for post-war business.

D. Contracts

Orders were placed with Italian factories in the following manner:

1. By firms or manufacturers in Germany in the form of sub-contracts;
or
2. Contracts were issued by the self-administrative industrial committee in Berlin.

MS # D-003

Initially the general trend was to permit the current Italian contracts and production to expire without any interruption of the manufacturing processes; subsequently the Italian industries were to be converted to German production.

E. Payment

Payment for delivered products and materials was made through special departments. The problem of advance financing was particularly important because in the majority of cases the factories were insolvent as a result of the Italian government's protracted method of payment. Actually, during the preceding year no payments whatever had been received from the Italian government for work on government contracts.

II. Co-ordination and Evaluation of the Italian Output in the Planning of German War Production

Co-ordination and evaluation of the Italian output were mainly determined within the framework of the over-all planning of German War Production by considering factors in the following fields: (a) Economy, (b) Transportation, and (c) Military Situation.

A. Economy

1. The fact that a large output can be achieved only when the manufacture of various items is centralized (occasionally into groups of items), limited the trend toward decentralizing the manufacture of complete equipment in Italy.

2. On the other side, the large number of skilled Italian workers was a big advantage. This consideration finally became decisive for turning the

MS # D-003

manufacture of items requiring skilled workers over to the Italians.

B. Transportation

1. The effort to save freight tonnage in bringing small parts to the large parts for assembly or completion of the finished product, made it seem desirable in most cases to give up the idea of decentralizing industries in Italy.

2. On the other hand, the blocking of traffic routes which led into Germany through Allied air raids as well as the constantly decreasing flow of traffic through Switzerland made it necessary to disregard the purely economic aspects. As a result, the German agencies strove to make northern Italy self-sufficient to meet the Army's requirements.

C. Strategy

The importance and usefulness of northern Italy fluctuated in proportion to the strategic plans and the situation. The main planning concerned the following periods:

1. Plan for an immediate withdrawal to the northern Appenine line. Had this plan gone into effect, northern Italy would have become a battle area as early as the winter of 1943-1944.

2. Plan to have an Army Group hold a line south of Cassino. Had this plan been adopted, the industries in upper Italy could have functioned without interruption until mid-summer of 1944.

3. Plan to withdraw from Rome and hold the northern Appenine line.

4. Plan to withdraw an Army Group to the Alpine Approaches. The

MS # D-003

adoption of this plan would have reduced production to an insignificant level and would have resulted in an improvised manufacture of equipment at the Alpine Approaches.

D. The German agencies reacted to the above plans and the situation as follows:

1. Central Planning Agency in Berlin

a. During the first year after Italy's defection the country was underestimated altogether as an asset to the German armament industry. As a result of this attitude there was a tendency to move machinery, equipment, and workers to Germany.

b. In view of the traffic situation, the idea of granting self-sufficiency to the northern Italian industries, long advocated by the Army Group was approved in October 1944 at the expense of the German armament production.

2. Armament Industry and War Production in Italy

Aside from the afore-mentioned considerations, the policy which was finally adopted by the Plenipotentiary for Armament and War Production in Italy was influenced by the following factors:

a. The inspection of plants conducted by representatives of the Plenipotentiary for Armament and War Production led to the confirmation of the assumption that northern Italy, especially, had at its disposal a surprisingly large number of modern, efficient manufacturing plants whose existence had been unknown until now. The Plenipotentiary for Armament and War Production considered it his duty from the very beginning to exploit

MS # D-003

these manufacturing plants as much as possible and influenced the Ministry of the Armament and War Production at Berlin toward that end. One of the two letters which the Plenipotentiary for Armament and War Production wrote to the German Minister of Armament and War Production during his entire tour of duty in northern Italy dealt specifically with this subject. The letter opposed the Berlin agency's desire of drawing refined steel from Italy and pointed out the vast steel processing facilities which existed in northern Italy.

b. The Plenipotentiary for Armament and War Production was keenly interested in maintaining good relations with the Italian industrialists. This could be achieved most readily if the plant owners were given contracts for their own factories.

c. The same applied to the attitude of the workers. If peace with labor was to be maintained for the good of productions and particularly for the maintenance of peace and order in the German rear area, then every contract possible had to be placed with the Italian economy.

d. Furthermore, the Plenipotentiary for Armament and War Production was interested in keeping a firm nucleus of skilled workers. Consequently, he set up his own department of labor in order to prevent interference in the factories by other interested German agencies which were looking for workers, as well as to carry out vital production tasks desired by the German government.

e. The Plenipotentiary for Armament and War Production was finally directed to co-operate with the Italian government, primarily with the Ministry of Corporations. This mission was also facilitated by the extensive employment of the Italian industry within the sphere of the Italian economy.

MS # D-003

3. Over-all Planning - Plenipotentiary for Armament and War Production in Italy

Since the policy of the Plenipotentiary for Armament and War Production deviated to some extent from his original instructions, a definite tension arose between him and the Ministry of Armament and War Production at Berlin; however, a satisfactory relationship was restored in October 1944 when a compromise was reached as to the self-administration of the Italian industries. It should be noted that even prior to this time varying opinions on this subject existed within leading circles of the Ministry of Armament and War Production at Berlin which largely agreed with the point of view taken by the Plenipotentiary of Armament and War Production. As a result, his supporters in Berlin were able to intercept and halt most of the orders and directives to the Plenipotentiary for Armament and War Production which might have interfered with the smooth operation of his agency.

