E-mail this to a friend

Printable version

[an error occurred while processing this directive]

Low graphics | Accessibility help

### BBC NEWS



**News services** 

**News Front Page** 



Africa **Americas** Asia-Pacific **Europe** Middle East South Asia

England Northern Ireland Scotland Wales **UK Politics** Education Magazine Business Health Science & **Environment Technology Entertainment** 

Video and Audio

Also in the news

**Programmes** Have Your Say In Pictures Country Profiles

Special Reports

RELATED BBC SITES **SPORT** WEATHER ON THIS DAY EDITORS' BLOG

### Watch One-Minute World News



Your news when you want it



## Project Paperclip: Dark side of the Moon



By Andrew Walker **BBC News** 

Sixty years ago the US hired Nazi scientists to lead pioneering projects, such as the race to conquer space. These men provided the US with cutting-edge technology which still leads the way today, but at a cost.

The end of World War II saw an intense scramble for Nazi Germany's many technological secrets. The Allies vied to plunder as much equipment and expertise as possible from the rubble of the Thousand Year Reich for themselves, while preventing others from doing the same.

The range of Germany's technical achievement astounded Allied scientific intelligence experts accompanying the invading forces in 1945.

Supersonic rockets, nerve gas, jet aircraft, guided missiles, stealth technology and hardened armour were just some of the groundbreaking technologies developed in Nazi laboratories, workshops and factories, even as Germany was losing the war.

And it was the US and the Soviet Union which, in the first



Wernher von Braun: Nasa icon and former SS officer

days of the Cold War, found themselves in a race against time to uncover Hitler's scientific secrets.

In May 1945, Stalin's legions secured the atomic research labs at the prestigious Kaiser Wilhelm Institute in the suburbs of Berlin, giving their master the kernel of what would become the vast Soviet nuclear arsenal.

#### In today's Magazine



Big beasts How elephants helped to shape human

history, by David Cannadine



Change acoming Justin Webb on America's love affair with

progress



**Audience** of one Would vou watch a play all on your own?

# 7 days quiz



What now for Paul the eight-limbed oracle?

Magazine regulars



Tweetbook

Say goodbye to worktime boredom. Follow us on

Facebook or Twitter **Magazine Monitor** 

Paper Monitor, Your Letters, Quote of the Day, Caption Competition and more

US forces removed V-2 missiles from the vast Nordhausen complex, built under the Harz Mountains in central Germany, just before the Soviets took over the factory, in what would become their area of occupation. And the team which had built the V-2, led by Wernher von Braun, also fell into American hands.

#### **Crimes**

Shortly afterwards Major-General Hugh Knerr, deputy commander of the US Air Force in Europe, wrote: "Occupation of German scientific and industrial establishments has revealed the fact that we have been alarmingly backward in many fields of research.

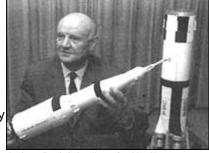
"If we do not take the opportunity to seize the apparatus and the brains that developed it and put the combination back to work promptly, we will remain several years behind while we attempt to cover a field already exploited."

Thus began Project Paperclip, the US operation which saw von Braun and more than 700 others spirited out of Germany from under the noses of the US's allies. Its aim was simple: "To exploit German scientists for American research and to deny these intellectual resources to the Soviet Union."

Events moved rapidly.

President Truman authorised
Paperclip in August 1945 and,
on 18 November, the first
Germans reached America.

There was, though, one major problem. Truman had expressly ordered that anyone found "to have been a member of the Nazi party and more than a



Arthur Rudolph: "100% Nazi

nominal participant in its activities, or an active supporter of Nazism militarism" would be excluded.

Under this criterion even von Braun himself, the man who masterminded the Moon shots, would have been ineligible to serve the US. A member of numerous Nazi organisations, he also held rank in the SS. His initial intelligence file described him as "a security risk".

And von Braun's associates included:

- Arthur Rudolph, chief operations director at Nordhausen, where 20,000 slave labourers died producing V-2 missiles. Led the team which built the Saturn V rocket. Described as "100 per cent Nazi, dangerous type".
- Kurt Debus, rocket launch specialist, another SS officer. His report stated: "He should be interned as a menace to the security of the Allied Forces."
- Hubertus Strughold, later called "the father of space medicine", designed Nasa's on-board life-support systems. Some of his subordinates conducted human "experiments" at Dachau and Auschwitz, where inmates

were frozen and put into low-pressure chambers, often dying in the process.

All of these men were cleared to work for the US, their alleged crimes covered up and their backgrounds bleached by a military which saw winning the Cold War, and not upholding justice, as its first priority.

And the paperclip which secured their new details in their personnel files gave the whole operation its name. Sixty years on, the legacy of Paperclip remains as vital as ever.

With its radar-absorbing carbon impregnated plywood skin and swept-back single wing, the 1944 Horten Ho 229 was arguably the first stealth aircraft.

The US military made one available to Northrop Aviation, the company which would produce the \$2bn B-2 Stealth bomber - to all intents and purposes a modern clone of the Horten - a generation later.

Cruise missiles are still based on the design of the V-1 missile and the scramjets powering Nasa's state-of-the-



The Stealth bomber: Based on a 1944 German design

art X-43 hypersonic aircraft owe much to German jet pioneers.

Added to this, the large number of still-secret Paperclip documents has led many people, including Nick Cook, Aerospace Consultant at Jane's Defence Weekly, to speculate that the US may have developed even more advanced Nazi technology, including anti-gravity devices, a potential source of vast amounts of free energy.

Cook says that such technology "could be so destructive that it would endanger world peace and the US decided to keep it secret for a long time".

But, while celebrating the undoubted success of Project Paperclip, many will prefer to remember the thousands who died to send mankind into space.

E-mail this to a friend Printable version

PRODUCTS AND SERVICES

E-mail news Mobiles Alerts News feeds Podcasts

Back to top ^^

Help Privacy and cookies policy News sources About the BBC Contact us