UNITED STATES STRATEGIC BOMBING SURVEY

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INTERVIEW WITH MINISTER SPEER, 17 May 1945

Note: "Q" indicates the question asked by the interrogator, "Sp" the reply by Speer.

Q. In general, we have obtained a rather satisfactory picture of the development and organization of the Ministry. Various points are still not clear, especially the process of administration itself in critical stages of production, etc. In this connection we had several other questions: Which department formulated the final demands (requirements) in detail, which are necessary for the waging of the war?

Sp. The Wehrmacht, divided according to the three parts of the armed forces, which separately requisitioned, even for the same types of product, for

example, for guns -

for antiaircraft (Flak) - the Air Forces Coast artillery - the Navy Other artillery - the Army

In the matter of requirements, one must distinguish between tactical requirements which at the same time are demands for new development and those which are demands for volume of production, i.e., output.

The tactical requirements were placed with all three parts of the armed forces by the existing General Staffs.

Are you interested in the development of only in the requirements for volume?

- Q. More in quantity.
- Sp. Technical development was demanded by the General Staffs, which passed it on to the armament agencies. The armament agencies then negotiated directly with the firms.

The volume of production was, in general, determined through programs during the time in which planning could still be done. Later, when air attacks became heavier, it was no longer possible - from Industry's view-point to draw up proprams for the long run, for example, one year.

- Q. Since what date?
- Sp. That varies. An initial date cannot be named. It gradually diminished from programs to monthly advance reports, with the beginning of the big attacks.

There were also 1944 programs, however, for example some were attempted with airplanes. For Army equipment there were for 1944, in general, no more longrun programs laid down, although there were rough plans drawn up for short periods ahead.

Q. How was the planning made in normal times? For example, OKH (Supreme Army Command) with requests for tanks, OKL (Supreme Airforce Command) with requests for airplanes. Did these interfere with one another?

Sp. Before I began, these questions were worked on by General Thomas, who tried to get decisions on priority at OKW (Supreme Command of the Wehrmacht).

While General Thomas and his people were of the opinion that only one or possibly two programs could be put through - either Air Force or Army or Navy in full volume - and always one would have to step back to the advantage of the other - I was of the opinion that one could put through all three simultaneously.

I was an opponent, if one wants to say so, of the programs, because all programs produce less output if one utilizes the program according to the calculated volume.

As I began, it was the practice for the program requirements for materials, like copper, steel, etc., to be collected from the individual Armament agencies of the Armed Forces, in order to be consolidated for Thomas.

It was a peculiarity of our offices, that each would make a certain increase in the requests, that the previous one had made, in order to proceed securely and receive no reproach.

Thus, the requirement for copper at that time, as well as I can remember, was higher for our armaments than the entire world production, therefore, an entirely theoretical figure, so that everyone said, this program can never be carried out in entirety.

Q. Did General Thomas have the function at that time of reducing raw material requirements, in his capacity as Chief of the Armament Office (Ruestungsamt)?

Sp. At that time, as far as I know, no one took the trouble to control requests or to cut them down, but one was satisfied to consolidate these requests, and determine how much could be allocated of the total available amount.

Q. Isn't it true that General Thomas also determined the priorities?

Sp. Together with General von Hannaken, who had the Main Department II in the Ministry of Economics and who officially planned the allocation.

The official allocation lay with the Ministry of Economics which even announced how much of the total available amounts would go to the general economy and how much to the Armed Forces.

Out of this, the condition arose, that the general economy at that time got too much material in relation to armaments.

I believe that at that time in the allocation of raw steel the armaments for all three Armed Forces was approximately 30 - 40 % of the total iron and raw steel production, while later under me, armaments got 60 % and the remaining economy 40 %.

Q. Did the Ministry of Economics, after you took over armaments, continue to plan raw material allocations and only get your signature on it?