III. Difficulties in Maintaining the Production Level of the Italian Industry

The difficulties which were encountered in maintaining the production and in converting the Italian industry were due to many causes, in particular to the following factors:

A. Political

1. In accordance with directives issued at the top-level, the Plenipotentiary for Armament and War Production was instructed to co-operate closely with the Italian Ministry of Corporation. This ministry had become very prominent in the course of time and was asserting its right to participate in a responsible capacity in the management of the Italian armament industry and war production. These demands increased particularly after

MS # D-003

the Italian agency was taken over by Minister Tarchi who relied on his own initiative and attempted to run domestic affairs and the Italian economy quite differently than his predecessor. Naturally, this resulted in many difficulties for the Plenipotentiary for Armament and War Production.

a. Even an individual with only a superficial knowledge of conditions in Italy was bound to realize very soon that the newly established Fascist republican government evoked no favorable response among the people, but on the contrary, was rejected by a predominate majority. Even though the Italians had co-operated with the Plenipotentiary for Armament and War Production in the beginning, a clearly perceptible attitude of hostile passivity was noticeable among the factory owners as well as the workers following the inclusion of the Italian government. The attitude of the Italians was "to wait and see" and "to remain on the fence."

b. The Italian government on its part pursued its own interests to a great extent and was unable to come to a decision as to a clearly defined course in which it would give unconditional support to a joint war effort with Germany. Consequently, the Plenipotentiary for Armament and War Production encountered hidden as well as open opposition in his work.

2. The previously enumerated deficiencies were not alleviated by the fact that under the leadership of Mussolini the Fascist government represented an effective tool whose activity and intervention should have guaranteed a definite output by Italian factories. However, on the contrary, it became more and more obvious that the Italian government lacked initiative in essential matters and depended on the Germans to take care of everything.

MS # D-003

Just to give an example, no move was made on the part of the Italian government to face the ever-increasing fuel shortage by an all-out demand on Italian coal mining industry. The same can be said with regard to road maintenance. Even in this matter, the Italian government displayed a passivity which was deplorable in view of the importance of this problem which required immediate action. In the face of this weakness of the Italian government, it remained the continuous task of the Plenipotentiary for Armament and War Production to provide food and clothing for the Italian defense workers in order to lessen the unfavorable effects resulting from the inefficiency of the Italian government.

B. Organizational

1. The organizations of the German Ministry of Armament and War Production and the agency of the Plenipotentiary for Armament and War Production still underwent definite growing pains, resulting primarily from the implementation of the idea of self-administration of the Italian industries. Previously the German military authorities in Italy had been in charge of Italian war production and at this time they showed no inclination of relinquishing control of their field offices without a struggle. Consequently, some time passed before the armament offices, as field agencies of the Plenipotentiary for Armament and War Production, were able to assume the responsibilities of the former economic detachments of the Armed Forces High Command (OKW) which had represented the German Office of Economics.

In addition, there remained the economic organization of the Army Group, which was represented by military economic officers; the latter's duties, on the other hand, were limited to the demands of the Army Group, so that there was little interference from that source. The economic detachments

MS # D-003

of the Armed Forces High Command as well as Major Schu's organization, which was charged with the seizure of scrap metal, were not under the control of the Plenipotentiary for Armament and War Production, but co-operated with the latter. At any rate, much duplication of work, over-lapping of duties, and other bottlenecks could have been prevented if the higher authorities had decided upon immediate radical measures, which at any rate developed automatically later on in the course of the Plenipotentiary for Armament and War Production activities.

2. The policy governing the evaluation and utilization of Italian industries, which was neither uniform nor constant, led to the following issues:

a. As one of the other faction gained the upper hand, the basic directives concerning priorities underwent considerable changes. Thus, at one time special emphasis was placed on increased production while at another time the procurement of raw materials for German factories was placed in the foreground.

b. The same factors prevailed in the formulation of various armament programs and the contracts which were to be distributed within the scope of these programs. It should be noted in particular to what extent the output of aircraft suffered from the constant change of programs.

By maintaining a uniform procedure, the Plenipotentiary for Armament and War Production attempted to stabilize the policy of his agency and to mitigate the radical changes originating in Berlin, so that they would not become apparent to outsiders. In this way we hoped to keep the Italian industries operating, by simultaneously retaining the confidence of both the Italian factory owners and labor. This effort, however, was limited to

MS # D-003

the individual programs; the Plenipotentiary for Armament and War Production had only a limited authority in these matters, which were usually settled directly by the Ministry for Armament and War Production at Berlin, since the Plenipotentiary for Armament and War Production lacked a wider perspective concerning an over-all planning which might have justified some of the changes.

C. Loss of Italian Territory due to the Military Situation

Economic planning must be based on the size of the country in order to co-ordinate the operation and output of the country's industries. The planning by the Plenipotentiary for Armament and War Production suffered from the very beginning from the fact that the area under his control could not be regarded as constant. The changes enumerated below led to a complete reversal of the programs and the over-all planning. This reversal also had a disturbing effect on production in areas of Italy still under German control.

1. The loss of central Italy
2. The loss for economic purposes of the area south of the Po River, because of its proximity to the front, and the destruction of bridges across the Po River.
3. The impending German withdrawal from the area west of the Tessin River.
4. The impending German withdrawal to the Alps.

D. Lack of Fuel and Electric Power

The ever-increasing lack of fuel and electric power had an unfavorable effect on the execution of the production programs. The following factors

MS # D-003

were of decisive importance:

1. Coal

The Italian economy at the time depended on coal imports entirely from Germany which up to July 1943 amounted to one million metric tons per month. Allied air raids on the Ruhr district, the critical transport situation and shortage of railroad cars in Germany, the loss of coal mining areas in the Saar, the Ruhr, and in Upper Silesia contributed toward a steady reduction in German coal exports to Italy. During the early months of 1944 the Italian coal imports again rose to about 600,000 metric tons per month, but ceased entirely during the last months of the war. The last few trains which still managed to leave Germany were requisitioned for the maintenance of railroad traffic.

