HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

MARSHALL SPACE FLIGHT CENTER,
REDSTONE ROCKET TEST STAND
(Redstone Missile Test Stand)
(The Interim Test Stand)
(Marshall Space Flight Center,
Building No. 4665)
Redstone Arsenal
Dodd Road
Huntsville Vicinity
Madison County
Alabama .

HAER No. AL-129-A

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Photographs by Jet Lowe, Summer 1995

AL-129-A-1 GENERAL VIEW OF SITE LOOKING SOUTHWEST. JUPITER "HOP" STAND, FOREGROUND CENTER, REDSTONE TEST STAND FOREGROUND RIGHT, SATURN I C TEST STAND BACKGROUND LEFT.

AL-129-A-2 OBLIQUE VIEW OF THE REDSTONE ROCKET TEST STAND LOOKING NORTHWEST.

AL-129-A-3 VIEW OF THE REDSTONE ROCKET TEST STAND LOOKING WEST.

AL-129-A-4 OBLIQUE VIEW OF THE REDSTONE ROCKET TEST STAND LOOKING NORTHEAST.

AL-129-A-5 DETAIL VIEW OF THE STRUCTURE OF THE BASE OF THE TEST STAND AND THE TAIL SECTION OF A REDSTONE (JUPITER) ROCKET. NOTE THE FLAME DEFLECTOR BEHIND THE STRUCTURE IN THE FOREGROUND.

AL-129-A-6 CLOSE-UP VIEW OF THE TAIL SECTION OF THE REDSTONE (JUPITER) AND THE TRANSFER ASSEMBLY.

AL-129-A-7 DETAIL VIEW IN THE FLAME TRENCH LOOKING SOUTH INTO THE FLAME DEFLECTOR.

AL-129-A-8 DETAIL VIEW IN THE FLAME TRENCH LOOKING NORTH, FLAME DEFLECTOR IN THE FOREGROUND, WATER PIPES AND VALVE ASSEMBLIES ON THE FOREGROUND.

AL-I29-A-9 DETAIL VIEW OF THE ROCKET TRANSFER CART. NOTE THE VALVE BOX IN THE FOREGROUND RIGHT WITH AN EYE WASH FAUCET PROJECTING OUT.

AL-129-A-I0 OVERALL VIEW OF THE SITE, INSTRUMENTATION AND CONTROL TANKS IN FOREGROUND, ROCKET TEST STAND IN BACKGROUND LEFT.

AL-I29-A-I1 DETAIL VIEW OF THE EXTERIOR, EAST ELEVATION, OF THE INSTRUMENTATION AND CONTROL TANKS LOOKING SOUTHWEST.

AL-I29-A-I2 VIEW LOOKING SOUTHWEST AT THE EARTH MOUND USED TO ENCASE THE INSTRUMENTATION AND CONTROL TANKS AND PROTECT EQUIPMENT. NOTE THE TEST STAND IN THE BACKGROUND RIGHT.

AL-I29-A-I3 VIEW LOOKING NORTHEAST AT EARTH MOUND. NOTE THE RECTANGULAR OPENINGS USED FOR OBSERVATION EQUIPMENT AND PERISCOPE TOPS.

AL-129-A-I4 GENERAL VIEW OF THE INTERIOR OF THE EXTREME NORTH CONTROL TANK SHOWING THE REMAINING PIECES OF EQUIPMENT USED DURING THE REDSTONE ROCKET TESTING PROGRAM.

AL-I29-A-15 DETAIL VIEW OF THE WEST INTERIOR WALL OF THE EXTREME NORTH (CONTROL) TANK. NOTE THE TWO PERISCOPES IN THE UPPER PART OF THE PHOTOGRAPH. ALSO NOTE THE CONTROL PANEL IN THE MIDDLE OF THE PHOTO, THIS WAS USED TO CONTROL THE REMOTE "FIRE-EX" WATER NOZZLES.

AL-I29-A-I6 GENERAL VIEW OF THE INTERIOR OF THE CENTER INSTRUMENTATION AND CONTROL TANK, NOTE THE PASSAGE CUT TO THE EXTREME NORTH TANK.

NOTE: Historic photographs were made available from the NASA/Marshall Space Flight Center Photographic Collection, Photographers and dates unknown, unless otherwise noted.

AL-129-A-17 HISTORIC VIEW OF ROCKET & LAUNCH STAND DESIGNED BY HERMANN OBERTH AND RUDOLF NEBEL FOR THE MOVIE DIE FRAU IM MOND (THE WOMAN ON THE MOON). THE LAUNCH STAND WAS MODIFIED BY THE VFR FOR THE FIRST TEST STAND AT RAKETENFLUGPLATZ NEAR BERLIN.

AL-129-A-18 HISTORIC VIEW OF MAX VALIER, FOUNDING MEMBER OF THE VEREIN FUER RAUMSCHIFFAHRT (GERMAN SOCIETY FOR SPACE TRAVEL), DRIVES HIS ROCKET CAR IN ~~1931~~. ca. 1929.

