

TOP SECRET with ORCON.

'The world is divided in to three classes of people: a very small group that makes things happen, a somewhat larger group that watches things happen, and the great multitude which never knows what happened.' Nicholas Murray Butler, J.P. Morgan and Company

The Battelle family was distinguished. Gordon Battelle's ancestor, Thomas, was a member of the Massachusetts Bay Colony; and his name was entered on the rolls at Dedham, Mass., in 1648. The men in his family graduated from prestigious colleges, served in the Revolutionary forces, and were entrepreneurs. His grandfather and namesake, the first Gordon Battelle, was a member of the 1861 convention that framed the constitution of the new state of West Virginia — and is credited with being largely responsible for the abolition of slavery in that region.

1876 Telephone invented by Alexander Graham Bell and Thomas Watson

Born on August 10, 1883, Gordon Battelle grew up in affluent surroundings and became an industrial leader. In the early 1900s, most industries did not invest in research. If they did, it was in small laboratories that performed routine tests. Gordon Battelle's vision was to find a way to provide high-quality research to industry. Further, he believed that the research could provide ways to improve people's quality of life.

1886 - Discovery of an inexpensive process for aluminum production by Charles Martin Hall.

1901 - Carnegie sells his steel company for \$250 million and guess to whom? J. P. Morgan. - J. P. Morgan organized the U.S. Steel Corporation, which was the largest corporation in the world.

1902 - Andrew W. Mellon becomes president of the Mellon National Bank.

1905 - (Andrew) Carnegie Foundation for Advancement of Teaching established.

This man's son, John Gordon, built the fortune that Gordon and his mother, Annie, would set aside to found Battelle Memorial Institute. John Gordon was an industrialist, investing in manufacturing in Wheeling at 21, owning a sheet metal business in Cincinnati, and finally opening a blast furnace with Joseph H. Frantz in Columbus in 1905.

1909 Hughes Tool Company, Hughes Tool Company was established in 1909 when Howard R. Hughes, Sr. introduced the first roller cutter bit that dramatically improved the rotary drilling process. When Hughes, Sr. died the company was left to Howard Hughes Jr., who at the time was a student at Rice University.

1909 Tesla development of turbine power

Battelle built a small laboratory in Joplin for W. George Waring, a scientist and former professor, who was trying to develop a process to make zinc tailings and mine water commercially valuable. Out of this came a patent for the process of treating the ores with ammonia and ammonium sulfate to produce a double ammonium-zinc sulfate salt that could be roasted. This early success, coupled with Battelle's appreciation for applying the best technical knowledge to practical problems, produced the vision that would consume Gordon for the rest of his life.

Although he died at 40 following an appendectomy without seeing his vision become reality, he left the bulk of his estate to the establishment of "Battelle Memorial Institute...for the purpose of education in connection with and the encouragement of creative and research work and the making of discoveries and inventions...". Two years later, his mother, Annie Norton Battelle, died and also left most of her estate to the Institute, bringing the total sum available for the founding of the new Institute to more than \$3.5 million.

Within the steel industry, Gordon Battelle was a concerned industrialist. He was the director of the American Rolling Mill Co. of Middletown, the Inland Steel Co. of Chicago, and the Eastern Hocking Coal Co. Young Gordon was more contemplative, and was interested in science, even though he didn't know any yet. He had moved to Missouri, where he decided to fund a university professor's research in recovering chemicals from the previously useless ores of a family-owned mine. Gordon thought if he could make this white elephant profitable, it would help him make his mark in the family. The work was successful, and Gordon became obsessed with finding out

other ways science could benefit society.

In 1913, in Cleveland, Ohio, five men formed a company dedicated to applying relatively new scientific principles to improving the physical properties of metals. Because improved steel was its main product, the company was named "THE STEEL IMPROVEMENT COMPANY". SIFCO

Three years later, in 1916, The Steel Improvement Company merged with its next-door neighbour, "THE FOREST CITY MACHINE COMPANY". The major manufacturing process at Forest City Machine was forging, and the merger added forging capability to the heat-treating company. The company was renamed "THE STEEL IMPROVEMENT AND FORGE COMPANY". (S.I.F.CO.).

1917 when the Equipment Division of the U.S. Army Signal Corps established a headquarters for its new Airplane Engineering Department at McCook Field, Dayton, Ohio, a World War I experimental engineering facility.

Gordon Battelle underwrote the Block brothers to build the Inland Steel company in Chicago; and in 1917, he and Frantz sold their Columbus Iron & Steel Works to the American Rolling Mill Company — renamed Armco Steel Corporation in 1948 and now part of AK Steel Holding Corporation.

However, in 1918 his father John died, leaving Gordon a nearly \$5 million estate. Gordon returned to Columbus, Ohio, and bored all his friends with his idea of forming a research laboratory. Meanwhile, he was president of two steel companies, and director of three more. Then in 1923 he died of complications following an appendectomy, at the age of only 40. He never got his lab built but, fortunately, he left a will!

In 1922, Steel Improvement successfully forged MONEL metal. They manufactured the product "STILL-PLUGS", a part used in oil refineries. Due to the hostile environment in which these parts operate they were used in large quantities. Up to this time STILL-PLUGS were cast from a nickel alloy known as MONEL metal. Steel Improvement, with its metallurgical and forging technology successfully forged these parts which gave them a much longer life. This gave the company an edge over its competitors who doubted a nickel-based alloy was forgeable. A sample order, produced for "THE STANDARD OIL COMPANY OF NEW JERSEY", know as "EXXON", was so successful that Steel Improvement was soon producing STILL-PLUGS for refineries all over the United States.

1923 First Cathode Ray Tube – AT&T/ Bell Labs, J.B. Johnson

Gordon Battelle died on September 21, 1923, following surgery. In his will, he established Battelle Memorial Institute, a not-for-profit organization that would conduct research to benefit industry and humankind and ensure that scientific technologies were put to work. The money from his estate, as well as money bequeathed by Anne Battelle, his mother, created the Battelle Memorial Institute.

1923- July 2-- US Naval Research Laboratory (NRL) opened-- D.C.

From 1886 to 1923, Ohioans developed the airplane, adding machine, bottle-making machine, commercial offset printing press, automobile tire, automatic traffic signal and vacuum cleaner, creating billion-dollar global markets and jobs for generations of Ohioans.

What does President Warren G. Harding have to do with Battelle? He was selected to be on the original Board of Trustees of Battelle, having been a Battelle family friend. Also to be on the Board were Annie Norton Battelle, two industrialists, and a lawyer.

President Harding a trustee of Battelle, also died in 1923, so two new trustees were appointed.

1924 "Union Banking Corporation, incorporated August 4 1924, is wholly owned by the Bank voor Handel en Scheepvaart N.V of Rotterdam, the Netherlands.

1924 Federal-Mogul Corporation created with merger of Muzzy-Lyon (Mogul Metal) and Federal Bearing and Bushing, becoming a major supplier of Babbitt and bronze.

1925 Arthur Collins first won national acclaim in 1925 by maintaining reliable communications with a scientific expedition to Greenland. Just 15 years old at the time, he accomplished this feat using a hand-build radio.

Battelle started out in Columbus on March 27, 1925. A building was constructed in Columbus, and was opened for business in the summer of 1929, with a staff of 20 employees and a

laboratory.

The Chairman of the Board, John G. Battelle's former business partner Joseph Frantz, shaped much of the form and substance of the organization — perhaps also its very existence. A significant portion of the assets distributed in 1927 were in industrial stocks; although the Institute benefited from the rising market, in 1928 Frantz thought that the Inland, Republic Steel, and American Rolling Mill stock was overpriced. The trustees agreed that this part of the portfolio should be sold and the proceeds put into government bonds — saving the Institute from the 1929 crash. Horace Gillett, who had worked with Thomas Edison and was the Chief of the Metallurgical Division of the National Bureau of Standards, was hired as Director of the Institute for \$10,000 a year — doubling his former salary.

Early research was almost completely dedicated to materials technology, including coal research. Battelle's first sponsored project was the preparation of The Alloys of Iron Research Monograph Series, several volumes on metallurgy. Early projects were clearly defined and had objective solutions, such as building a pump that would withstand exceptionally high temperatures for Worthington Pump Company.

On October 3, 1929, a staff of fewer than 20 scientists and engineers opened the doors to the nation's first contract research and development firm, Battelle Memorial Institute.

1927 Working as an unaccredited lab assistant at Stanford in 1927, Townsend-Brown described all the features of the Flying Saucer, and he demonstrated the physical principles with bench models at public schools in California. T. T.-Brown patented his engineering, disclosure # 2,949,550.