The most exacting planning by the Plenipotentiary for Armament and War Production in allocating coal to only the most vital industries, and, in the course of time, the complete elimination of all civilian production, while at the same time increasing the output of the Italian coal mines at Aosta, Bergamo, and Istria were at best emergency measures which could not long delay a sharp decrease in Italian production.

2. Electricity

The power situation in Italy was substantially more favorable as a result of the available sources of hydro-electric power. Consequently, a far-reaching effort was made to convert the machinery in Italian factories to electricity.

Nevertheless, the lack of snow and rain during the winter of 1943 and

MS # D-003

the spring of 1944 contributed materially toward a considerable shortage of power in the spring of 1944. As a result, the output of low priority goods had to be temporarily reduced. The Italian partisans and the Allied forces further reduced the Italian production.

A project to link the Italian power lines with German lines was never completed.

3. Despite the availability of large quantities of Italian raw materials, particularly metals, which exceeded all expectations, a continuous output could not be achieved because of the lack of certain specific items. However, through careful planning, it was possible to use substitutes on a wide scale.

In conclusion it may be stated that the coal problem was the sore spot as far as energy was concerned. The curve of coal imports had a direct bearing on general production, so that the two were nearly identical. Efficient and thorough planning could do a great deal to compensate for existing shortages.

B. Price Controls

In establishing price controls in northern Italy the Plenipotentiary for Armament and War Production was caught in a squeeze between the danger of inflation and the utter indifference of the Italian industrialists.

On the one hand, the Plenipotentiary for Armament and War Production was vitally interested in the fact that the general price ceiling, which had been fixed in the autumn of 1944 by the German military administration in Italy, should halt the progress of inflation for the following reasons:

1. The agency of the Plenipotentiary for Armament and War Production

MS # D-003

had only a limited sum of Italian currency in constantly varying amounts at its disposal, to be used for the payment of purchases and orders.

2. Inflation with its consequences would invariably lead to trouble with the Italian workers.

On the other hand, production costs increased; furthermore, it became necessary to procure critical materials through black market sources, and the cost of transportation suddenly tripled due to Allied air activity. As a result of these factors, the prices authorized within the price ceilings were in part far below the production cost of the Italian industrialists. Consequently, the individual industrialist, quite apart from his efforts to preserve the raw materials, lost money whenever delivering an order under a German contract.

It is superfluous to point out that this situation did not aid the service-with-a-smile policy.

In cognizance of these facts, the Plenipotentiary for Armament and War Production succeeded in having the price ceilings lifted in certain, exceptional instances. On the whole, this action was taken so that the Italian industrialists at least would not be paid less than their production costs. With industrialists who were especially hard-hit, the Plenipotentiary for Armament and War Production established a silent agreement which enabled them to sell some of their merchandise on the black market in order to compensate for the deficits which they had incurred while working on German contracts.

F. Partisann Activity

MS # D-003

The effect of Italian partisan activity upon the maintenance of the production level of the Italian industry depended to a great extent on the seasons. Beginning in the spring of 1944, a constant increase in partisan activity could be observed, which continued well into the summer and fall of 1944; during the winter, on the other hand, activity by the Italian partisans dwindled to a point where it was virtually negligible. The partisans again became active in March and April of 1945, which seemed to indicate a similar pattern for that year.

Moreover, the effect of partisan activity varied considerably with regard to the affected region. While some large areas remained permanently free of partisans, there were districts where the Italian industries were seriously crippled by partisan activity. This was true, in particular, in the area west of Tessin, primarily Turin and vicinity, the Aosta Valley, and Novara as well as in the industrial regions around Udine and Istria, although the latter were not very important.

The output of the motor vehicle industry, for instance, at times dropped to thirty percent of its production quota because of partisan activity. The motor vehicle plants as well as the entire spare parts industry, were centered in the region around Turin. The same applied to the exploitation of the important and productive Cogne steel factories in the Aosta Valley whose production of refined steel and steel alloys became steadily more critical with the scarcity of coal imports. As a result, the coal deposits in the vicinity of the steel mills also assumed major importance. The previously planned and partially effected transfer of a large part of the R I V roller bearing factory to tunnels near Honebard was halted in the Aosta Valley in view of the uncertain partisan situation.

MS # D-003

In Istria, the mining of bauxite and coal was constantly menaced by the partisans. On the whole, partisan tactics were directed in a skillful manner, primarily against transportation and traffic routes, as well as against high-tension lines. In this way, production in the affected plants was paralyzed without the necessity of a direct attack against the factories. The partisans correctly calculated that it would be definitely more difficult to guard a wide net of traffic routes and lines than to protect specific installations. In this way, the partisans crippled production very effectively in the Aosta Valley, where the dynamiting of a single bridge was sufficient to halt all traffic for a considerable length of time.

Additional partisan tactics consisted of terrorizing men who were willing to work in Italian war plants under German control. In some instances, large numbers of workers were intimidated and left their employment in the Plenipotentiary for Armament and War Production defense plants.

The Plenipotentiary for Armament and War Production accomplished much through negotiations and knew how to evade the most dangerous pitfalls. Negotiations with the partisans were carried on chiefly by the industrialists themselves to whom the Plenipotentiary for Armament and War Production had given complete freedom of action along these lines. During the winter, in particular, the partisans were inclined to enter into negotiations which in return for inactivity promised them food supplies.

