

# **Mills Archive      Historic Information**

## **Summary 3**

### **German Rocket Scientists / Engineers At Waltham Abbey Post WW2**

Two influxes of personnel to the Waltham Abbey Gunpowder Mills from 'outside' were of interest technically and socially. The first, in the late 19th century, involved industrial staff and scientists from the West of Scotland Nobel chemical explosives plant at Ardeer and other sources, mainly the Glasgow, area taking up employment at the Mills as it made the transition from gunpowder to chemical explosives. And the second was in 1946 with the recruitment from Germany of a small number of specialist rocket scientists and engineers for employment in the Explosives Research Centre which had been established in 1945 by the Chemical Research and Development Department (C.R.D.D.) utilising the old Mills factory buildings after closure as a ROF manufacturing facility.

The following describes the German presence in Government service at Waltham Abbey based on copy documents in the Mills Archive (WAROC 2-20, AVIA 67-40).

WWII ended and large parts of Europe lay in ruins with a huge numbers of refugees, what were termed Displaced Persons, DP's, seeking sanctuary in refugee camps. However behind the scenes a full scale scramble was going on between the now rival Super Powers, the US and Russia, to acquire German scientific expertise / scientists, particularly in rocketry which was becoming increasingly important both in the military and civil fields. Both were successful at a top level, the best known von Braun to the US. Britain and France were very much in the second rank, left to secure whatever they could, in some cases it later appeared by subterfuge.

British policy under the D.C.O.S. Scheme was a characteristically gentlemanly process more akin to a private firm's recruitment policy. It was set out in a review of 1/12/46 headed Employment of German Scientists in U.K. in a File rather revealingly / unfortunately titled 7/Exploitation/12. Basically the Germans would be offered 6 or 12 month contracts with review after that to determine whether they wished to stay or return to Germany or other destination.

*"It has been decided that a limited number of high-grade German scientists and technicians will be employed for the benefit of our Defence Services".*

Emphasising that there was no question of displacing British scientists and they would be on lower salary scales and grades. The review also introduced the 'Darwin Panel' under which German scientists could also be considered for private employment in industry or Research Associations.

### **How were the Germans selected ?**

Interested parties consulted a list of candidates, with their position, location and action to be taken, such as Assessment Report required or required in UK for interrogation. This was probably based at least partly on information obtained by 'T' Force (1)

Five rocket research personnel were selected in 1946 for Waltham Abbey:

Hans Ziebland	Experimental Engineer. Already at Rocket Research Institute at Trauen
Botho Demant	Chief Chemist Luftwaffe At Peenemunde, transferred to Trauen
Norbert Luft	Chemist At Peenemunde, transferred to Trauen

Gerhard Muller      Described as Chemical Assistant At Peenemunde,  
transferred to Trauen  
( there is some doubt as to how this lower grade  
came to be Included in this 'high grade 'group)

Franz Neunzig      Engineer Transferred to Trauen

Apart from Ziebland already there, the Waltham Abbey Germans were included in a group assembled at Trauen for sea / rail passage to the UK, to be escorted by a Mr. A.Vietch, possibly a MoS employee. The Authorities were obviously solicitous of the German's welfare – Mr. Vietch's Movement Authority / Instructions included a specific instruction that at the Hook the group could be taken into the Officers Mess for not only a meal, it had to be a hot meal !

The group commenced their rail journey at 13-45 on 19th June 1947. A copy of the Movement Order is annotated 'Demant and Luft arrived at Waltham Abbey at 11-30-a.m. 20-6-47.'

A small number, but of considerable social and technical interest. It must have been a strange journey for the Germans. Here they were travelling to work for what had been 'the enemy' in an area of research which had been dedicated to destruction of the enemy. How would they be received, at work and in the community?

Apart from that, there were family concerns. Ziebland's wife was dead and he had to leave his two sons in the care of his parents, not a simple situation for grandparents in war ravaged Germany with all its difficulties.

However, Demant's problems surpassed this. In August 1947 he wrote a heartfelt letter to the C.R.D.D. which is a good example of the myriad problems the War had brought for so many and what conditions were for refugees. It is apparent that Demant had a 'former' and a 'new' family and his concerns were with his new family. He had been promised that he would be able to bring them across after a six month period of service.

However this waiting period had extended to a year and this meant that his new future wife and children, who were in a camp for refugees from the Russian Zone, would have to wait over the winter for a fresh period of service to expire.

Demant describes the conditions:

*"Beside all the other incredibly hard conditions of life at the present time in Germany, my future wife and her two little children must live alone as a refugee from the Russian Zone with people who dislike refugees. There is no possibility for her to get some other food than only the very small rations, no fuel,, no clothing, no potatoes etc., nothing more than trouble, sorrows and grief's day by day.*

*Now she is alone and unable to endure any longer all the daily increasing difficulties regarding the last wintertime in Germany. It is really quite impossible, that she will survive under the present intolerable conditions the coming winter without danger for her life."*

(Demant uses the term future wife as circumstances had made marriage impossible before he had to leave for his first six month term in the UK).