1928 Thomas Brown discovered a relationship between electrical capacitance and gravitational control. His work was subsequently taken over by the government.

1929 Federal-Mogul Corporation Research Division established with a fellowship of the Battelle Memorial Institute of Columbus, Ohio

In the beginning, Battelle concentrated its research on metallurgy. The Institute recruited the top scientists of the day. With a staff of less than 50, Battelle could claim "...that a list of the ten best metallurgists in the United States would include at least five of the staff of Battelle."

1930 Dr. Henry Coanda began work on aerial craft that were lenticular in shape.

1930's Dr. Wernher von Braun, a rocket scientist from Germany, was first introduced to the possibility of electric propulsion in the 1930s, through his mentor, Dr. Hermann Oberth. But von Braun started his career working on chemical propulsion systems.

1931 Andrew W. Mellon steps down as Treasury Secretary. - H. Trendley Dean, Public Health Service dentist, was dispatched to certain remote towns in the West to determine how much fluoride people could tolerate without obvious damage to teeth. He reported fewer cavities in areas with high-natural fluoride. Dispatched by Alcoa aluminium.

1932 Karl Jansky invents the radio telescope.

1932 Howard Hughes Jr. formed Hughes Aircraft as a division of the Hughes Tool Company. In 1936 this became a separate company.

1933 Collins Radio Company, founded by Arthur Collins in Cedar Rapids, Iowa, initially designed and produced short wave radio equipment. The company steadily grew, and captured the world's attention when Collins supplied the equipment to establish a communications link with the South Pole expedition of Rear Admiral Richard Byrd in 1933. Collins Radio Company provided communications in America's space program, including equipment for astronauts to communicate with earth stations and equipment to track and communicate with spacecraft. Collins communications equipment was used for the Apollo, Gemini and Mercury programs, providing voice communication for every American astronaut traveling through space. In 1973, the U.S. Skylab Program used Collins equipment to provide communication from the astronauts to earth.

1937 Dulce Base Security officer Thomas Edwin Castello heard Dulce was started in 1937-38 by the Army engineers, enlarged over the years, most recent work was completed 1965-66 to connect tunnels to the Page [Arizona] Base, site of one of the older underground facilities. The four corners base is called PERICA

1937 Joseph Lewis and Jack Green started Progressive Mutual Insurance Company because they wanted to provide vehicle owners with security and protection. The company grew steadily throughout the next decade, moving to new offices in downtown Cleveland, Ohio, in 1951. In 1955, after the death of Joe Lewis, Jack Green became CEO and Peter Lewis, Joe's son, began

his career with Progressive. Peter brought fresh ideas and began looking for ways to distinguish the company from its competitors. In 1956, the company formed Progressive Casualty Company to write auto insurance for high risk drivers (today the company serves all types of drivers).

1937 Grote Reber invents the parabolic dish antenna.

1938 HG Wells War of the Worlds radio show – Orson Wells

1938 Discovery of the Dropa Stones (around 97°E 34°N), in Qinghai (Tsinghai) and Sichuan Provinces

High in the mountains of BayanKara-Ula, on the borders of China and Tibet a team of archaeologists were conducting a very detailed routine survey of a series of interlocking caves. Their interests had been excited by the discovery of lines of neatly arranged graves which contained the skeletons of what must have been a race of human beings. They appeared to have spindly bodies and large overdeveloped heads. While studying the skeletons one of the members of the team stumbled on a large round stone disc half buried in the dust on the floor of the cave. The disc looked like an Stone Age record. There was a hole in the center of and a fine spiral groove that is a continuous spiralling line of closely written characters. No one understood the meanings of the message. The disc was labeled and filed away among other finds in the area. For 20 years many experts in Peking tried to translate the disc.

1939 "Possibilities of Space Flight." Published in 1939 Dr. Hermann Oberth devoted a chapter to the various problems of electric propulsion systems, envisioning one design that might carry a 150-ton payload. In studying the origins of interest in electric propulsion, Stuhlinger learned that the American rocket pioneer, Dr. Robert Goddard, had examined the subject as early as 1906. Goddard had mentioned the possibility of accelerating electrically charged particles to very high velocities without the need for high temperatures.

One significant early project was the creation of an antimagnetic and rustproof alloy, Eligoy. It was named after the company that contracted it, the Elgin Watch Company, for watch springs. Years later, this material would be used in mechanical heart valves.

The Institute landed its first federal contract with the U.S. Army in 1939 to improve armor plate. In addition to its contractual work, Battelle loaned scientists and managers to various wartime agencies.

Most notably, Director Clyde Williams was administrative chief of the War Metallurgy Committee, which conducted significant research into metallurgy, creating new alloys for ships and planes. Because of its combination of metallurgical talent and outstanding reputation with U.S. government agencies, Battelle became involved in the Manhattan Project, the code name for the work to develop atomic weapons. Specifically, Battelle provided critical information on the fabrication of nuclear fuel.

After five years, Gillett, who basically disliked administrative duties, handed over his responsibilities to Clyde Williams and became chief technical advisor until his retirement in 1949. It was Williams who diversified Battelle's capabilities beyond materials technology and pioneered the concept of contract research. Under Williams' leadership, Battelle acquired expertise in chemistry, physics, engineering, and economics and, by his retirement in 1957, employed a staff of 3,100 in the U.S. and in two European locations.

1940 During the 1940s, the development of the atom bomb required handling huge amounts of fluoride in the production of nuclear weapons. Documented here is a major safety study by the Atomic Energy Commission. As a result of this extensive study, the federal government became involved in the suppression of information about fluoride poisoning.

1941 June, the Office of Scientific Research and Development (OSRD) superseded the committee structure [of the National Defense Research Committee (NDRC)]. The OSRD projects gave the United States and Allied troops more powerful and more accurate bombs, more reliable detonators, lighter and more accurate weapons, safer and more effective medical treatments, and more versatile vehicles.

Our current understanding of the history of military UFO (Flying Saucer) investigations is that they began in 1941 with the first crash recovery of a saucer in Cape Girardeau, Missouri. It is believed that some exploitation (**reverse engineering**) of this event was integrated into the Manhattan Atomic Bomb Project, but that significant efforts did not occur until the July 1947 New Mexico events.

1942 something unidentified found "Celestial Device" is found in Missouri.

November 23, 1942, in Stratford, Connecticut, by Boone T. Guyton—a former Navy fighter pilot and Chance Vought's chief test pilot. During its test life, it accumulated 131 hours in several hundred flights. Guyton made the most flights (54) in it; among its pilots were Richard Burroughs, Charles Lindbergh and a number of Navy pilots. The V-173 could fly as slowly as 15mph, it cruised, during tests, at about 75mph, and it had a top speed of 138mph. Its international reputation in metallurgy led to fabricating the then almost unknown metal uranium for the Manhattan Project in 1942.

Dr. Arthur Compton, University of Chicago, a key member of the scientific team that established the Manhattan Project. Early in 1942, as part of the emerging effort to develop an atomic bomb, Dr. Vannevar Bush, head of the National Defense Research Committee, appointed Compton to be one of three program chiefs with responsibility to run chain reactions and develop weapons theory. As a result, under Arthur Compton the Metallurgical Laboratory at the University of Chicago became a critical research facility for the Manhattan Project.

E.I. du Pont de Nemours and Company constructed and operated the Hanford site in Washington state from 1943 to 1946 for the Manhattan Project. The X-10 facility in Oak Ridge, a pilot reactor and plutonium production plant, was also built by Du Pont. Du Pont and the Harshaw Chemical Company of Cleveland produced uranium hexafluoride on a scale sufficient to keep the vital isotope separation research going.

1943, John **Von Neumann** was invited to work on the Manhattan Project. **Von Neumann** did crucial calculations on the implosion design of the atomic bomb, allowing for a more efficient, and more deadly, weapon. **Von Neumann's** mathematical models were also used to plan out the path the bombers carrying the bombs would take to minimize their chances of being shot down. The mathematician helped select the location in Japan to bomb. Among the potential targets he examined was Kyoto, Yokohama, and Kokura.

1943 In response to Japan's full-scale germ warfare program, the U.S. begins research on biological weapons at Fort Detrick, MD.

Xerox® machine. In 1944, while much of Battelle was focused on the war effort, a small group of researchers began solving enormous technical challenges to turn Chester Carlson's concept for a photographic process using static electricity into the first commercial xerography equipment. Their pioneering technology contributed to one of the 20th century's greatest products and created a multinational, multibillion-dollar industry employing hundreds of thousands of people.