G. Allied Air Activity

Allied air activity had the following effects on the armament industry and war production in northern Italy:

1. Direct Destruction of Industrial Plants;

MS # D-003

2. Paralysis of Traffic; and
3. Loss of Man-hours Due to Air Alerts.
1. Direct Destruction of Industrial Plants

The German observation and evaluation of Allied air activity in northern Italy led to the conclusion that the Allied tactics were as follows:

- a. In the beginning, destruction of individual plants.
- b. With the beginning of the summer of 1944, emphasis was shifted to disruption and paralysis of traffic.
- c. In the winter of 1944/1945, in addition to the emphasis on halting ground traffic, the Allied air forces began the systematic destruction of installations engaged in the manufacture and filling of ammunition, including those plants which turned out weapons and ammunition.

Among the individual plants which were initially destroyed by Allied air attacks, those of primary importance were part of the Fiat plant at Turin and the R I V plants at Turin and Villa Perosa, as well as the Dalmine steel and rolling mills.

The destruction of the R I V plants was a particularly severe blow to the entire German war effort, since after the destruction of the German roller bearing factory near Schweinfurt, the modern and efficient R I V plants had been selected to compensate for the bottlenecks that had occurred. The destruction of the plants was so thorough that repairs were no longer possible and the only course open was that of transferring the factories. The successful attack upon the Dalmine plant was of particular significance since the latter, with its very new output facilities, had developed into an important sub-contractor for parts of the recently introduced Panzerfaust; upon

MS # D-003

completion these parts were shipped to assembly centers in Germany. The results of the attack threatened to become even more effective as a deplorable heavy loss of life had occurred because of a defect in the air raid warning system, which led toward considerable dissatisfaction and fear among the Italian workers. However, the most urgent repairs were completed within a comparatively short time so that the factory was able to resume production within three to four months. Except for similarly rapid repairs in one of the Pirelli rubber factories which had been damaged on a much smaller scale, the comparatively rapid resumption of operations at Dalmine should be regarded as an outstanding achievement. As a rule, the repairs in Italy consumed very long periods of time, and there was no comparison with the speed in the removal of air-raid damage in Germany. As a result, damage incurred in Italian factories always had to be regarded as a particularly serious since in most instances it led to a prolonged interruption of work or brought production to a complete halt.

On the other hand, the destruction and damage to the industrial plants in northern Italy was in no way proportional to the losses which the German industries suffered as a result of Allied air raids. The Italian industry remained intact to a surprisingly great degree and was in a position to go into full-scale production as soon as electric power and fuel became available.

It is impossible to enumerate specifically the Italian ammunition producing and filling plants which were systematically destroyed by Allied air raids in 1944/1945. These installations were primarily located around the southern tip of Lake Garda, but were also distributed to other parts of northern Italy. By attacking these targets, the Allied air forces succeeded in February 1945 in eliminating all manufacture and filling of ammunition in

MS # D-003

northern Italy. The alternate factories, which were constructed underground subsequently achieved only a very limited output and were never entirely completed.

2. Paralysis of Traffic

The tactics employed by the Allied air forces practically nullified the Plenipotentiary for Armament and War Production efforts to keep Italian production rolling. The thorough destruction of Italian railroad lines, the elimination of daytime traffic on the highways through constant surveillance by Allied dive-bombers, attacks on moving trains, and other measures designed to halt all traffic resulted in the following serious consequences for the Plenipotentiary for Armament and War Production:

a. From the time that the latter had begun his work, he was faced with a tense traffic situation to meet the Italian industry's requirements. The German Army Group, and not the Plenipotentiary for Armament and War Production, had the final authority in all fields of transportation, such as the distribution of freight cars, the maintenance of railroad lines, the commitment of railroad engineer troops, the distribution of trucking tonnage, the allocation of fuel, and others.

However, only a few of the Plenipotentiary for Armament and War Production interests coincided with those of the Army Group, so that the Plenipotentiary for Armament and War Production was able to make only little use of the transport facilities placed at his disposal by the Army Group.

Army Group's main line of supply ran primarily from north to south, from Germany to the Brenner, to Verona, and from there to the front. The Army Group used all means at its disposal to maintain this line. Engineers and work crews were formed for employment at a moment's notice; as soon as

MS # D-003

the line was reopened, the trains which had backed up were ordered to proceed. Everything possible was done by way of active and passive air defense, such as camouflage and the commitment of anti-aircraft (Flak) to reduce the effects of the ever-increasing Allied air activity.

In contrast to the Army Group's supply line, the road net from west to east linking Genoa, Turin, Milan, Brescia, Verona, and Maestre, was the life line of the Italian industry in whose maintenance the Plenipotentiary for Armament and War Production was primarily interested if the flow of Italian goods to Germany was to continue.

The course of events made it inevitable that as the situation became more critical because of the intensified Allied air attacks on transportation, the conflict of interests between the Army Group and the Plenipotentiary for Armament and War Production also moved more prominently into the foreground. The constantly increasing flow of traffic from north to south finally led to the complete disregard and virtual abandonment of the east - west supply line. The same situation prevailed in regard to the distribution of freight cars and the allocation of trucking tonnage and fuel. These facilities, which were vital to the Plenipotentiary for Armament and War Production were constantly reduced to the extent that the Army Group was engaged in keeping the supply route from Germany to the Italian front open despite Allied air raids.

All of the Plenipotentiary for Armament and War Production attempts to counteract this course of events were generally unsuccessful. Strategic considerations were decisive during this period even though the Italian economy produced almost exclusively for the Army Group, at least during the final months of the war.