Food Parcels: In the above conditions and in the absence of a parcel service to Germany it was permitted to send one food parcel a month to Germany via an organisation, 'Save Europe Now' at 14 Henrietta Street, Covent Garden, who required payment of 4/- by Postal Order to cover costs.

## **What became of the Waltham Abbey Germans?**

Hans Ziebland

Ziebland was a senior experimental engineer at the German Rocket Research Institute at Trauen with particular expertise in heat transfer effect in liquid rocket fuels, including the design and building of proof stands. Post War there was a steadily increasing

interest in rocketry, military and civil, and the materials studied at the Research Centre formed the propellant in what was called the rocket motor. Ziebland was therefore of considerable interest to the Research Centre where a liquid rocket fuel research plan was under way.

Ziebland was an assiduous worker and created a good impression virtually from the moment of his arrival at Waltham Abbey. The internal memoranda speak for themselves:

6-11-1947 It should be noted that this is a continuation of the work for which Ziebland was responsible at Trauen, and in which he is an expert He has done excellent work at Waltham. (WASC 2372)

15-1-1949 In support for an application for special merit salary increase Ziebland has made a first class contribution, both theoretical and practical ..... His familiarity with engineering design and past experience of proof stand work in Germany are also exceedingly valuable. (WASC 2372).

Ziebland went on to become a senior figure at Waltham Abbey, progressively extending his work.

Ziebland published extensively in Government reports and in the open literature on his specialist subject of heat transfer, collaborating with the Rocket Propulsion Establishment at Westcott, and received special merit promotions (WASC 1914)

Ziebland brought his sons over from Germany and established his life here. Later, one of his sons, living in Broxbourne, visited the Mills and recollected his father toiling into the night over his Reports.

Franz Neunzig

Neunzig specialised in the evaluation and testing of solid catalysts for decomposition of H.T.P. As this was intended for use in submarine torpedoes, much of his time was spent at the Admiralty Research Station at Welwyn, working with Shell Petroleum.

6-11-1947 Neunzig has proved a most useful and willing member of the team, and is very assiduous in his duties (WASC 2372)

Neunzig emigrated to Australia in 1950.

Norbert Luft

No information has been discovered on Luft. He returned to Germany in 1950.

Boho Demant

Demant does not appear to have fulfilled the promise which would have been expected from his position at Peenemunde.

It has not been possible to find any information or valuation of his activity at Waltham. His correspondence indicates severe dissatisfaction and he is mentioned as 'awkward'. He is reported as having left Waltham Abbey in 1948 for other, non rocket, work in Britain.

What was the conclusion on the value or otherwise of the German experiment, with the scientists or engineers (around 40 in 1948) scattered around the various Governmental research establishments according to their specialisation?

The following are extracts from an analysis by John Becklake, a major authority on the subject (WASC 2115 Acta Astronautica 59 2006)

*The Germans were generally well liked and respected, most stayed to make their homes here, but there were not many exceptional talents among them.*

And further:

*Apart from the invaluable experience in rocket and guided missile systems which the Germans brought with them, which saved some 18 months R&D, they had little influence on British rocket technology.*

It could be said this is a little stringent. The US and Russia had already taken the top talent and those remaining whilst on the whole able inevitably had to be somewhat lower than the very top personnel.

However there were some notable successes.

In this context Hans Ziebland should be counted a notable success of the Scheme, both technical and societal. His contribution in his specialisation was invaluable, counting as a notable example of transfer of technology, and he tirelessly extended his activity at Waltham beyond this, publishing Reports extensively and achieving a senior scientific position. Societally he integrated himself and family into the Waltham Abbey area and was a notable example of reconciliation after a devastating war.

( 1 ) T- Force was a secret intelligence unit set up to go in with the spearhead forces and secure any technical equipment, documents, personnel etc. of potential interest to Britain. The Force was involved in a strange incident at the end of the War. It had been detailed to seize and take control of Kiel, an important strategic

area, when the order was received from the British High Command, i.e. ultimately Field Marshal Montgomery, ordering all British forces to 'stand still'. However there was a very real danger that the Russians would seize Kiel. It seems that Brigadier Pennycook, the boss of T-Force, who prior to the stand still had ordered the Force, led by Major Tony Hibbert, to press on to Kiel was awakened in the middle of the night by his staff after the stand still order to confirm that he stood by his decision and in a Nelsonian mode reiterated his order - a direct contravention of an order from High Command - a heinous military crime. Kiel was successfully seized, but a British General placed Hibbert under arrest. It appears it was later realised that in the circumstances of victory to further proceed against a holder of the Military Cross who had been suffering from a leg wound throughout the advance would be invidious and the matter was dropped. The leg injury forced Hibbert's retirement from the Army in 1946. In 1960 aged 90 Tony Hibbert returned to Kiel to do a TV programme on the episode. One of the most important WW2 armaments development and manufacture works was in Kiel, the WalterWerke. Swords into ploughshares - it now makes machinery for manufacture of ice cream cones and wafers.

**Les Tucker**

**(Royal Gunpowder Mills Friends Association)**