1944 February 22, 1944 Franklin D. Roosevelt writes a DOUBLE TOP SECRET memo on White House stationery for "The special committee on non-terrestrial science and technology." Both the title and the content clearly allude to extraterrestrial life, the former using the word "non-terrestrial" and the latter talks about "coming to grips with the reality that our planet is not the only one harboring intelligent life the universe."

1945- early-- NRL transferred from Bureau of Ships to Office of Research and Inventions (ORI)

1945 Project Paperclip is initiated. The U.S. State Department, Army intelligence, and the CIA recruit Nazi scientists and offer them immunity and secret identities in exchange for work on top secret government projects in the United States.

1945 – Z Division – Sandia Laboratories

In July 1945, the forerunner of Sandia Laboratory, known as 'Z' Division, was established at Oxnard Field to handle future weapons development, testing, and bomb assembly for the Manhattan Engineer District. The District- directive calling for establishing a secure area and construction of 'Z' Division facilities referred to this as 'Sandia Base' - apparently the first official recognition of the 'Sandia' name.

When clients needed expertise to analyze and manage exploding amounts of technical Information, Battelle supplied the need — beginning with the Tin Research Project in 1934 and continuing through the Chemical and Biological Defense Information Analysis Center today.

17 October 1945 when the 509th returned to the United States. They immediately proceeded to their new home, Roswell AAFld (later renamed Walker AFB), New Mexico. Because of its expertise with the atomic bombs, the unit became the core organization for what would become the most powerful military force on earth, the Strategic Air Command (SAC), when the command was created on 21 March 1946.

The squadron remained at Roswell until the Army Air Force directed the 509th to Kwajalein, the Marshall Islands, for Operation Crossroads, an atomic explosion test. Although the squadron

didn't drop the bomb, it waited in reserve as a back-up to its sister squadron, the 715 BMS. After the squadron returned to Walker AFB, it continued to fly and train in B-29s. In 1952, two major events occurred. First, the 393d welcomed a new aircraft, the B-50. Next, the 393 BMS was reassigned directly to the 509th Bombardment Wing following the inactivation of the unit called 509th Bombardment Group. In 1955, the unit pioneered a new chapter when it began receiving SAC's all-jet bomber, the B-47. In the late 1950s, change was in the air for the personnel of the 393 BMS. In 1958, the squadron, along with the 509th Bombardment Wing, moved with personnel and equipment to Pease AFB, New Hampshire. For the next seven years, the squadron flew and trained from Pease.

October 1, 1945 Rand Corporation formed

1945 At the end of WWII in 1945, von Braun and hundreds of other German rocket experts surrendered to the Americans. They were sent to Fort Bliss, Texas, to develop rocket technology for U.S. Army research. While von Braun and his team continued to work on the V-2 rocket at Fort Bliss, von Braun dreamed about developing a rocket that could travel to other planets.

On October 1, 1945, Arnold, Bowles, Douglas, Raymond, and Collbohm met at Hamilton Field, California, to set up Project RAND under special contract to the Douglas Aircraft Company.

Project RAND got under way in December 1945, expending a total of \$640 in its first month of operation. That same month, the new office of Deputy Chief of Air Staff for Research and Development, to which Project RAND would report, was officially established, with Major General LeMay as its first appointee.

1947 U.S. Air Force, renamed when it became a separate service

1947 Transistor invented by AT&T

1947 Colonel E.E. Kirkpatrick of the U.S. Atomic Energy Commission issues a secret document (Document 07075001, January 8, 1947) stating that the agency will begin administering intravenous doses of radioactive substances to human subjects.

1947 The Timken Connection

Ralph A. Multer was an "A class" truck driver for the Timken Roller Bearing Company of Canton, Ohio in the summer of 1947 when on a hot day in August or September he and two other drivers were asked to go to a nearby railroad yard, pick up three trucks and bring the loads back to the plant. He was planning to meet his young wife - they had been married the previous year - for lunch. He was on a four hour shift and hoped he wouldn't be late. Upon his arrival at the rail yard, Ralph and the other drivers were given three flatbed trucks to drive back to the plant. The trailer on each truck had a load covered with a canvas tarpaulin. The load on Ralph's truck was the largest. It covered the entire width of the trailer and part of its length. The convoy was escorted by officials, but Ralph never said who these escorts were.

When they arrived back at the plant they were met by several men who identified themselves as FBI. Being curious, Ralph asked what the loads were. The agent replied that they were parts of a "flying saucer" that had been recovered in New Mexico and that the new Timken furnace was going to be used to try and melt down the material. As his wife remembers the story, he was further told not to discuss the matter with anyone. Ralph had a security clearance as part of his job, so this revelation was being made within that context. The agent climbed up and pulled the tarp back to partially expose the load. From what Ralph could see, it was a "brushed aluminum" colored metallic object that appeared to have been blackened in places as if someone had tried to use a torch to cut off pieces of it. He did not see the loads on the other trucks.

When Ralph met his wife for lunch he was late. At first he didn't tell her why he had been late. However, after some prodding on her part and a promise not to talk to anyone about it, Ralph finally told her what had happened. A week or two later he ran into two of the furnace operators during the lunch period and he asked them what had happened with the material. They replied that the furnace "couldn't touch it." They couldn't break it or melt it. He never did learn what happened to the material after that. However, word got around the plant about the "flying saucer" and people were joking about it.

1947 In June 1947, a civilian pilot flying over the Cascade mountains of Washington State observed nine flying discs (later referred to as UFOs). The Commander, Air Force Technical

Intelligence Center of the then Army Air Forces became concerned and ordered an inquiry. This was the beginning of the United States involvement with the UFO investigations.

1947 an experimental aircraft that was borne out of the revolutionary aviation research of the Horten brothers of Germany was test-flown from White Sands, New Mexico". It was part of a larger project begun in 1946, of a nuclear-powered aircraft.

1947-present Mound Laboratory, Miamisburg, Ohio

SIZE: 306 acres (0.5 square miles)

BUDGET: \$119.9 million [not including DOE's Ohio Field Office] (93.7 percent defense-related) (1997)

EMPLOYEES: 34 [federal]; 740 [contractor] (as of 9/30/97)

FUNCTION: Until October 1994, produced non-nuclear components of nuclear weapons (e.g., detonators, timers, cable assemblies, pyrotechnic devices). Formerly developed tritium reservoirs; currently analyzes, disassembles, and recovers tritium from weapon components.

Also assembles and tests plutonium-238 heat sources for **radioisotope thermoelectric generators** (RTGs) used in interplanetary probes, surveillance satellites, and classified military programs. Until November 30, 1961 Mound fabricated plutonium-beryllium neutron sources.

RADIOACTIVE MATERIALS ON-SITE: 2.2 kilograms of uranium-235 and 25 kilograms of plutonium

CONTRACTOR: Babcock & Wilcox of Ohio, a division of BWX Technologies (a wholly-owned subsidiary of McDermott International, Inc.)

FORMER CONTRACTOR: Monsanto Research Corporation, a wholly owned subsidiary of Monsanto Chemical Company (formerly the Monsanto Chemical Company), 1948-1988; EG&G Mound Applied Technologies, a subsidiary of EG&G, Inc., 1988-1997

1947 Generals Douglas MacArthur and George Marshall are believed by some to have started an Interplanetary Phenomenon Unit (IPU) at the end of World War II. In a 1987 query to the U.S. Army Director of Counterintelligence, it was acknowledged that the IPU did indeed exist, but was disbanded in the late 1950s. It was then stated, "All records pertaining to this unit were surrendered to the U.S. Air Force Office of Special Investigations [AFOSI] in conjunction with operation BLUEBOOK." The IPU records supposedly retained by AFOSI remain classified and have never been released.

1948 In 1948 Hughes created a new division of the company, the Aerospace Group. Two groups within the Aerospace Group of Hughes Aircraft Company; Hughes Space and Communications Group and the Hughes Space Systems Division were later spun off in 1948 to form their own division and ultimately became the Hughes Space and Communications Company in 1961.

1948 In February 1948, the Chief of Staff of the newly created United States Air Force wrote a letter to Donald Douglas that approved the evolution of RAND into a nonprofit corporation, independent of the Douglas Aircraft Company. On May 14, 1948, RAND was incorporated as a nonprofit corporation under the laws of the State of California.