MS # D-003

b. From the very beginning, the Plenipotentiary for Armament and War Production had seen to it that the Italian government as well as the Italian people took an active part in keeping the traffic routes open. In addition to the almost incredible inefficiency and lethargy displayed by the Italian government in this sphere, all the Plenipotentiary for Armament and War Production efforts to remedy the situation suffered from the workers' constant fear of Allied dive-bombers. On many occasions, after a hundred Italian laborers had been assembled and equipped with the necessary tools for the purpose of filling in bomb craters, the sudden appearance of a vapor trail of an Allied dive-bomber many miles away was enough to scatter the entire crew, so that actually nothing was accomplished.

c. After the original agreement between Germany and Switzerland permitting German trains to pass through the latter country, the Plenipotentiary for Armament and War Production transportation difficulties were to some extent alleviated. The southbound trains now carried coal from Germany to Italy, while the trains going north carried Italian-made goods to Germany. However, in time the Swiss clamped down on the German transit traffic which gradually came to a complete halt. As a result, the railroad line leading through the Brenner Pass had to carry the additional traffic just when the Allied air forces were concentrating their attacks on the Italian routes of communication.

d. The Allied air attacks, which were still gaining momentum, quickly reduced the motor transportation and fuel which the Army Group had made available to Plenipotentiary for Armament and War Production. The daily losses caused by Allied dive-bomber attacks began to mount, so that it gradually became impossible to compensate for the lack of railroad transportation by

MS # D-003

the use of trucks. In the end, the Plenipotentiary for Armament and War Production even faced a shortage of menthane fuel which previously had been exclusively under his control, since the Army Group had shown little interest in this type of fuel. However, with the increasing scarcity of ordinary fuel, other agencies and the Army Group in particular remembered this source of fuel and began to tap the Plenipotentiary for Armament and War Production supply.

In evaluating the above factors the reader must bear in mind that the Plenipotentiary for Armament and War Production situation deteriorated progressively more with each Allied air attack, loss of transportation facilities, and shortage of fuel, so that finally all industries in northern Italy were adversely affected. It became evident that it was no longer possible to distribute the German and Italian coal shipments to the individual plants. In addition, the output of ammunition in particular was seriously impeded, since prior to final assembly the various parts and components had to be brought to the assembly plants from far-flung points of northern Italy.

3. Loss of Man-hours Due to Air Alerts

The output of the Italian war plants under the Plenipotentiary for Armament and War Production control was further reduced by air alerts, which mounted steadily and brought work to an almost complete standstill. In this connection, the following factors had a particularly unfavorable effect:

a. The Italian air raid warning service, which was initially retained after Italy's defection in September 1943, was still unfamiliar with the German system of classifying alerts according to the severity of the imminent air raid. This classification was based on the reports of the air observers who

MS # D-003

counted the enemy aircraft and observed their course. The lack of this system in Italy had the effect that a full alert was sounded even at the sudden appearance of a nuisance raider, regardless of its course. Naturally, all work ceased over a vast area as of that moment.

After considerable effort the German military authorities became convinced of the justification of the Plenipotentiary for Armament and War Production demand for a warning system similar to the one being used in Germany. However, it was still more difficult and time consuming to overcome the opposition of the Italian government and the Italian Ministry of Labor, in particular, to any changes. During the negotiations conducted in this direction it became plain that the Italian government did not desire a change in its alert system even though these objections were veiled, as usual.

As a result, the alert system was not actually changed until the beginning of 1945, so that the change occurred at a time when the coal and traffic situation had already brought about a considerable decline of the Italian production. The most favorable time for the change had already been wasted as a result of the prolonged deliberations of the Italian government.

b. However, the introductions of the preliminary alert which signified that dive-bombers were in the vicinity, or that bomber formations were approaching was not very beneficial, since it was impossible to keep the Italian workers at their machines after the alert warning had been given regardless of whether a full or only a preliminary alert had been announced. Even the introduction of a bonus system for workers who remained on the job as well as deductions from the salaries of workers who left during the preliminary alert failed to bring about any improvement. The introduction of a preliminary alert to injure uninterrupted and continuous work did not

MS # D-003

compensate for the loss of time caused by the almost constant presence of Allied dive-bombers over the industrial areas.

c. Even changing over to night shifts, when Allied air attacks were less likely to occur was found to be impracticable. The Italian workers reacted with such marked active or passive resistance that utilization of this expedient seemed more likely to create discord in labor relations than to supply a practical solution of the problem.

d. Finally, it must be stressed that the alerts promoted shirking and strengthened the general apathy of the average Italian worker. Aside from the already seriously affected areas where the alert signal was all that was needed to cause the workers to desert their factory and village to take shelter in the countryside, there were other factories where it was typical during the alert for the entire personnel to assemble in the yard, enjoy the sunshine, and engage in animated conversation. This situation progressed to such an extent that frequently women could be observed quietly sitting next to their machines and doing needlework. Consequently, it was not predominantly fear which caused all work to stop upon the preliminary alert signal but primarily the presumed right of the workers to take time off, which, according to their interpretation, was their own when the warning signal was given.

As a result of the Allied air activity, there was a great loss of man hours which further reduced the output of the Italian industries. This loss of time, naturally, varied according to local conditions. Percentages approaching a degree of accuracy could not be obtained, but it would be reasonable to state that at various plants the loss of time due to air alerts amounted to at least thirty percent.

MS # D-003

Aside from the direct loss of working hours as a result of Allied air activity, the indirect effects of the air alerts on the Plenipotentiary for Armament and War Production control of the output of the Italian industry must also be mentioned.

In view of the small staff which was at the Plenipotentiary for Armament and War Production disposal only an extremely small number of supervisory personnel could be permanently assigned to one plant. As a result, the Plenipotentiary for Armament and War Production had to rely more or less on the information submitted by the Italian industrialists. Whenever the Italian plants failed to meet their monthly quota, they usually sent a report to the Plenipotentiary for Armament and War Production pointing to the air alerts as having interrupted normal production. Since it was impossible for the Plenipotentiary for Armament and War Production to check each report in detail, it was only too evident that the air alerts served as an excuse for the Italian industrialists to hide their unwillingness to produce. In any event, under these circumstances a reliable control and checking of the actual monthly output was only possible to a limited extent.