Sp. No. I was, indeed, at first still building things up, but after half a year I had relieved General Thomas as well, because he was naturally too pessimistic and calculating for me, and I also let General von Hannaken go, at the same time creating the Central Planning, which then planned the entire allocation under my Chairmanship.

Unofficially, Kehrl also belonged to the Ministry; for all practical purposes he was "my man" in the Ministry of Economics.

Only after the Ministry of Economics in the fall of 1943, turned over these jobs to me, did Kehrl come over to the Planning Office in my Ministry.

Q. What was the relationship between the Planning Office and Central Planning (Planungsamt and Zentrale Planung)?

Sp. Central Planning was to be looked on more from the standpoint of power politics (Goering). It sufficed to let the job of the Four Year Plan remain in existence and nevertheless be authorized to work freely and make decisions.

Q. Did Central Planning really sometimes turn down the decisions and conclusions of the Planning Office, or was it more of an automatic procedure to confirm what the Planning Office decided?

Sp. After the creation of the Planning Office, for all practical purposes to took over the duties of the Central Planning. Before this, while Kehrl was still in the Ministry of Economics, these questions were comprehensively discussed and decided in the Central Planning. Afterworks this was no longer necessary.

For me, Central Planning was to a certain extent the neutral place where I had the opportunity to make super-ministerial decisions over the other ministries (as, for example, the Food Ministry in connection with nitrate questions, where they and I competed for the material for powder and explosives).

At the moment when the Planning Office appeared, these things were first discussed there and negotiated, and my authority was so great that the Ministries would conform to these preliminary decisions.

In case this authority was not recognized, or decisions were considered too burdensome, Central Planning was called in.

It happened for example, that in the allocation of nitrates for the year 1944, the Food Ministry said that this question is so decisive that he could not rely soley on the Planning Office.

In these cases the decision was reached through Central Planning.

Q. Therefore, only in unusual cases of conflict?

- Sp. Yes. And also the basic questions, which were generally brought to light by Kehrl.
- Q. What was the function of the armament Council (Ruestungsrat)?

 Sp. An honorary organization for people who were kicked upstairs from Armament work. It never met.
- Q. It is difficult to understand how it was possible for the OKH and OKL and OKM to continue planning work after it was no longer possible to plan for more than a year?
- Sp. Planning was done but on the basis of the allocation of the available materials. Raw steel production was decisive, which was always allocated for a quarter in advance, and for the coming quarter one month before the beginning of the quarter.

Quota certificates were given to the Armed Forces and on the basis of these quotas the Armed Forces, and later the Main Committees, could calculate what they could make, That was the effective basis.

- Q. Was it decided to go over to the defensive at this time, after long-range planning was no longer possible nor desired, or did the offensive plans remain?
- Sp. Production was oriented toward offense and defense almost up until the end by all three Armed Forces. It is difficult to differentiate in the case of the army. If I take the airplane program as an example, it can be seen that bombers were cut out only very late in favor of fighters. That was only in July 1944, thus toollate. The reconversion had taken too long before making itself noticeable.
- Q. It is the opinion of most big industralists, with whom the Colonel has spoken previously, that the end of 1943 saw a basic change to the defensive.
- Sp. Practically, one can show quite clearly in the case of the Air Force, when one went from the offensive to the defensive. That was the case there, because two types of weapons can clearly be distinguished, while with other things offensive and defensive weapons are the same Panzers are Panzers; guns, guns; ammunition, ammunition.
- would like to ascertain if he has understood your explanation of raw material allocation: The demand was handed in to you, and it was then decided by the Planning Office how much individuals could get and needed. Then they got checks for the quantities of raw materials and these then went into production.

- Sp. No, for the most important things I made the decisions myself. That was mainly in the allocation of steel.
- Q. Are there reports on the distribution of raw materials within the individual raw material fields.
- Sp. Among others, with Bosch (of the Planning Office) in Hamburg.