25 March 1948 Another craft found Aztec, New Mexico,

The IPU Interplanetary Phenomenon Unit (IPU) operated out of Camp Hale, Colorado, at this time, and its main function was to collect and deliver disabled or crashed disks to certain specified secret locations. The craft was recovered within hours by the IPU scout team about 12 miles northeast of



Aztec. General Marshall ordered Air Defense Command to go off alert status, and the radar units were advised that there had been a false alarm. Marshall then gave orders to the commander of the IPU to organize a recovery team and contacted Dr. Vannevar Bush - the head of MJ-12 to gather together a team of scientists to accompany the IPU to the crash site. Steinman has named these scientists as follows:

December 1948 Air Intelligence Division Study No. 203 produced by The Directorate of Air Force Intelligence and Office of Naval Intelligence states in paragraph No. 7 that "The Pattern of Sightings is definable. Sightings have been most intense throughout the states bordering The Atlantic and Pacific coast lines, and the central states of Ohio and Kentucky" . The mention of the central states of Ohio and Kentucky indicates that the secret nuclear material processing plants in that area were under surveillance.

Z Division – Western Electric / Bell Laboratories 1940's – 1948 Jack Shulman

The things that I saw described in this Lab Shopkeeper's Notebook consisted of things that today would be more powerful than the Intel Pentium processor, for instance, or the Cray supercomputer. There were communications devices that were described; there were ways to sandwich-in very, very thin, micrometre-thin layers; special metals to produce moving parts for things like...from the descriptions that I read, the nearest thing I could describe...an anti-gravity propulsion unit for a spacecraft. They included dynamic electronic and power-control technology that even to this day we have not yet developed. They included communications technology that was described only as having been taken from an object of unknown or unearthly origin. The documents were very carefully worded not to reveal what was, in reality, in these boxes of materials.

1948 - The invention of the transistor by American physicists John Bardeen, Walter H. Brattain, and William Shockley, later jointly awarded a Nobel Prize, was announced by the Bell Telephone Laboratories in 1948; it was also independently developed nearly simultaneously by Herbert Mataré and Heinrich Welker, German physicists working at Westinghouse Laboratory in Paris.

December 10, 1948 , Top Secret Air Intelligence Division Study 203, "Analysis of Flying Object Incidents in the US". This study examined the possibility that flying objects reported over the continental US represented Soviet reconnaissance, training or provocation missions.

October 18, 1948, Dr. Grebe advanced his hypothesis that small missiles of the order of 1 to 3 feet in diameter might be responsible, coming from distant sources. He considered that a rapidly rotating disc of mechanism [magnesium] and/or aluminum might have enough energy if properly utilized to propel the disc several thousand miles, and might be completely destroyed by burning in air. Remaining traces of silver and thorium might be ascribed to electronic control system. Grebe clearly envisioned the Midland object as a small, unmanned vehicle containing vacuum-tube-based electronic equipment, and undoubtedly he believed that its source was the Soviet Union. The intriguing vision of a fast-spinning, flywheel-like object that would destroy itself at the end of its trajectory was novel, to say the least, but Grebe had a good reason for this

unlikely idea. One of Dow's most secret and most vital wartime projects had been the development of a structural matrix for the miniature radio transmitter that formed the heart of the supersecret "VT" -- the Proximity Fuse.

Grebe's saucer concept amounted to something much like an artillery shell, possibly combined with an aerodynamic shape that would allow a degree of flight after the device arrived in the vicinity of its target. The VT shell had incorporated a novel battery that was energized when its chemicals mixed due to the shock of launching; possibly the disc-missiles used something similar. Presumably the self-destructing feature would prevent US analysts from recovering intact specimens of the vehicle.

National Bureau of Standards' Ordnance Development Department, The Ordnance Department's first products were highly classified miniature radio components for the Proximity Fuse.

Diamond's group, along with Hugh Dryden, from the Bureau's Mechanics and Sound Division, also developed some of America's first "smart weapons" during the war, including the Robin, a television-guided bomb, the Pelican, a passive-radar-homing glide bomb, and the Bat, a 1,000-pound radar-guided anti-ship glide weapon. To help pack more and more electronic components into missiles, the Bureau had perfected increasingly miniaturized vacuum tubes, and by the end of the war, its technicians helped invent a process for literally painting circuitry onto insulating substrates, the forerunner of now-universally utilized printed circuits.

Evidence that Bureau of Standards actually assisted in the analysis of the Midland saucer debris and theorized about saucer propulsion systems remains elusive, but in light of Condon's subsequent involvement in UFO research the possibility is highly intriguing. Grebe's theory did, however, make enough of an impression at senior levels that a report soon reached General Vandenberg's office. Vandenberg cabled Project Sign on December 2 inquiring about Sign's investigation of the case. Project Sign admitted in a December 21 teletype that it had no details on the Midland incident and sheepishly requested copies of Grebe's report from the Chief of Staff.

Project Sign: Dec 30 1947 to 1949 – declassified in 1997 by GAO

Project Sign was the first U.S. Air Force investigation of UFOs and lasted from January 1948 to April 1949. Based at Wright-Patterson AFB, Dayton, Ohio, it collected several hundred sighting reports from government and non-government sources, and claimed to explain most of them. Due to its unwillingness to accept UFO reports not sent directly to it, the Project Sign files include only a few dozen reports from 1947, while newspapers received more than 1,500 reports in just two weeks. At the end, a Joint Intelligence Summary concluded that almost all, but not all, UFO reports were explained by balloons, misinterpreted aircraft, astronomical or natural phenomenon. As for the remaining unexplained observations, the report said:

There are numerous reports from reliable and competent observers for which a conclusive explanation has not been made. Some of these involve descriptions which would place them in the category of new manifestations of probable natural phenomena but others involve configurations and described performance which might conceivably represent an advanced aerodynamical development. A few unexplained incidents surpass these limits of credibility. 1949 In late 1949, another Alien aircraft crashed in the United States and was recovered partially intact by the military. One Alien of extraterrestrial origin survived the crash. The surviving Alien was male and called itself "EBE". The Alien was thoroughly interrogated by military intelligence personnel at a base in New Mexico. The Alien's language was translated by means of picture graphs. It was learned the Alien came from a planet in the Zeta [sic] Reticuli star system, approximately 40 light years from Earth. EBE lived until June 18, 1952, when he died [sic] to an unexplained illness. During the time period EBE was alive, he provided valuable information regarding space technology, origins of the Universe, and exobiological matters.

Sandia Laboratory was operated by the University of California until 1949, when President Truman asked American Telephone and Telegraph (AT&T) to assume the operation as an 'opportunity to render an exceptional service in the national interest.' Sandia Corporation, a wholly-owned subsidiary of AT&T Corporation, managed and operated the laboratory until October of 1993.

Furthermore, we have PROVEN that AT&T had access to WHATEVER CRASHED in the target field of "Goliath", and that "Goliath" was built BY AT&T, and is referenced only, in

AT&T literature and pictures of it, as a "highly experimental, super high energy Radar system" located in the desert outside of Albuquerque and Roswell/Corona.

1948 and 1949, James Forrestal suffered from mental breakdowns. The Secretary of Defense was in and out of hospitals. He was diagnosed with Involuntary Melancholia; a very depressed condition. Secretary of State, James Forrestal, in May of 1949...was not a suicide. He was the only member of Majestic 12 that wanted full disclosure to the American people. At 2AM, on the morning of May 22 of 1949, the Secretary of State was thrown out of the 16th floor window at Bethesda Naval Hospital!

1949 NEPA-Nuclear Energy Propulsion for Aircraft. NEPA was managed for the Atomic Energy Commission (AEC) by the Fairchild Engine and Airplane Corp. Its headquarters was a woebegone tar-paper shack behind the AEC's library in Oak Ridge, Tenn. Much more serious than that was opposition to the program from senior scientists. The noted atomic physicist J. Robert Oppenheimer was among them. He believed that a nuclear plane could not be built and advised younger colleagues about the professional danger of being associated with it. This conflict prompted the AEC in 1948 to call for a review of NEPA by the Massachusetts Institute of Technology. Its "Lexington Report" surprised some opponents when it concluded that a nuclear plane was feasible given an overriding national interest in tackling the enormous technical problems-and as long as approximately a billion dollars was spent over 15 years to do so. The report also postulated, as future events were to prove correct, that such a long development time meant that some other technology (such as the guided missile) could render the nuclear plane obsolete by the time it was finally completed.