AL-129-A-19 HISTORIC VIEW OF MAX VALIER IN AN EARLY STATIC TEST. THE ROCKET IS SITTING ON A SCALE. VALIER IS MEASURING THRUST BY ADDING WEIGHT LIKE THE ONE IN HIS RIGHT HAND.

AL-129-A-20 HISTORIC VIEW OF THE VEREIN FUER RAUMSCHIFFAHRT, 193O. LEFT TO RIGHT: RUDOLF NEBEL, FRANZ RITTER, UNKNOWN, KURT HEINISCH, UNKNOWN, HERMANN OBERTH, UNKNOWN, KLAUS RIEDEL, WERNHER VON BRAUN, UNKNOWN, KLAUS RIEDEL HOLDS EARLY VERSION OR MODEL FOR THE MINIMUM ROCKET, "MIRAK".

AL-129-A-21 HISTORIC VIEW OF EARLY MIRAK DESIGN. PROBABLY AT THE FARM OF KLAUS RIEDEL'S GRANDPARENTS IN BERNSTADT, SAXONY, 1930.

AL-129-A-22 HISTORIC VIEW OF EARLY TEST STAND IN GERMANY PERHAPS THE ENGINE IS FOR THE VFR'S (VEREIN FUER RAUMSCHIFFAHRT) 4 STICK REPULSOR. ENGINE IN PHOTOS IS BEING TANKED WITH LOX (NOTICE THE FROST FORMING AT THE BOTTOM OF THE TANK BEHIND THE LADDER.

AL-129-A-23 HISTORIC VIEW OF ONE STICK REPULSOR OF RAKETENFLUGPLATZ GROUP. POSSIBLY 1931, THE STAND IS FOR LAUNCHING NOT FOR STATIC TESTS.

NOTE: Historic photographs were made available from the NASA/Marshall Space Flight Center Photographic Collection, Photographers and dates are unknown, unless otherwise noted.

AL-129-A-24 HISTORIC VIEW OF A-2 ENGINE UNDERGOING STATIC FIRING AT TEST STAND NO. 1 KUMMERSDORF.

AL-129-A-25 HISTORIC VIEW OF A-2 ROCKET (FULLY ASSEMBLED) EXCEPT FOR GN_2 CONTAINER) AT TEST STAND NO. 1 IN KUMMERSDORF. THE STAND WAS DESIGNED & CONSTRUCTED IN 1932. ROCKET IS BEING TANKED WITH LOX PRECEDING A STATIC FIRING.

AL-129-A-26 HISTORIC VIEW OF A-2 ROCKET DIAGRAM.

AL-129-A-27 HISTORIC VIEW OF AN A-2 ROCKET WITH FUSELAGE, TANKS AND ENGINE CUT AWAY.

AL-129-A-28 HISTORIC VIEW OF A-3 ROCKET IN TEST STAND NO. 3 AT KUMMERSDORF (THE LARGEST TEST STAND AT KUMMERSDORF). THE STAND WAS MOBILE, SINCE IT MOVED ALONG RAILS.

AL-129-A-29 HISTORIC VIEW OF THE MOST IMPORTANT DIMENSIONS OF THE A-4 MISSILE.

AL-129-A-30 HISTORIC VIEW OF A-4 ENGINE BEING FIRED AT TEST STAND NO. 1 AT PEENEMUENDE.

AL-129-A-31 HISTORIC VIEW OF TEST STAND NO. 1 AT PEENEMUENDE A-4 ENGINE AND ROCKET PROPULSION TEST STAND.

AL-129-A-32 HISTORIC VIEW OF GERMAN ROCKET SOCIETY VETERAN KURT HEINISCH IN CONTROL ROOM AT TEST STAND NO. 1, PEENEMUENDE.

AL-129-A-33 HISTORIC VIEW OF WERNHER VON BRAUN LOOKS THROUGH THE PERISCOPE FROM THE CONTROL ROOM AT TEST STAND NO. 1, PEENEMUENDE.

NOTE: Historic photographs were made available from the NASA/Marshall Space Flight Center Photographic Collection, Photographers and dates are unknown, unless otherwise noted.

AL-129-A-34 HISTORIC VIEW OF GROUP PHOTO OF THE GERMAN ROCKET DESIGN TEAM SHORTLY AFTER THEIR ARRIVAL AT THE REDSTONE ARSENAL IN 1950.

AL-129-A-35 HISTORIC GENERAL VIEW LOOKING WEST AT THE NEWLY CONSTRUCTED INTERIM TEST STAND AT THE REDSTONE ARSENAL SOON AFTER COMPLETION IN 1953.