More important than the actual allocation of materials from 1942 on is the internal procedure, which lowered the input per weapon and piece of equipment, so that one could make more with the same quotas. The main concern of planning, from me down, was to determine intuitively, one must say, how much one could save (cut down) in the requests of industry all the way to the requirements of the armed forces or later of the Main Committees together with the Armed Forces.

For example, we quarreled for a long time with the Navy in 1943 about the naval construction program. And indeed we could not place at the disposal of the Navy the amounts of steel that it needed. The Navy at that time still had their own armament program. We said we would meet their needs with the amounts of steel which had previously been at their disposal. That is just about what we did. And that happened because beginning with industry and the requirements of the concerns themselves and through all the stages, each was untrue and had added on something, so, that at the end threefold requirements arrived at the military Office which was not in a position to examine them.

In Blankenburg I have one of my lectures with slides in which a contrast in the growth of production is to be noticed; for example, in artillery.

Let us assume that from 1942 to 1943 it grew sixfold, yet at the same time we got by with an increase of the quota volumes by 30 %; that means we reduced the quota volumes to one-fifth. That was not due to a lightening of the artillery pieces, but to a stopping of cheating with the input volumes.

From this you will also understand why I was an opponent of this theoretical planning, because there were so many sources of error in it which came as a result of long-range planning. One could do better on the basis of raw materials. The Main Committee Weapons, for example, by the beginning of 1944 still promised me to make twice as many weapons by the end of 1944 as at the beginning with the same quantity of steel, that I had previously allocated.

Now, that was not just idle talk, rather it was the result of rationalization, that is, with a smaller input.

Q. Did the Ministry help the producers redesign all the weapons possible, and machines too, or was that left up to industry?

Sp. I must go back a little to answer that. In 1942, our armament industry was not yet geared to mass production in that sense, but the figures which were

reached at that time show that until then one had practically run a handicraft armament. That was based on the fact that we had few large concerns, but many split-up industries of medium-sized plants. Each plant wanted if possible to have 3, 4 or 5 orders at once, if possible from different parts of the Armed Forces, for different types of equipment, so that they would still have orders to work on in case of a sudden change in the war situation. Thus was the split-up there.

Q. Did you then direct the contracts yourself to the producers and determine who should make what, or did that take care of itself?

Sp. I entered the job as a layman, and as such surrounded myself with good specialists and only drew from industry those who were described to me as being the best, and these I provided with dictatorial powers over their field of production. For example, I placed Mr. Roland of the Edelstahlwerken in Krefeld, who already worked with armored vehicles (panzers), over the entire Panzer production, and he could divide up his work as he wished. Roland, for example, could determine independently of the armament Offices where the individual panzers were to be produced, where Panzer components were to be made, and how the materials which he received for total Panzer production were to be divided among the individual firms.

Under Roland there was then a division into the so-called special and working committees, which again consisted only of people from the industry. We had two principles, first, that these organizations should consist only of people from industry, and second, only technicians from the industry. And here one thing was proved to us, that the technician looked at a technical problem so fanatically that he approached his task over and above the interest of his firm. That was always the universal phenomenon, so that the captains of industry and the business leaders of these concerns fought the work of my people for a long time and did not like it, although they came out of their own concerns.

Q. Have the substitute materials, which were produced to stretch out the raw materials in general reduced the effectiveness of the weapons?

Sp. No. In each field - for the substitution of copper for aluminum, the saving of chromium, molybdenus, etc., we set up Commissars in the Main Committees. These were under the leadership of a man named Houdremont, who worked with Krupp in Essen. His work was so excellent that we really had no reduction in the quality of weapons. For example, the Panzer steels were the same since the beginning of the war, almost better at the end. Roechling, who had a very good work staff, played a very big role with many ideas to increase the quality of steel and nevertheless to reduce the amount of alloyed metals.

Q. In regard to the questions about division and allocation of labor: What were the exact duties of Sauckel in this connection?