1949 **Project Bando** (PROWORD: RISK) Originally established in 1949. Its mission was to collect and evaluate medical information from the surviving Alien creature and the recovered Alien bodies. This **Project** medically examined EBE and provided United States medical researchers with certain answers to the evolution theory. (OPR: CIA) (Terminated in 1974)

Project Twinkle Summer of 1949, In the summer of 1949, a rash of "green fireball" sightings in New Mexico spurred a special study project, Project Twinkle. Because of the uniformity of the sightings (many people reported the same type of object) and the proximity of the reports to a highly sensitive nuclear facility (Los Alamos) and missile testing area (White Sands), there was some concern the fireballs might be reconnaissance devices of some kind. When the fireballs faded away, so did interest in studying them. The official conclusion ultimately was that the objects were simply a rash of oddly-colored meteors.

Project Grudge Feb 11 1949 – 8 months – declassified Jul 23 1997

Grudge was originally released in August of 1949 as a SECRET Technical Report (NO 102-AC 49/15-100) by the headquarters of the Air Materiel Command, Wright Patterson AFB, Dayton Ohio.

Project Grudge replaced Project Sign in April 1949. In December 1949, a magazine article on UFOs written by the famous aviation writer, Donald Keyhoe, based on his private investigations and military contacts, elicited enormous media attention. In it, Keyhoe insisted that UFOs were alien spacecraft and that the U.S. Government was keeping this knowledge secret. In response to the furor that Keyhoe's article caused, and to demonstrate that there was nothing to get excited about, the Air Force reduced Project Grudge to a routine intelligence effort. However, in October 1951, Project Grudge was returned to its original status as a special project. This investigation ended in March 1952. The final report suggested that most sightings had been explained. However, a large percentage of the reports were left either unexplained or only conditionally explained.

After just eight months, Project Grudge closed down. The final report of the Grudge team listed 273 UFO sightings, of which 23% were classed as "unidentified." There seemed little to learn from UFO reports, and Air Force interest waned through 1950 and well into 1951.

1950's When James Watson (Nobel laureate Watson, or "Honest Jim" as he likes to consider himself) and Francis Crick deduced the double helical structure of **DNA** in the early 1950's they revealed how genetic information is transmitted through successive generations. Back then, did they realise the future implications of such an important discovery? Scientists now had an understanding of the basic instructions for the building and maintenance of life. The human genome is all of the **DNA** that makes up a person. **DNA** (Deoxyribonucleic acid) is the molecule that makes up our genes. It is made up of four similar chemicals, known as bases which are abbreviated as A, T, G and C. The order of these bases is vital. It dictates whether an embryo will develop into a human, a fly or any other organism, all of which have their own specific genome. Genes carry information for making all the proteins required by all living organisms. These proteins determine everything about us, how we look, how well our bodies fight infection or metabolise food, and to some extent how we behave. By mapping the human genome scientists have obtained an instruction manual on how to make a person. By 1950, Battelle had developed prototypes of fuel elements for the nuclear reactor in the first atomic submarine, had developed zirconium for the first full-scale nuclear reactor at Oak Ridge, and was operating the first privately owned nuclear research center in the world. On September 11, 1951, Captain Edward J. Ruppelt took over the moribund Project Grudge. A month later, a revitalized effort, usually dubbed Grudge II, reorganized its reporting procedures, its forms, etc. The Battelle Memorial Institute, a "think-tank" consulting firm, was asked to undertake a statistical study of UFO reports collected so far. In March 1952 Grudge II went public as Project Blue Book, and for the next 17 years remained the Air Force's official UFO study program.

1951 **Battelle** helped ATIC evaluate the MiG-15 components brought to the United States in 1951.

1951 development had begun in earnest, with contracts going to General Electric (GE) for an aircraft-mounted reactor and to Convair and Lockheed for a suitable airframe in which to mount it. GE's solution for the X-6 was to design a single, large, air-cooled reactor that had a core of 143 pounds of uranium dioxide fuel elements riddled with air passages and sandwiched between rings of stainless steel. Four J-53 turbojet engines were manifolded to the front and rear ends of the reactor; air from the compressor sections of the jets passed directly through the core and then out the exhaust nozzles. The all-up weight of the power plant came to about 128,000 pounds, 60,000 pounds of which was shielding.

The scheduled X-6 test flight in 1956 was indefinitely postponed.

1913 to 1950 SIFCO established itself as a high technology forging supplier to the Aerospace Industry.

SIFCO - The second project took place in 1950, for CANADA. When the Second World War ended, the Canadian government decided that it was essential to develop an independent Canadian aircraft industry capable of designing and building aircraft and power plants tailored to the unique conditions confronting that nation. They invited A.V. ROE, Ltd. a subsidiary of the British aircraft giant, HAWKER SIDDELY Ltd. to take over a plant at Toronto airport to develop a Canadian fighter plane and jet engine to power it. Steel Improvement worked closely with A.V.ROE/CANADA to produce experimental turbine and compressor blades required for the initial engines

Project Magnet Dec 1950 to Aug 1954

The Canadian who was in charge of collecting this material for the Canadians was Wilbert Brockhouse Smith. His brief 12 years of UFO research is one of the most amazing stories in Ufology. Smith was the head of the official flying saucer investigation run by the Canadian government. It is important to this conference because it dealt in part with crashed saucers and hardware. Moreover, much of what was discovered was documented in writing. Fortunately, the government lie was exposed for all to see a couple decades after the minister's denial. It was exposed by Smith himself who had then had been dead for 20 years. Smith, you see, was dying of cancer of the lower bowel. When he realized that he would not survive his illness he gave his wife, Murl, instructions to hide his UFO files to protect them from the government people who he

had come to totally distrust. He predicted they would be coming to recover the files following his death.

Mrs. Smith told me that each of the representatives was told that she had destroyed the files. They left, but at that point, as Murl told me in a 1978 interview, the break-ins at the house began. On more than one occasion, the door would be forced open but nothing in the house was taken. Mrs. Smith was convinced it was the work of people looking for the files.

Decades later when Smith's files were placed at the University of Ottawa, the true extent of Smith's work became open for all to see. It became clear that Smith had been the head of an official flying saucer investigation funded and approved by the Canadian government.

The first was Edwin Easley who was the Provost Marshall at the Roswell Army Air Base. His job was to provide security at the UFO crash site. A check at the Truman Library will show no record that he ever talked to, corresponded with, or met with Truman.

General Roger Ramey is second example of a key player who has no White House record of ever having met with, talked, or corresponded with President Truman. He played a key role in Roswell, coming up with the weather balloon theory to cover up what had actually been found. Later in the second Truman term he led the debunking effort in front of the press corps after UFOs were spotted flying over the White House twice in July 1952.

Although the written official record shows no contact between Ramey and the President, an interview done with Ramey's wife after his death showed that not only did the two meet, they were good friends and Truman and his wife had actually visited the Rameys on more than one occasion at their home in Fort Worth, Texas.

The base was known as Suffield Research Station. It is Canada's equivalent to Area 51. It had a restricted fly zone over it, and it did a lot of Top Secret research such as the early testing of nerve gas.

Project Stork: March 31, 1952 through April 25, 1952

In fact, in the 1950s and 60s **Battelle** was under a long term contract to the Air Force for the purpose of assisting the Air Technical Intelligence Center in evaluating Soviet and Chicom aerospace technologies under a project named Project Stork, which was later named Project White Stork. Back in those years, at the height of the Cold War, the nature of the Battelle work was considered classified.

What TID/ATIC also needed, General Watson believed, was a "gold mine" in technology. Accordingly, in 1950 he contacted Dr Clyde Williams at the **Battelle** Corporation (now, **Battelle** Memorial Laboratories) in Columbus, Ohio, to see if they would be willing to work under contract for ATIC. The ATIC commander told Dr Williams that he needed technological and scientific information and asked if **Battelle** had any Russians in the work force. General Watson also needed to know whether there was a place within the corporation that could be turned into a secure compartment. General Watson asked the Secretary of the Air Force for Air, Harold Talbot, for \$20 million for a contract with **Battelle** to provide technical and scientific data on the Russians. This was the start of **Project Stork**, later called **White Stork** and **Have Stork**.

Gus Simpson from ATIC ran the group at **Battell**

Project Blue Book Sept 11 1951

1952 President Truman created the super secret National Security Agency by secret Executive Order on November 4, 1952, This most urgent task was a continuation of the earlier effort and was code named SIGMA. The secondary purpose of the NSA was to monitor all communications and emissions from any and all devices worldwide for the purpose of gathering intelligence, both human and alien, and to contain the secret of the Omega presence. By Executive Order the NSA was exempt from all laws which do not specifically name the NSA in the text of the law as being subject to that law, meaning that if the agency is not spelled out in the text of any and every law passed by the Congress it is not subject to such laws.