A detailed analysis of all the elements which impeded and curtailed production led to the conclusion that the lack of coal and the halting of traffic by Allied air activity were the factors which had hit production the hardest. It would be inconclusive, however, to consider and evaluate these factors individually since they all directly or indirectly affected each other, so that an over-all picture of the Italian situation is required, as it appeared to the Plenipotentiary for Armament and War Production, who did everything in his power to improve the situation. Consequently, it also became necessary to the Plenipotentiary for Armament and War Production to

MS # D-003

concern himself with matters which at first glance did not seem to be directly connected with the effects of Allied air activity.

IV. Transfer of Industrial Plants

A. Reasons for the Transfers

The reasons for the proposed transfer of industrial plants were as follows:

1. Transfer of industries from central to northern Italy because of the military situation;

2. Dispersal of industries within northern Italy in view of increased Allied air activity; these transfers fell into two categories:

a. In the majority of cases, the transfers were effected as preventative measures, before Allied attacks occurred.

b. Industries were transferred after production centers had already been destroyed.

B. Transfer of Industry to Locations Above Ground

In line with the decentralization of industry, combined with the abandonment of Central Italy by German forces, industries were transferred to locations above the ground in small towns, valleys, remote regions, in the northern Po plain, and in the Alpine valleys.

From the very outset the Plenipotentiary for Armament and War Production observed that for once the Italians had made very thorough and exceptionally skillful preparations. In this connection, the Savoia Marchetti plant may be cited as an example. Its main production centers had been dispersed to

MS # D-003

skillfully camouflaged plains and woods in an area having a diameter of approximately ten miles around Sesto Calende (Lake Maggiore); the plants manufacturing the individual parts were appropriately distributed so that the production followed its normal course.

The Italian industrialists also displayed a lively interest in the transfer of other industries which was subsequently recommended by the Plenipotentiary for Armament and War Production, because they considered the transfers a way to save their property from Allied air raids and at the same time have their plants moved at the Plenipotentiary for Armament and War Production expense. The transfers involved one hundred installations, to use a conservative figure.

C. Transfer of Industries to Sub-Terranean Locations

1. Date of the Initial Undertaking

Viewed in retrospect, it should be stated that at the time it was impossible for the Plenipotentiary for Armament and War Production to lend the necessary emphasis to the sub-terranean transfer of industries. There were other critical programs which had priority and demanded all of the Plenipotentiary for Armament and War Production personnel. Consequently, the initial transfer of industries to sub-terranean locations did not get under way until the spring of 1944, so that actually only three installations became productive. They were the Cimena ball bearing plant east of Turin, the Torbile aircraft fuselage plant at Lake Garda, and Custozza aircraft engine factory south of Vicenza. The unsatisfactory conditions in the aircraft engine plant which was located near a highway which ran along the western shore of Lake Garda were due to other circumstances. Plans were made to move twenty-three installations,

MS # D-003

and by April 1945 ten transfers had been completed.

2. Potential Sites for Sub-Terranean Plants

Only a limited number of sites were available for the proposed subterranean factories, and due consideration had to be given to the military situation. Moreover, since only those sites which were assured of an adequate supply of power could be considered, it became even more difficult to find suitable locations.

Acceptable sites were:

- a. Natural caves.
- b. Man-made underground passages and tunnels.
- c. Tunnels to be excavated.

The Plenipotentiary for Armament and War Production exploited all three possibilities. They were as follows:

re: a. The caves of Custozza (Vincenza).

re: b. The water storage tunnels of Cimena near Turin (roller bearings).

The water storage tunnels of Honebard in the Aosta Valley. (The project had to be abandoned as a result of partisan activity, as mentioned earlier in this study.).

The tunnel on the western shore of Lake Garda.

(engines and undercarriages for infantry heavy weapons).

The water storage tunnels of Torbile, on the eastern shore of Lake Garda.

(aircraft fuselages).

MS # D-003

The Wirgl highway tunnel near Bolzano.

(roller bearings).

The Sarnta Valley highway tunnel.

(Ammunition).

re: c. Construction of tunnels near the Beretta plant at Gardone Val Trompia (sub-machine guns).

Construction of tunnels in a hill at the approaches to Trento.

Furthermore, at various locations, but particularly in the Alpine approaches, the construction of tunnels had either been planned or was already in progress. The temporary production centers above the ground, which were located in the immediate vicinity of these tunnels were gradually to have been moved underground.

3. Difficulties in Moving Plants Underground

The difficulties which had to be surmounted during the process of transferring the Italian plants to sub-terranean locations were in many ways identical to those which the Plenipotentiary for Armament and War Production had encountered in his assigned mission. The shortage of motor transportation and gasoline had a very unfavorable effect, since the plants for the most part moved to areas which were inaccessible to railroad transportation. The following difficulties arose specifically in plants which had been moved underground.

a. The plants transferred to sub-terranean locations remained vulnerable as far as the following factors were concerned:

MS # D-003

- (1). Power lines.
- (2). Transportation in bringing in raw materials and shipping out the finished product.
- (3). Supply of labor.