Sp. Here it was the same battle, as in other countries, as for example in England; the Minister of production could not cooperate with the Minister of Labor in his affairs.

I had the opinion that labor input belonged to me, and also even the question of manpower supply, while Sauckel represented the standpoint that not only manpower supply was his business, but also the question of how manpower should be brought to the place of work.

- Q. Who determined the total number of foreign workers that were necessary?

 Sp. The request came from us, agriculture, forestry, etc. We saw on the basis of the requirements of industry that we needed so and so much manpower altogether. My goal was to get control of labor input. Sauckel succeeded because of his powers to remain independent. He also did not usually how to Central Planning. That was at the time, however, more a question of power politics, rather than an objective one, since Sauckel, as a Gauleader, was at the top with Borman. Thus the thing was not settled on a purely rational basis.
- Q. Was the allocation of workers provided by Sauckel taken up by your officials, and if so, who handled that?
- Sp. Yes, in the first period until the middle of 1944 by Colonel Von Nicolai, the Armament Inspector in Salzburg, and from then on by Schmelter, and also quarrels always arose on the question of allocation. The figures were never in agreement.
- Q. Were you, thus, dependent on raw material?
- Sp. No, that is in another connection. We calculated the manpower that we had to apply in the factories, while Sauckel credited us with the amount of labor which had been referred to us from the labor office. But referral from the labor office by no means meant that the people appeared at the shop. In conclusion to this, I might say that the question of labor input was the only completely unsolved problem of administration in the house which I had built.
- Q. Was the allocation of industrial labor handled on the same basis as the allocation of raw and basic materials? For example, for periods?
- Sp. We did not get manpower requirements periodically but more according to the importance of various specialized programs. That is, there came from above the request, for example, to increase the tank (Panzer) program, then it was attempted to direct additional manpower into the tank program, while for other production the requirements were satisfied by normal diversions from the Labor Offices. The firms always made their requests to the Labor Offices, which collected them for the Regional Labor Offices (Landesarbeitsämter) and finally gave them to Sauckel. Special priorities were designated which were given out by us together with Sauckel and which instructed the Labor Offices to fill that demand ahead of all other requirements.

Red letters went from us to Sauckel and from him to the Labor Offices. He had to be called in. These red letters were stamped when the requirements were met. That was only control that I had. All other allocations were quantitatively uncontrolled by me. It was estimated that the number of the so-called red letters did not exceed approximately 10 - 20% of the total manpower affected.

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- Q. Are you informed as to where the reports of the Labor Offices are to be found?
- Sp. Min. Dir. Timm, who was the next in line to Sauckel, and who is a very sensible man, must be in the area (Flensburg).
- Q. Who controlled the functions of the Construction Office Organization Todt (Amt Bau OT)? What was the control procedure?
- Sp. The Todt Organization originated as a part of the General Inspector for the German Highway System and only got the name "OT" on the West Wall job. With the march into France, it was brought by Dr. Todt into the form which it now has, that is, a half-military construction organization based on private economic principles. In general with us, in contrast to you there is a difference military rank has to be earned (sweated out). In the OT rank was bestowed on the basis of capability and professional accomplishment. If, therefore, someone was previously a construction foreman, he got the corresponding rank, without having to go through the lower grades. For you that is more natural than for us.

That was the simple reason why the OT would complete better work than the Engineers or Construction Batallions, in which often a school teacher or someone like that lead the unit and a technician had to serve as a sergeant because of his military career.

- Q. Who directly controlled the organization after Todt's death?
- Sp. I took it over and was Chief of the OT. Under me, Dorsch was Representative for the OT. When I first took it over it was an organization that carried on construction in the occupied regions outside of Germany under Dorsch while inside of Germany construction was directed by Schulze-Fielitz or Steffens. Within Germany, it was the so-called "Plenipotentiary for the Direction of Construction in the Four Year Plant".
- Q. To what extent was the OT utilized in order to rebuild the industrial capacity of Germany, or to protect and maintain it after the heavy air attacks started?
- Sp. In order to answer that I must go back a bit further. The OT had for a while very nice jobs in other countries Submarine pens, the Atlantic Wall, and in addition more comforts in the occupied territories. For this reason all the capable people went to the occupied territories.