The NSA was the main workhorse of Illuminati's power, using their Black Operations to carry out North American missions, but recent attacks and skirmishes with a rogue terrorist group known only as 'Writers Block', has reduced their effectiveness causing the NSA to be labeled a "high-risk division".

In late 1952, Project Blue Book director, Capt. Edward J. Ruppelt, ordered a study of all the cases in the files for 1947-1952, under a contract with the Battelle Memorial Institute. The data were

supplied by the Air Force, while the conclusions were those of the Battelle scientists. The Air Force issued the final report as "Project Blue Book Special Report No. 14." It was released in 1955, accompanied by an Air Force news release. Although the Air Force stated their own conclusion that there was nothing to warrant interest or concern, this was contrary to the conclusions of the Battelle study. The Battelle scientists had stated that of almost 2,000 reports that were deemed to have sufficient information to permit analysis, 22.8% were judged to be "unexplained," and another 31.3% were judged to be "doubtfully" explained. In total, therefore, 54% of the sightings were said to lack convincing explanations! 5

"Special Report on Conferences With Astronomers on Unidentified Aerial Objects." It is dated August 6, 1952. It is not clear whether the report was issued by **Battelle** or by Dr. Hynek himself. Air Technical Intelligence Centre report on "Project Silver Bug"⁴⁰ that prototype saucers were actually test-flown (obviously before 1955)

The project was headed by Dr. Richard Metha, known today as the Father of Saucerology. He was hired by the German air force to build a saucer shaped craft that could vertically ascend and shoot down allied planes with rockets. Supposedly the war ended before Metha developed his ship.

The American government recruited some of the German scientists after the war to go to Canada and continue their work. Dr. Metha was one of these men. He work on a secret aircraft project at AVROW Aeronautics in Canada. These were saucer type flying machines. The US had as many as 35 saucer projects with vertical lift off and descent. The most highly classified was known by code name "Silverbug". These saucers were designed to 2300 miles per hour at an altitude of 80,000 feet. Though designed in 1955 the papers describing these design were not declassified until 1995. For over 40 year America's #1 top flying saucer project was top secret.

Project Silver Bug was the American "Black" project version of the Avro Aircraft Canada Y-2/ Private Venture 704 project that was revealed to the United States Air Force in 1955. 1952 'Operation Mainbrace' may have related to a similar flying saucer prototype Interestingly, there is some evidence that the Bureau of Standards was involved with yet another case concerning magnesium from a UFO. In 1952, five NBS scientists allegedly analyzed a fragment of metal supplied by Cdr. Alvin Moore, USN, who said that it had fallen on his property during the July 1952 "Washington, DC Invasion". The scientists subjected the material to a battery of tests, including spectrographic analysis, and concluded that it was an artificially produced artifact. It was composed mostly of magnesium, had a specific gravity of 3.48 and was filled with millions of microscopic iron particles. Like the West Rindge fragments, it appeared to be a section of a cylinder, which when complete would have been 10.4 inches in diameter. Cdr. Moore decided that **Project Blue Book** should know about the discovery. He mailed it to Captain Edward Ruppelt, who sent it on to the **Battelle** Memorial Institute, where Howard Cross gave it a cursory examination.

Project Moonstruck, 1952, CIA: Description -- Electronic implants in brain and teeth.

Targeting -- Long range; Implants introduced during surgery or surreptitiously during abduction.

Frequency range: HF-ELF transceiver implants.

Purpose: Tracking, mind and behavior control, conditioning, programming, covert operations.

Functional Basis: Electronic stimulation of the brain, E.S.B.

"Electrogravitics Systems" mentions a research project called "Project Winterhaven" undertaken in 1952 in order to validate Thomas Townsend Browns'⁵² "Biefeld-Brown" effect.

The Air Force botched an opportunity to do just that when it prepared Project Blue Book Special Report 14, released in October 1955. The report had its genesis in a January 1952 agreement between Grudge and the Battelle Memorial Institute, a think tank based in Columbus, Ohio.

Battelle was to analyze UFO reports and in other ways to assist the Air Force in dealing with the problem. Project Stork, as the classified Battelle project was code-named, officially commenced work on March 31 and continued into the spring of 1955. Its findings were incorporated into Report 14.

All Roswell crashed-saucer books report that the thin metal foil-like material recovered from the Brazel ranch--which more than 30 years later Maj. Jesse Marcel and his son would claim had extraordinary characteristics--was flown to WPAFB in Dayton for analysis. If so, USAF scientists

would logically have consulted with scientists at the **Battelle** Memorial Institute in Columbus, Ohio, only 60 miles from Dayton, according to an article in the May/June 1993 issue of International UFO Reporter (IUR), published by the Hynek Center for UFO Studies (CUFOS). The article was jointly authored by Mark Rodeghier, scientific director of CUFOS, and Jennie Zeidman, a CUFOS board member. Zeidman worked at **Battelle** in 1952 when it conducted a computer analysis of more than 2,000 UFO sighting reports for the USAF's Project Blue Book and knew some of the scientists involved. She interviewed several of them for the article.

According to Zeidman, "During the 1940s and 1950s **Battelle** was surely one of the premier metallurgy research facilities in the world....**Battelle** was well established as a trusted and respected facility for Top Secret work (including the Manhattan Project). Its staff included top metallurgists, welding technology experts, physical chemists, and fuel application specialists....The supposition that **Battelle** analyzed Roswell (or other) UFO artifacts is a simple and obvious theory. William of Occam would have approved."

In the late 1950s and early '60s, several contractors worked on the development of nuclear-reactor-powered jet engines for long-range military aircraft. The projects were funded by the AEC and the Department of Defense, and the contractors included General Electric, Pratt & Whitney, and others. Engines were built in Connecticut (Pratt & Whitney) and Ohio (GE), and some were tested at the National Reactor Testing Station in Idaho. Also known as the NEPA (Nuclear Engine for the Propulsion of Aircraft) program, the nuclear aircraft program was cancelled by President Kennedy because problems with engine weight and crew shielding, as well as design philosophy disagreements, were halting progress.

1953 Project Y by A.V.Roe – U.S. Defence Department Weapon system 606A

1953 **Saucer** crash lands near Camp Polk, Louisiana. US Army

Pvt. H.J. (initials) under Sgt. R.S. (initials) in Company B ordered to stay by the **saucer** until the ambulance and superior officers arrive. Three Aliens walked away from the crash. One Alien was carried on a stretcher. All aliens eventually died, taken to storage facility near Washington D.C. Alien description: Large helmeted heads, tight fitting suits, legs stiff when they walked, 3.5 to 4.0 feet tall, used Alien language.

1953 Project Sigma functioned to intercept and decrypt alien communications. With ten disk crashes, effort to maintain security took a supreme effort.

1953 Project MK-ULTRA (BLUEBIRD/ARTICHOKE), , CIA:

Description -- Electronics and electroshock.

Targeting -- Short range.

Frequency range: VHF, HF, UHF, modulated at ELF. Local transmission and reception.

Purpose: Programming behavior, creation of 'cyborg' mentalities.

Effects: Narcoleptic trance states, programming by suggestion.

Functional Basis: Electronic dissolution of memory, E.D.O.M.

1953: the Howard Hughes Medical Institute (HHMI) was formed, and Hughes Aircraft reformed as a subsidiary of the foundation. The Internal Revenue Service unsuccessfully challenged its "charitable" status which made it tax-exempt.

1953-present The Fernald Environmental Project (FEMP)

ESTABLISHED: Construction began in 1951 and was completed in May 1954; production operations began in 1953 and ceased in 1989.

SIZE: 1,050 acres (1.6 square miles); 136 acres of process buildings

BUDGET: \$269.7 million [not including DOE's Ohio Field Office] (100 percent defense-related) (1997)

EMPLOYEES: 55 [federal]; 1,989 [contractor] (as of 9/30/97)

FUNCTION: Formerly converted various forms of uranium into uranium metal for use as target and fuel elements in DOE production reactors. Processed depleted uranium for use in artillery shells and tank armor. Currently undergoing decontamination and decommissioning (D&D).

RADIOACTIVE MATERIALS ON-SITE: 3,373 metric tons of depleted uranium and 2,170 metric tons of low-enriched uranium CONTRACTOR: **Fluor Daniel Fernald** (known until September 1996 as Fluor Daniel Environmental Restoration Management Corp. [FERMCO]), a subsidiary of Fluor Corp. FORMER CONTRACTORS: National Lead Company of Ohio (NLO, a subsidiary of NL Industries, Inc.), 1951-1985; Westinghouse Materials Co. of Ohio, 1986-1992

1953 Codeword Dance, The Project was originally established in 1953, by order of President

Eisenhower, under control of NSC and MJ12.