In some instances it was exceedingly difficult to guarantee safety in underground installations, such as the Honebard project.

b. For the construction of the tunnels numerous compressors in good working condition were required. It was impossible to procure these compressors in sufficient numbers at short notice, particularly, in view of the shortage of this item in Germany.

c. Since the Organization Todt (Para-military construction organization of the Nazi Party, auxiliary to the Armed Forces High Command (Wehrmacht). Named after its founder, Dr. Todt. It consisted of a cadre of engineers, expanded as necessary by the use of hired, conscript or foreign labor) was fully occupied in constructing positions in the Appenines and at the Alpine Approaches, the Plenipotentiary for Armament and War Production had to rely to a large extent on Italian contractors; however, the latter lacked adequate equipment and did not tackle the problem quickly enough which was important if anything of value was still to be accomplished before it was too late. The Organization Todt was already using the most productive Italian construction firms for its construction tasks, so that the Plenipotentiary for Armament and War Production had only a comparatively limited choice.

d. With the deterioration of the military situation the transfers were finally limited mainly to the projects at the Alpine Approaches. However, the Plenipotentiary for Armament and War Production had to overcome

MS # D-003

considerable opposition on the part of both the industrialists and labor. Even though the industrialists seemed inclined to co-operate in transferring industries to northern Italy, they became passive and in fact even displayed a great deal of opposition as soon as they noticed that the installations were to be transferred into the area under the jurisdiction of the Supreme Commissars. This opposition did not even cease when the Plenipotentiary for Armament and War Production assumed the entire cost of transferring the Italian industries to the sub-terranean sites. The confused political situation in this area was responsible for the industrialists' reluctance which could not be overcome. In a few exceptional cases, due to the Plenipotentiary for Armament and War Production efforts, the main differences between the latter and the industrialists could be reconciled and an amicable settlement reached. Due to the Italian outlook on life, it had already been difficult to induce Italian workers to move along with their factories even within Italy proper. However, these difficulties became even more pronounced when the workers were to be transferred to sub-terranean sites at the Alpine Approaches. The Plenipotentiary for Armament and War Production was finally compelled to provide quarters for the workers and their entire families, or else grant them a certain amount of leave after completion of a six-week work period; transportation was to be authorized at the employer's expense. This procedure, aside from the additional enormous expense could not be supported for any length of time by the already overburdened Italian transportation system.

V. Collaboration and Attitude of the Italian Industrialists

Insofar as any uniform and generally applicable description can be given, the attitude of the Italian industrialists was determined by factors which were partially negative and partially positive in their effects on the collaboration with the Plenipotentiary for Armament and War Production.

MS # D-003

A. Negative Factors

1. The overwhelming majority of the Italian industrialists rejected the principles of Fascism and consequently also the Italian alliance with Germany. In keeping with the politeness which is so peculiar to southern Europeans these sentiments were never expressed openly. Nevertheless, appropriately framed remarks left little doubt as to the true feelings of the Italian industrialists. This became only too obvious at a formal gathering which the Plenipotentiary for Armament and War Production held on 27 January 1945 to wind up the fiscal year 1944. On that occasion it became evident that not one of the 17 leading industrialists who had been invited was personally acquainted with the Italian Governor of Milan who was also present. This example serves to show that there was anything but a close tie between industry and the leading political figure of this main industrial city.

2. It was apparent that the prolonged war caused the industrialists to fear further damage to their private property from both air and ground operations. Consequently, they had little desire to contribute in any way toward strengthening the German war effort.

3. The Italian industrialists also felt that everything contributing toward prolonging the war would delay the time when they would again be able to engage in peacetime business. They were particularly interested in the latter for the following reasons:

a. The Italian government as a contractor for war production, had failed miserably as far as the payment of war contracts was concerned. Compared to the subscribed capital and other reserves, the government had allowed corporations to show excessively high, doubtful outstanding amounts on their

MS # D-003

balance sheets, and thus had endangered their financial status.

b. A consistent conversion of the majority of the plants to war production had not ever been achieved, and, as a result, these plants were only organized to operate at a profit in peacetime production.

Consequently, the Italian industrialists were simply adhering to the law of self-preservation if they were eager to resume peacetime production as quickly as possible in order to stabilize their accounts. They realized that it would not be to their advantage to support the war effort.

4. Furthermore, in their collaboration with the Plenipotentiary for Armament and War Production, the industrialists had difficulties with their employees who were actually earning a livelihood on the German war contracts, but who on the other hand had succumbed to allied and communist propaganda to which they lend an attentive ear. Consequently, they were easily inclined to look at the situation only from the political angle when they should have been glad that they even had an opportunity to earn a living for themselves and their families.

5. Finally, the industrialists courted disaster by collaborating with the German authorities. The treatment of collaborators in France had become common knowledge through broadcasts and the circulation of Swiss newspapers throughout northern Italy. The danger to the industrialists increased with the deteriorating German military situation, and finally became decisive for their general attitude.

B. Positive Factors

In contrast to the negative factors the industrialists could gain the

MS # D-003

following advantages from loyal collaborators with the Plenipotentiary for Armament and War Production:

1. The German war contracts in Italy kept the plants and workers busy and enabled them to earn a livelihood. As long as the Italian industrialists had to count on the continuation of the war as an unalterable fact about which they were unable to do anything, it was preferable to have the machines running and the workers employed instead of having to put up with rust, unemployment, migration of permanent employees, and the dismantling of idle machinery.

2. The Italians apparently preferred collaboration with the representatives of the Plenipotentiary for Armament and War Production to the German Military Administration which consisted exclusively of German civil servants. The German industrialists and economists who represented the Plenipotentiary for Armament and War Production were for the most part able to resume old business connections. The Italian industrialists may have been influenced to some extent by the thought that their former German business contacts, who were now confronting them in an official capacity, would not completely lose sight of furthering their postwar business in fulfilling their official tasks.