The leading people of the OT were in general construction officials and not men from the construction fields. When the air attacks became heavier, I then tried to create a new organization with new talent, as emphasized, out of the still inexhausted construction economy. From this originated the reorganization of the Construction Office (Amt Bau) with Stobbe Dethloffsen and the Main Committee for Construction with his associate partner (both from the building trades). This Main Committee for Construction then together with Stobbe-Dethloffsen's Construction Office after three months cooperated very well and got especially good results in the removal of bomb damage. At the beginning of 19/4 I was cut sick for several months. During this time the building officials were angry that

the construction economy had been given independent state authority, and undertook an attack on the organization under the leadership of Dorsch. And unfortunately, with success.

- Q. Did you have a certain number of workers who were used for removal of bomb damage?
- Sp. One can only estimate that, because this manpower was used partly for the removal of bomb damage and partly for new construction at the same place. We had, however, in the chemical industry alone at the end between 250 300,000 workers for the removal of bomb damage and have estimated that altogether one million workers were employed in removing bomb damage.
- Q. Are reports about this in existence?
- Sp. No. It is also difficult to estimate. Air attacks are sudden. We stopped the nearby construction jobs and immediately threw in the workers so that there was no possibility to report them on a recurring basis. In addition, right by the big construction sites, there were usually new construction projects from which the workers automatically went over to removal of damage.
- Q. Do you have any investigations of these questions, and for losses of active productive work because of air attacks?
- Sp. Such investigations were made by the Planning Office (Planungsamt) which I did not notice because they are purely theoretical things. Air attacks are similar to earthquakes one can no longer distinguish whether the workers who are clearing up do so because the street cars are not working or because the factory is destroyed. There were no possibilities of reporting. Everyone with hands had to help with the work. I had forbidden questionnaires, or reduced their number, because people had more in their heads than to answer questionnaires.
- Q. Could you estimate for us when the manpower situation was critical at what period in the war?
- Sp. It was always critical until about January 1955 when the air attacks began to create unemployment. Before that there were a continual demand for workers because of the problems and the air attacks. That was also true because continual drafts for the armed forces were made which could only be replaced by new workers, and the rising young "classes" automatically went to the Wehrmacht and no longer to the factories, while the old classes vanished through death, sickness, etc. There were thus two things to equalize: a lost class (Jahrgang) of about 600-700,000 and the draft together marking about one (1) million. One million workers had to be replaced in order to maintain the same relative position.
- Q. To what extent did the foreign workers contribute to the solution of this question, and when did the solution reach the critical stage?
- Sp. The good times were at the beginning of the occupation of Russian territories, in which the workers could just about meet our needs. At that time it was the Russian workers whom we had to allocate. After that, about the middle of 1943 I would guess, the numbers that Sauckel could deliver to the general economy became much smaller because many fewer workers came from Bussia,

particularly the Ukraine, than before and the partisan activity there increased at the same time. Then Sauckel set up programs in order to bring workers in greater quantities to Germany out of the other occupied territories, mainly from France, Holland, Belgium and also Italy. In Russia, I had no particular interest outside of the Donetz region that was covered to a certain extent by Sauckel. With regard to labor, however, I still had great interest here and we were continually coming into conflict.