1953 Project Aquarius, is a **project** which compiled the history of alien presence and their interaction with Homo Sapiens upon this planet for the last 25,000 years and culminating with the Basque people who live in the mountainous country on the border of France and Spain and the Syrians

1954, Von Neumann was appointed to the Atomic Energy Commission. A year later, he was diagnosed with bone cancer.

Apr. 24, 1954..A **saucer** crashed at Bandelier, N.M., as reported by K.A. (initials) of the Roswell, N.M. Rescue Team 4. (see 4/12/54) Mar. 7, 1955...

K.A. (initials) from Rescue Team 4, Roswell AFB, N.M. given a general discharge from the USAF because he told his Sergeant about the Top Secret recovery of a UFO on April 12, 1954. (see 4/12/54)

Project Bluebook (Grudge II) – Report 14

In March of 1954, Major Charles Hardin was put in charge of Project Bluebook, and the 4602nd Air Intelligence Service Squadron began training as field investigators. In 1955, the results of the Battelle Memorial Institute study were finally released as Bluebook Special Report Number 14. The study had a number of flaws, and concluded that improved methods of investigation and reporting would result in all UFO sightings being explained as ordinary phenomena

The Cross letter was significant because it implied that a group of specialists working in the shadows on the most massive UFO study to date had the power to keep critical information from a prestigious national security panel. Furthermore they had another plan, a brilliant project of far-reaching implication, which they proposed to implement as a way of getting to the heart of the phenomenon. I had a copy of that letter. It was stamped Secret. I knew its exact origin. Yet all the efforts I made to unearth an official copy from the Air Force or the National Archives through the Freedom of Information Act failed to yield results. It is finally through Congress that I obtained clearance to release the text. The process has given me a sobering view of the ability of the bureaucracy to hide the truth for decades, occasionally using the colorful community of UFO believers itself as an unwitting tool as it covered its tracks. To this day I am convinced that historians of the phenomenon have remained blind to some of the implications. It is my hope that books like the present one can stimulate a renewed effort to get at the truth.

What we have now has basically fallen out of the sky," he said. "Now we have a formal plan to go after this market. There needs to be a focused effort because it's such a huge industry. It's something that touches everybody." Peter Hall, principal engineer for EWI's microjoining and plastics technology team.

Advanced, innovative metallurgy. Battelle innovations, including hot isostatic processing (HIP) and other novel techniques for processing, cooling, and forming metals, led to countless breakthroughs — from improving tool bits to construction of bridges and rail cars to understanding the behavior of materials for use at elevated temperatures of the space age.

Titanium alloys and welding. Battelle's pioneering work in the development of titanium alloys and welding enabled the production of first-generation jet engines and evolved into materials for modern military aircraft

samples of Nitinol wire were distributed with Battelle Research Outlook, the house magazine of Battelle-Columbus

Monel can be electropolished with phosphoric-sulfuric-hydrochloric type bath, US Patent 2,440,715, Battelle Development Corporation

Edward Doty, was in the Air Force, was an investigator for Project Bluebook, was at Holloman AFB from 1962 to 1964, and was involved in the investigation of the 1964 UFO landing case at Socorro, New Mexico. However, in a letter dated 3/3/89, Doty says that it was an uncle, not his father, that was a Bluebook investigator.

In early 1953, a panel of distinguished scientists was convened with the Central Intelligence Agency (CIA) to examine the UFO "problem". The CIA became interested after the events of 1952 showed that there was a possible security risk involved. The panel (called the Robertson Panel) reviewed the workings of Blue Book and examined some important cases during the five days they met. The panel did not give a favorable evaluation of the investigations and felt the unknowns were not indicative of anything unusual. However, they felt that UFO reports represented a security risk in that an opposing force could use them to flood communications channels as a prelude to a sneak attack. The scientists involved desired the government remove the mythological status of UFO reports by educating the public and "debunking" each sighting as it was reported. UFOlogists focus on the term "debunking" to show that these scientists (one of which won the noble prize) were biased against the phenomena. Reading the panel's evaluation, it is fairly clear the Robertson panel was more interested in the security aspects of UFO reports than trying to downplay investigation of new phenomena by interested scientists.

1954 Project Orbiter the nation's first major step in developing satellite systems. The U.S. soon became a world leader in this emerging technology, with the National Aeronautics and Space Administration (NASA) playing a leading role.

1955 "Possibilities of Electrical Space Ship Propulsion." studies in electric propulsion became

more frequent following WWII, and in 1955 Stuhlinger presented a paper at the International Astronautical Congress in Vienna entitled, "Possibilities of Electrical Space Ship Propulsion." During his presentation, Stuhlinger discussed a proposal made by von Braun two years earlier, to use chemical propulsion to send a spaceship to Mars. In von Braun's proposal, Stuhlinger noted that the ratio of take-off weight to final weight after propellant consumption was 25-to-1. Stuhlinger argued that lighter-weight electric propulsion systems would make such planetary trips more feasible than they were with chemical propulsion.

1955 During these years, ATIC was at the forefront of automation. The center installed its first computer. By 1955, ATIC had compiled a glossary of 5,500 technical Russian terms and published the first edition of a Russian-English dictionary.

In 1955, on a test site in Idaho, the X-39 (nuclear powered engine) was run on a ground test stand in what was called the Heat Transfer Reactor Experiment No. 1 (HTRE-1). Engineers tested a complete aircraft power plant consisting of a reactor, a radiation shield, two X-39 engines, ducting, control parts and instrumentation; the whole assembly was called a core test facility because it was designed for the insertion of different reactor cores as they were developed. In January 1956, the engines were operated successfully but, because there had been no attempt to restrict the weight of the shielding, they would not have been flyable. Later in 1957, other cores that were tested, HTRE-2 and -3, did reduce the weight somewhat. The HTRE-3 assembly produced enough thrust to theoretically sustain a flight at 460 mph for about 30,000 miles. However radiation levels were still a problem; at one point in the tests, controls failed and released enough radioactivity to contaminate 1,500 acres.

July 1955 - March 1957 Convair NB-36H first experimental nuclear powered aircraft

<http://www.wpafb.af.mil/museum/research/bombers/b3-84.htm>,

http://home.att.net/~jbaugher2/b36_14.html,

http://www.cowtown.net/proweb/nb36h_ide.htm (view this one - eye witness to program)

1955 Shockley Semi Lab

Dr. Shockley left Bell Labs in 1955 to establish Shockley Semiconductor Laboratory (part of Beckman Instruments, Inc.), an effort that was instrumental in the birth of Silicon Valley and the electronics industry. His former employees later invented the integrated circuit and founded Intel, the most successful microprocessor company in the world.

1956 - Fluoride and cancer, too, have been linked by the government's own animal carcinogenicity test. Evidence that fluoride is a carcinogen has cropped up since at least the 1940s, but the government has dismissed it all. A federal study found nearly twice as many bone defects (of a type considered possibly pre-malignant) among young males in the fluoridated city of Newburgh, New York, as compared with the unfluoridated control city of Kingston; his finding, however, was considered spurious and was not followed up. For a long time, the government avoided performing its official animal carcinogenicity test--which, if positive, would require regulatory action against fluoride. It had to be pushed into doing that.

1956 Von Neumann's last public appearance was in February 1956, when President Eisenhower presented him with the Medal of Freedom at the White House. In April, Von Neumann checked into Walter Reed Hospital. He set up office in his room, and constantly received visitors from the Air Force and the Secretary of Defense office, still performing his duties as a consultant to many top political figures.

1956 Dr. Carl Hammer, director of the Battelle Research Institute, Installation of the institute's brand-new UNIVAC 1 computer. UNIVAC — the world's first commercial computer — was making its European debut at Frankfurt. It contained over 5,000 vacuum tubes and 18,000 crystal diodes, and weighed several tons. It had a memory of about 1,000 words and a price tag in excess of \$1 million. Fewer than four dozen were sold. Today's average desktop computer is thousands of times faster. Still, it proved the usefulness of computers in such applications as the census and TV election coverage, and its commercial availability and use of magnetic tape storage were milestones on the road to the computer age. _

1957 Sputnik launched

1957 John **von Neumann** died, His wife, Klara **von Neumann**, committed suicide six years later.

Dr. Marina von Neumann Whitman, John's daughter from his first marriage, was invited by

President Nixon to become the first woman to serve on the council of economic advisers. 1957, the head of one of the major forging machinery producers in the United States pointed out the desperate need for a production forge facility to supply the embryo auto industry in BRAZIL. At the same time, KAISER renewed efforts to establish a forge plant in ARGENTINA. After careful study, Steel Improvement decided BRAZIL was by far the best market, but would go into both countries if there was enough support.