AL-129-A-36 HISTORIC GENERAL VIEW LOOKING NORTH DOWN THE FLAME TRENCH AT THE TEST STAND. NOTE THE MOTORIZED LIFT TO THE LEFT OF THE TEST STAND, USED TO ACCESS THE INSTRUMENTATION PLATFORM ("BIRDCAGE") MOUNTED ON TOP OF THE ROCKET DURING TEST FIRINGS.

AL-129-A-37 HISTORIC GENERAL VIEW LOOKING WEST OF TEST STAND AND ROCKET DURING TEST FIRING NUMBER 2. NOTE THE FLAME BEING EMITTED FROM THE BOTTOM OF THE ROCKET.

AL-129-A-38 HISTORIC CLOSER VIEW LOOKING WEST OF THE TEST STAND AND ROCKET DURING TEST FIRING NUMBER 10. NOTE THE NUMBER ALONG THE TOP RAIL OF THE STAND JUST TO THE RIGHT OF THE ROCKET, THIS NUMBER INDICATES WHAT NUMBER TEST IS BEING CONDUCTED.

AL-129-A-39 HISTORIC VIEW LOOKING WEST AT THE TEST STAND WITH THE COLD CALIBRATION TOWER CONSTRUCTED TO THE LEFT OF THE ROCKET AND AN ACCESS PLATFORM BUILT TO REACH THE TOP OF THE ROCKET MORE EASILY.

AL-129-A-40 HISTORIC VIEW LOOKING WEST AT THE TEST STAND. NOTE THE LOAD CELL APPARATUS LOCATED ABOVE THE ROCKET. THE SPACE BETWEEN THE BOTTOM OF THE LOAD CELL APPARATUS AND THE TOP OF THE ROCKET IS THE DIFFERENCE IN SIZE BETWEEN THE REDSTONE ROCKET AND ITS DECEDENT THE JUPITER C ROCKET. THE GAP IS FILLED WITH A SPACER WHEN THEY TEST A REDSTONE ROCKET.

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AL-129-A-41 HISTORIC VIEW LOOKING SOUTH FROM THE FLAME TRENCH AT THE TEST STAND AND LOOKING INTO THE FLAME DEFLECTOR.

AL-129-A-42 HISTORIC VIEW LOOKING WEST SHOWING A REDSTONE ROCKET BEING WORKED ON IN THE TEST STAND PRIOR TO A TEST FIRING.

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AL-129-A-44 HISTORIC VIEW LOOKING WEST AT THE TEST STAND AND ROCKET BEING PREPARED FOR TESTING, NOTE THE LOAD CELL APPARATUS ABOVE THE ROCKET AND THE EQUIPMENT PLATFORM TO THE LEFT OF THE LOAD CELL HAVE BEEN ENCLOSED FOR PROTECTION FORM THE CLIMATE.

AL-129-A-45 HISTORIC AERIAL VIEW LOOKING SOUTHWEST AT THE TEST STAND AND THE SURROUNDING ELECTRONICS AND EQUIPMENT TRAILERS.

AL-129-A-46 HISTORIC AERIAL VIEW LOOKING EAST AT THE REDSTONE TEST SITE, SHOWING THE TEST STAND, SUPPORT EQUIPMENT, SERVICE AREA AND THE OBSERVATION TANKS BURIED BENEATH THE EARTH MOUND IN THE BACKGROUND.

AL-129-A-47 HISTORIC CLOSE-UP VIEW OF THE SITE SHOWING THE SERVICE HOUSES AND TRAILERS.

AL-129-A-48 HISTORIC CLOSE-UP VIEW OF THE REDSTONE ROCKET IN THE TEST STAND, WITH THE TAIL SECTION REMOVED, REVEALING THE ROCKET ENGINE WITH SOME OF THE TESTING SENSORS ATTACHED.

NOTE: Historic photographs were made available from the NASA/Marshall Space Flight Center Photographic Collection, Photographers and dates are unknown, unless otherwise noted.

AL-129-A-49 HISTORIC GENERAL VIEW LOOKING NORTHWEST AT THE TEST STAND IN ITS CONFIGURATION FOR THE MERCURY-REDSTONE TESTING PROGRAM. NOTE THE MERCURY CAPSULE BEING ASSEMBLED IN THE FOREGROUND, ALSO NOTE THE LOAD CELL APPARATUS ON THE GROUND IN THE RIGHT OF THE PHOTOGRAPH.

AL-129-A-50 HISTORIC CLOSE-UP VIEW OF THE MERCURY CAPSULE ON THE GROUND BEFORE BEING HOISTED ON TOP OF THE REDSTONE ROCKET.

AL-129-A-51 HISTORIC GENERAL VIEW LOOKING WEST AT THE TEST STAND WITH THE MERCURY REDSTONE ROCKET FULLY ASSEMBLED AND BEING PREPARED FOR TESTING.

AL-129-A-52 CLOSE-UP AERIAL VIEW OF THE MERCURY CAPSULE SITTING ON TOP OF THE REDSTONE ROCKET IN THE TEST STAND.