Q. What percent of the total workers, foreign as well as domestic, were women, and what were the quality relationships?

Sp. We can only say that with regard to Russian workers, the women have worked at least as well as the men - sometimes better. From the West, we had none or very few women. Our German women were, and that was a point that I always attacked strongly, employed to a lesser extent than in the First World War. Sauckel, after workers no longer came from Russia set up programs to bring other workers out of the western regions. In opposition to him, I submitted a plan for evacuating production to the west, based

The military commanders as well as I were of the conviction that we lacked the power of execution to bring the workers to Germany and that through it the Maquis areas in the western regions would grow as quickly as the partisan areas in Russia. At that time I took the position with Bichelonne, the French Minister of production who has died, that the socalled consumer goods should be evacuated from Germany to France, for example, shoes, merchandise, textiles, etc., and in Germany these whole industries should practically be stopped in order to convert the entire labor force to armaments and at that time in France I started about 600,000 people in the production process. Thereby, two things were attained. The French workers remained on the spot with their own food which was also important for Backi. The results were better and on the other hand it was possible in this way to increase the number of German workers in armaments. I said at that time to Bichelonne - he was in Berlin at a conference - that I would take care of it that no manpower would come to Germany and we then instituted the concept "Speer Firms", that is, all firms which were working for me could no longer have workers taken by Sauckel and since practically the entire French industry worked for me after the agreement with Bichelonne, it was to be expected that all French workers out of fear of Sauckel would go into the factories in France.

Q. To what extent did the plan materialize?

upon the following considerations:

Sp. There followed continued long disputes between Sauckel and me that went to the Fuehrer for decision and we opposed each other there with our different opinions. Sauckel wanted the workers which he needed for my needs and also for agriculture to be brought out of the occupied territories to Germany. I. Pound it more rational to obtain these workers in my way. that time the memorandum on total war appeared which is known to you, in order to better utilize the workers in their own countries - the actual solution of this question was, however, never reached. About these things Laval also is informed. I gave Bichelonne my word to act in this way and It was, therefore, impossible for he built his production on this basis. In addition there was in every French "Speer-Firm" a me to retreat. poster which bore my signature, which said, that these factories were protected. Due to the fact that I had to post this in the factories one can

- soc how great the quarrel was.
- Q. Did these plans conform with the general plans to evacuate all heavy industry from France and to make it into a kind of granary for Germany?
- Sp. You have been incorrectly informed. At the same time that Bichelonne consented that I take over these industries in France, I agreed with Bichelonne that he direct the entire production completely independently and that he could allocate all resources as I did in Germany. At that time the Fronch industry which had been led by Roechling was given back to Bichelonne about in the fall of 1943 in Meurthe and Moselle.
- Q. The question was raised whether you ever reduced production of consumer goods to the absolute minimum as you yourself said you still allocated 40% of the raw materials for that?
- Sp. The 60% were only for armament production, the 40% contains not only consumers goods but also mines, ship-building, energy, etc.
- Q. Do you believe that in spite of that, production of consumers goods could be pushed down further?
- Sp. No that was doubtless too small according to the need which is partly very high due to air attacks. With each attack much china was borken as well as stoves which also were lacking for the refugees and bedding clothes always greatly damaged so that a terrific damage arose.
- Q. Was the 12th of May 1944 the date that this started?
- Sp. No. Here the English air attacks played the decisive role which mainly hit the center of cities where the Americans did not cause us too much trouble because they mainly attacked purely industrial centers.
- Q. Are you of the opinion that absence of a minimum of consumer goods did not finally contribute to the reduction of the ability to resist?
- Sp. No, it must be realized that the German worker continued to devote his energies to production and took the paucity of consumers goods in his stride. Only at the very end was there a diminution of his energy and work. Even until just before the end, work was continued with undiminished vigor.

The decisive element in the cracking of the will and ability to resist did not rest with either the food or clothing but rather the threat of air attacks which continued in the west uninterruptedly.

The above is borne out by the fact that in areas in which the food and clothing was just as scarce, the workers continued the production without let up till the end.

Q. Do you have the impression that this diminution played a decisive role?

Sp. It is very difficult to explain these psychological time periods. During the decisive weeks of the crossing of the Rhine, I was in the west just prior to the arrival of the American tank spearheads and could see how the people reacted.