3. The Italians were familiar with the policy pursued by the Plenipotentiary for Armament and War Production in relation to the trends emanating from Berlin. Thus they came to realize that the Plenipotentiary for Armament and War Production was their best protection against the transfer of installations, machinery, supplies and skilled workers. As a result of this collaboration, it only happened on two occasions that the Plenipotentiary for Armament and War Production exercised his special prerogative which had been provided for in the agreement with the Italian government of 3 July 1944, in

MS # D-003

transferring an installation to Germany. However, even in both cases, the controversial issue was discussed once more by the Plenipotentiary for Armament and War Production at the weekly conferences with the Italian Minister Tarchi and the affected Italian industrialists; finally, an agreement was reached which was satisfactory to all parties. Consequently, the reviewing authority which had been set up to solve such controversial problems, consisting of the German Ambassador and the Italian Minister Tarchi did not have to intervene in the matter. This proved that the industrialists were aware of the fact that their interests were best served by the Plenipotentiary for Armament and War Production.

4. The industrialists also came to an understanding with the Plenipotentiary for Armament and War Production in the field of price policy. The Plenipotentiary for Armament and War Production used his business sense in advising the Italian industrialists of loopholes and helping them to circumvent the price ceilings, so that they would not be compelled to sell below cost, this was more than could have been expected from a more bureaucratic administration. The same principle applied to the financing of current orders which was not even comparable with the inefficient methods which the Italian government had been using for years. Even though the Plenipotentiary for Armament and War Production was unable to give any assistance to the plants in collecting their large claims against the Italian government the Plenipotentiary for Armament and War Production nevertheless gave financial support to the Italian industrialists whenever they were insolvent by prepaying current orders. The Plenipotentiary for Armament and War Production agency functioned more or less as a commercial enterprise and not as a bureaucratic authority. The German industrialists who functioned as representatives of the

MS // D-003

Plenipotentiary for Armament and War Production knew when and where the shoe pinched the Italian business men and attempted to help them from the commercial point of view.

5. Furthermore, the Italians knew that the Plenipotentiary for Armament and War Production played an important part in limiting the destruction of industrial plants for military reasons. The Plenipotentiary for Armament and War Production had materially contributed to the idea of paralyzing industrial plants instead of destroying them. The initiative for this action had emanated from the Plenipotentiary for Armament and War Production rather than from the Italian government. Finally, the Italian industrialists also realized that the Plenipotentiary for Armament and War Production had subsequently seen to it that the orders issued for paralyzing industrial plants were rescinded altogether when it became evident that the military situation could not be improved by these measures. Under these circumstances, it is not surprising that many industrialists saw in the Plenipotentiary for Armament and War Production an assurance that their property would remain intact, and adjusted their attitude accordingly.

6. It finally became common knowledge among the Italian industrialists that in important matters the Plenipotentiary for Armament and War Production decisions were always based on the axiom that results were all that counted. The industrialists could always depend on the Plenipotentiary for Armament and War Production support if they had difficulties with the Italian or German authorities. As long as the output of the industrialists met the desired standards and a corresponding recommendation was received from the Plenipotentiary for Armament and War Production representatives, the latter intervened and in the majority of cases met with prompt success. In addition, the

MS # D-003

industrialists felt that the Plenipotentiary for Armament and War Production would protect them against attempted socialization. Even though the Plenipotentiary for Armament and War Production was not authorized to interfere with Italian domestic affairs he still took action when in the wake of a socialist reorganization, a change in the management of an industry under his control was to be made. In the most instances the proposed factory manager was to be rewarded in this way for his work in the Fascist Party, but was hardly qualified for the job. In these instances the Plenipotentiary for Armament and War Production issued a sharp protest pointing out the detrimental effects which such a choice would have on the plant. Since this argument could never be refuted, the former manager of the factory usually was reinstated and the attempted socialization was dropped altogether. As a result of this position taken by the Plenipotentiary for Armament and War Production, emphasis on socialist measures on the part of the Italian government was shifted to plants which were not under the Plenipotentiary for Armament and War Production control. This suited the interests of the industrialists who were collaborating with the Plenipotentiary for Armament and War Production.

C. Conclusions

From an evaluation of both the negative and positive factors, the following picture emerges:

1. From the Plenipotentiary for Armament and War Production Standpoint

The Plenipotentiary for Armament and War Production had no illusions in regard to the fact that the vast majority of Italian industrialists literally counted the days until the Allies' arrival which would bring an end to war in Italy - a war which for them had meant an extraordinarily heavy burden. Nevertheless, the Plenipotentiary for Armament and War Production was able to attain

MS # D-003

a smooth working arrangement which benefitted both parties. This policy was perfectly adapted to the prevailing situation, particularly since the Plenipotentiary for Armament and War Production lacked the executive power to enforce any other policy. In any event, the Plenipotentiary for Armament and War Production agency was not organized to enforce any compulsory measures.

2. From the Industrialists' Standpoint

The Italian industrialists in most instances felt that the Plenipotentiary for Armament and War Production agency represented "the lesser evil", and in line with the situation always gave the Plenipotentiary for Armament and War Production just enough support so that he was not forced to change his policy of economic collaboration, or else resign. The industrialists realized that a reorganization of the Plenipotentiary for Armament and War Production agency by the German authorities at Berlin could only have worked to their disadvantage without helping their cause in the least.

(signed) Leyers

MS # D-003

Appendix 2

C O M P O N E N T S O F T H E A R M E D F O R C E S
H I G H C O M M A N D

- I. ARMED FORCES HIGH COMMAND (OKW) (Administration)
- II. Army High Command OKH (Ordnance Office)
 - A. Weapons
 - B. Ammunition
- III. Special Naval Staff
- IV. Staff Officer of the Air Force (Luftwaffe)
- V. Armament Detachments:
 - Bologna
 - Genoa
 - Turin
 - Milan
 - Verona
 - Trieste