## Rocket blast from the past

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The Peenemunde Wind Tunnels: A Memoir. By Peter P. Wegener. Yale University Press: 1996. Pp. 187. \$30, £19.95.

PEENEMÜNDE: the name of the Third Reich's leading rocket centre had and has a certain magic. Peter Wegener spent less than a year there, in 1943-44, as well as another year or so working with the wind tunnels after they were evacuated to the Bavarian Alps. Yet that year or two were formative in his life; they turned the aspiring geophysicist and veteran of the Eastern Front into an aerodynamicist. They also exposed him to Wernher von Braun the charismatic technical director of

that revolutionary enterprise and to the opportunities and dilemmas of working on military research for a totalitarian regime.

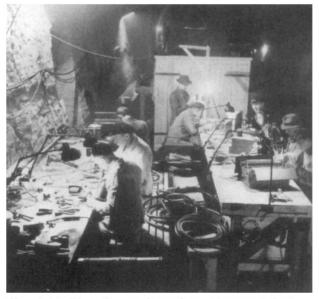
Despite being sincerely anti-Nazi, Wegener came to grapple with the moral dilemmas only over time, and to some extent only recently. After decades of obfuscation by von Braun and his followers, the name Peenemünde - which had come to signify for many the first step on the road to space — finally became wedded in the 1980s to another name: Dora, the concentration camp that supplied the slave labour for V2 missile production. The efforts of survivors of that camp, and the forced departure from the United States of Arthur Rudolph who had been production director in the underground plant, made it difficult to think of one without the other. Yet angry

denial of Rudolph's guilt, and of any responsibility for the prisoners' fate, has remained the nearly universal reaction of the former Peenemünders. Wegener's genuine attempt to deal with the implications of Dora therefore makes this absorbing memoir a milestone in the literature about the centre.

Like most of the scientific and engineering staff there, Wegener was drafted into Peenemunde knowing little or nothing about rocketry. The son of a wellknown Berlin actor and film director and nephew of Alfred Wegener, the great geophysicist and advocate of 'continental drift', Peter Wegener came from a liberal bourgeois family with a natural aversion to Nazism. Born in 1917, he reached his maturity at the apogee of the Third Reich and saw little choice but to live with the system while circumventing its ideological demands as much as possible. His academic training was repeatedly interrupted by service in the Luftwaffe anti-aircraft artillery, most notably in Russia, but he

finished an abbreviated doctorate in 1943 and was almost immediately sent to the air-force group at Peenemünde which was working with the army on anti-aircraft missiles. He found himself assigned to Rudolph Hermanns institute groundbreaking work was being done in supersonic aerodynamics.

Those who come to this short memoir expecting detailed discussion Wegener's scientific work will be disappointed. But Wegener does give valuable



V2 rocket builders: Germany's wartime underground plant.

new insights into the aerodynamics institute, its personalities and its director, who comes off as a rather unsavoury believer in Hitler's regime. Wegener also describes his transfer to the United States in 1946 under Project Paperclip, working with a small group to reconstruct the Peenemünde tunnels at the Naval Ordnance Laboratory outside Washington DC. He eventually became a distinguished professor at Yale. For many readers, however, the most engaging parts of the book will be those where he discusses his encounters with von Braun, the underground plant and the realities of working under that regime.

His answers will please neither of the extreme camps that dominate opinion about von Braun and Peenemünde: the traditional hero-worshippers and those who see only goose-stepping Nazis. On the one hand, Wegener has only good things to say about von Braun, whom he describes as "gifted and complex", "one of the great engineers of our time" and "categorically... no Nazi". "His outlook on life," Wegener asserts, "was far removed from the prevailing ideology." On the other hand, Wegener attacks the "myth" that Peenemunde was a space centre and that its military work was just a "detour" on the road to space. He concludes that Rudolph was a "Nazi" and was guilty of initiating the exploitation of concentration-camp labour at Peenemünde before a Royal Air Force raid forced production underground. Wegener's single two-hour visit to the underground plant, Mittelwerk, in about March 1945 left a lasting impression: "I have never before experienced such glances of hate" - from the prisoners. He questions how those assigned from Peenemünde could have kept their sanity. He also mentions von Braun's many visits there, but accepts

Ernst Stuhlinger's assertion that von Braun struggled with his conscience over what to do about the prisoners.

This last point will irritate von Braun's critics. The truth is that we do not know - we will never know - what he thought about forced labour at the time, because no written evidence exists. Stuhlinger's story comes from conversations with von Braun decades later, after the French survivors of Dora had forced von Braun to rationalize his role. But we do have written evidence of his involvement in decision-making about concentration-camp labour from at least August 1943 on. As to his party and SS memberships, I could accept Wegener's assumption that these were reluctantly accepted political necessities for von Braun, who was a nationalist but no Nazi ideologue. Yet, what-

ever von Braun's beliefs, his actions again put him in a less flattering light. Wegener comes nearest the truth early in the book when he says that von Braun was "close to being obsessed with rocket development" and "disliked Hitler and all Hitler did [a statement truer after 1943 than before].

But Hitler supported his dream."

Whether one accepts all of Wegener's judgements or not, in the last analysis this memoir of Peenemünde is unique because it breaks the traditional mould. His account of the wind tunnels is also informative, interesting and useful to historians. Despite instances of awkward writing that cry out for a stronger editorial hand, the book is also readable. It belongs on the reading list of all those interested in the history of rocketry, as well as anyone fascinated by the dilemmas of science and technology in the Third Reich.

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