Although I, as a minister, am a well known personality who would have been attacked in other lands at this period yet I received the friendliest of receptions. However, your troops did likewise two hours later.

It is noteworthy that until the very end I could ride around with my adjutant and driver without any other escort and without feeling any danger and I could enter any factory in the west. I refused every escort.

Just the three of us went through the factory. The manager, my adjutant and myself, and we saw only the friendliest of faces.

One might compare this condition with the conditions in the cities just after a heavy air attack. I experienced that too -

Just after an air attack where so many dead and maimed are lying around there was an almost happy atmosphere because those who survived suddenly lost all the nervous tension.

The same atmosphere carried over was at that moment present when the air war was over for the population and your troops entered the town.

Q. The Colonel has the impression that you are a believer in mass production in so far as armament production is concerned. Did the possibilities for mass production suffer because of our air attacks?

Sp. As long as transport was alright we paid no attention to the errors in mass production and rationalization.

We brought about special armament production until 1944 without considering the problem of transport, and that was our mistake. Later, because of the lack of transport we were not able to function.

- Q. We must consider the entire problem of dispersion later. It is important to us as well as to you.
- Sp. We must dwell then upon the theme of the disentanglement of transport.

 We tried to shorten transport and equalize travel between one place and another.
- Q. Did you try to carry out the principal in industry and in all other fields of not separating iron from coal in order to save transport?
- Sp. We inaugurated for the transport of coal the system whereby cards on which every movement from one place to another was entered on the card. We thus found out that coal was transported from Upper Silesia to other places as well as from the Ruhr to places situated further east so that both these transport movements crossed each other. This was true to a great extent. Then we were able to make some savings which helped us a lot. The man responsible was Hoffmann in the Zentralamt who had no special position.

We utilized these cards for tank, aircraft production and saw just where the material was going and tried, on the basis of this overall view, to equalize the flow. The cards are presumably in Blankenburg. They were drawn up by Prof. Thiessen.

With the Americans this problem did not arise because the distances involved are great and probably noted by the contractors. In Germany, the travel is relatively short and the freight correspondingly cheap so that the contractors did not put any great value on them.

Underground-dispersal - Splintering.

Before the dispersal of U-boat production was decentralized in small plants and this became extremely difficult to maintain as the communications and transport failed.

- Q. What danger did you foresee from air attacks in U-boat dispersal?

 Sp. Really, we considered this safe. They would have been effected by lack of power and transport principally. Our only worry was that the ten ton bombs would cause such shock to the limestone that the machinery would be injured by pieces of limestone or that the entire place would cave in.

 Almost everything was limestone which was cavernous and we had to accept it to continue production.
- Q. Did you disperse into plants cut out of stone?

 Sp. We could not go into granite because it would take too long. We acted on good geological principals, but we had to wait until power, gas and transport were present. The selection of a site depended upon all these things.
- Q. One of the fundamental problems is: Whose attacks were more effective on Industry, British or American?
- Sp. When the English bombs actually hit they caused more destruction. I for-bade the press to mention that American bombs caused less effect. Perhaps the explosive is not so good, I don't know. My opinion is that the detonator was not sensitive enough and thus the crater was too deep and the blast went up instead of out to the side as was the case with English bombs. In addition you dropped lighter bombs while the English mixed mines which had a greater effect than the bombs.
- Daumbach: It isn't true that a 500 lb. bomb has one-half the effect of a 1,000 lb. bomb. A 2,000 lb. bomb would be preferable as it would tear up the foundations. In the small weights the difference in effect is not double per double weight.
- Q. You aren't referring to the bombing technique but rather hits by English and American bombs.
- Sp. Then there has been a misunderstanding. The American method was more dangerous because it was an economic war technique while the English were aiming for centers of cities. If the Americans had used the British mixture the synthetic production of oil would have been destroyed last October, perhaps even earlier. The English attacked Poellitz twice at night and hit it well. The English also hit Leuna at night.

The directors were shocked at the effect and reported that this plant would be out of operation for a long time while we had assumed that there would be some production after six weeks.

Q. Allocation of Basic Material: Did you and the planning office have the final decision as to whether a factory could increase it's production

capacity or purchase new machinery?

Sp. It was the responsibility of the main committee which was responsible for production. For example, the tanks: who should take on the production of "Panthers" and thus procure more factory space? The Main Committee divided the production among individual factories which produced according to plan of the main committee. You over-estimate the Planning Office it made statistical reports and allocated raw material, etc. dent planning offices were the main committees.

- There are cases for example the "Gustloffwerke", which worked under the jurisdiction of the Main Committee Weapons and Main Committee Machines. How did that work?
- Sp. We never solved the problem. For a long time I thought about the problem and wanted to make one main committee responsible for the rest in regard to labor utilization, materials, etc. We never worked it out because of the hostility of the various main committees.

We had some factories which were responsible to four or five different main committees and it was extremely difficult for the factory manager.

I never did clear up the difficulty and permitted the competition because I feared that the production would have been altered voluntarily. an unhappy situation and mistake in the assignment.

Q. How did you manage the problem of resolving two production programs which might conflict, e.g., for tanks and for aircraft which had the higher

priority?

Sp. Only I could decide, not the military agencies as it appeared to be a theoretical problem of two opposing programs but in practice it was not so. We had well known bottlenecks in the components which in the final analysis guided the production. For example, metal sheets; if I would have curtailed the tank program in order to increase plane production I would have taken metal sheets from one program to give to the other program. The would have saved quotas but I wouldn't have had any crankshafts as they were already used up after awhile. Around the end of 1943, we reached the point where production had to be directed and guided. The bottleneck was principally metal sheets which effected the output of tanks, ship construction, locomotives and other things. However, it is necessary to distinguish between metal sheets of varying thicknesses. We thus adapted our armament production to conform to the greatest bottlenecks. We were able to determine our needs for tanks, ships and locomotives in regard to sheets and we then estimated how much we had at our disposal. We made the necessary allocation and then instructed the main committee to give us estimates of their needs.

Just as sheets were the determining factors for tanks, ships, etc., so were the other bottlenecks, tubing and crankshafts for other things. was possible to estimate the production of tanks and aircraft from the pro-We made every attempt to break these bottlenecks duction of crankshafts. and succeeded for a time. I must thus make it clear that the various

services did not decide the production plans, such as what production would be stopped and what increased, etc. It was so before but not later. The "Iron notes" were resorted to and it was found that it was not a workable system. Entire rolling mills were idle because of it. We thus never permitted the armed forces to set programs for us but rather produced as much as we could which the High Command felt was important. We would never say for example "We shall produce more guns and less tanks" but rather we produce as many guns and tanks as possible.

- Q. Two questions about allocation of Power and Motor fuel?

 Sp. Power must be divided into gas and electricity. Our gas production was primarily in the Ruhr. I think it provided 2/3rd's of the total gas production. It is obvious how dependent upon gas were the industries in the Ruhr.
- Q. Did the gas come primarily from coke ovens?

 Sp. Yes and from blast furnaces. We increased gas production in the Ruhr greatly. The allocation of gas was difficult in winter. In summer, we had a surplus of gas. In the winter of 1944-1945, we had almost overcome the difficulties by expanding capacity. Then came the heavy attacks. The normal allocation could not be carried out because gas installations were very susceptible to attack. Production of gas continued because the coke ovens were protected and dispersed. The gas, however, could not be allocated.

In the report which you have there is a part devoted to allocation of electricity and it is noteworthy that in spite of the air attacks output increased. At any rate we had to conserve an extraordinary amount of power.