Meanwhile arrangements were made to acquire a small company in MINNEAPOLIS known as CUSTOM TOOL AND MANUFACTURING COMPANY, (SIFCO CUSTOM MACHINING COMPANY). CUSTOM's skills in tool making and machining, when combined with Steel Improvement's metallurgical skills, enabled the company to move into a number of fascinating new programs. Among the more exotic were molybdenum rocket nozzles and steering mechanisms for POLARIS missiles and, more recently, the alloyed aluminum chassis and cover plates which house the electronic engine control boards for the United States space shuttles. At the same time, Custom's main airfoil production capabilities continued to grow. During the height of the VIETNAM WAR, the one-millionth gas turbine blade was produced for the T-53 helicopter engine manufactured by AVCO/LYCOMING.

1957 Semiconducting Compounds Group investigates intermetallic compounds, especially GaAs and HgTe in the 1950s. Group joins the Battelle Memorial Institute group.

1957 Allvac Metals Company was founded in 1957 to commercialize vacuum induction melting, a key technology for manufacturing aerospace-quality nickel-base alloys.

1958 creation of National Aeronautics and Space Administration (NASA)

1958 Collins Radio Company opens offices in Australia, Melbourne office in St Kilda road

1958 the Army Ballistic Missile Agency in Huntsville initiated its first electrical propulsion contract. Stuhlinger and his fellow scientists selected Electro-Optical Systems (EOS), Inc. to investigate ion thrust devices.

1958 Project ORION (DREAMLAND), U.S.A.F.:

Description -- Drugs, hypnosis, and ESB.

Targeting -- Short range, in person.

Frequency range: ELF modulation. Transmission and reception by radar and microwaves.

Purpose: Top security debriefing, programming, insure security and loyalty.

Effects: Narcoleptic trance states, programming by suggestion.

Functional Basis: Electronic dissolution of memory, E.D.O.M.

1958 Recovery of a fully functioning alien craft in Utah. The United States recovered a third Alien aircraft from the desert of Utah. The aircraft was in excellent flying condition. The aircraft was apparently abandoned by the Aliens for some unexplained reason, since no Alien life forms were found in or around the aircraft. The aircraft was considered a technological marvel by United States scientists. However, the operating instrumentations of the aircraft were so complex that our scientists could not interrupt their operation. The aircraft was stored in a top security area and analyzed throughout the years by our best aerospace scientists. The United States gained a large volume of technological data from the recovered Alien aircraft.

1959 marked the beginning of the final decline of the nuclear airplane effort, Nine hundred million dollars had been spent on it since 1946, and not even a flying platform of any kind was near completion. Consequently President Dwight D. Eisenhower's budget message of January 1959 stated that until "the technical problems involved in operating a nuclear-powered aircraft safely are solved, there is no practical military value in attempting to build the airplane itself" and that any more money spent should be for basic research only especially research on better reactor materials. Herbert York, chief scientific adviser to the Department of Defense, was more emphatic

when he declared that "no possible (within reason) ANP development program could lead to the kind of plane the military could depend on for important and useful missions before approximately 1970."

1959 -- In 1959, the RAND Corporation held several conferences on Deep Underground Construction. These conferences were attended by the various military services as well as large corporate construction firms like Bechtel. Underground construction projects began within a year. Existing underground facilities were beefed-up and new ones were started. Funding for government underground facilities comes from "Presidential Shelter" funds, as well as covert drug operations conducted by the CIA under the orders of MJ-12. This procedure appears to be still in effect as of July 1989. Over 75 underground facilities have been constructed under various programs.

1959 – blades for U2 spy plane.

Just then our forge plant (sifco) was asked to quote on some experimental compressor blades. These blades were too thin to forge. Our machining experts at Custom believed that tool pressure from cutting or grinding would distort and warp the dimensions. But Steel Improvement engineers thought of the work being done for the company at Battelle on ECM. Battelle was quickly instructed to switch its research from tool making to a production process for airfoils, and, it worked! The resulting engine was to power the U-2 spy plane.

1960 Spud Potocki – a former Polish Air Force Flier took 606A for a flight, Avro saucer Wladek "Spud" Potocki (1919-1996) Former Chief Experimental Test Pilot Avro Aircraft Ltd. (Canada)

1960 Project MK-DELTA (DEEP SLEEP), CIA:

Description -- Fine-tuned electromagnetic subliminal programming.

Targeting -- Long range.

Frequency range: VHF, HF, UHF, modulated at ELF. Transmission and reception through television and radio antennae, power lines, mattress spring coils, modulation of 60 Hz wiring.

Purpose: Programming behavior and attitudes in general population.

Effects: Fatigue, mood swings, behavior dysfunction and criminality.

1960 Edward Ruppelt mysteriously dies of a heart attack. In that year, Project Aquarius is initiated in order to collect medical and technical information from alien technology. It was another NSA sponsored project. Ronald Reagan is governor of California. His personal secretary was former translator for those Germans over Eichmann during World War II.

1960

April - July

Project Ozma: Astronomer Frank Drake listens for alien signals from space.

1960 NASA's first ion engine was built by Glenn Research Center (Columbus Ohio), Under the circumstances for which ion propulsion is appropriate, it can push a spacecraft up to about ten times as fast as chemical propulsion. Because the ion propulsion system, although highly efficient, is very gentle in its thrust, it cannot be used for any application in which a rapid acceleration is required. With patience, the ion propulsion system on DS1 imparts about 3.6 km/s to the spacecraft.

1960 Hughes Research Laboratory in Malibu, Calif. At first, Marshall directed Hughes to design a laboratory model of an ion engine. The 0.01 lb.-thrust model would be followed by the development of a 0.1 lb.-thrust engine. Marshall later modified the Hughes contract to include a flight test model ion engine, primarily to determine whether a beam neutralization problem existed in space.

Sept. 27, 1961 Hughes demonstrated an ion engine on Sept. 27, 1961, at its research laboratories in Malibu. Stuhlinger was among those on hand to greet the scientific and technical writers who attended the event. The group gathered to watch the engine actually operate in a vacuum chamber intended to duplicate the conditions the engine would encounter in space.

1961 On Aug. 1, 1961, NASA awarded a contract to the Astro-Electronics Division of RCA to design and build a payload capsule for flight-testing electric propulsion engines. The program called for seven capsules, three for ground tests and four for actual flight tests. Each capsule was

expected to carry two electric engines. The first was expected to carry one cesium-fueled ion-engine representing Stuhlinger's design with the Hughes engine. The second was expected to carry one mercury-fueled ion engine representing Kaufman's design with the Lewis engine. Plans called for the engines to operate from 1 to 2 kW of power.
Project Moon Dust – 1961-1965 - 89 ??

As a specialized aspect of its overall material exploitation program Headquarters USAF has established **Project Moon Dust** to locate, recover, and deliver descended foreign space vehicles. In the 1960s, Battelle acquired a laboratory in Duxbury, Mass., to expand ocean sciences capabilities; was awarded the Department of Energy (DOE) contract to manage Pacific Northwest National Laboratory; and purchased sites in Sequim, Washington, for a marine research facility and Seattle for a conference center.

1961 Air Materiel Command was redesignated Air Force Logistics Command while Air Research and Development Command, gaining responsibility for weapon system acquisition, was redesignated Air Force Systems Command. The two commands were integrated to form Air Force Materiel Command July 1, 1992.

1961 the first RTG used in a space mission was launched aboard a U.S. Navy transit navigation satellite. The electrical power output of this RTG, which was called Space Nuclear Auxiliary Power (SNAP-3), was a mere 2.7 watts. But the important story was that it continued to perform for 15 years after launch. Probably developed at Idaho National Engineering and Environmental Laboratory ran by the Battelle corporation.

http://en.wikipedia.org/wiki/Radioisotope_thermoelectric_generator

1962 SR-71/A-12 testing begins at Area 51.

In 1962 William Buehler, David Goldstein discovers nitinol at the Naval Ordnance Laboratory, so-called because it was an acronym for Nickel-Titanium Naval Ordnance Laboratory.

1962 X-22A

The Bell X-22A V/STOL Research Airplane (correct designation) was sponsored by the US Navy (Naval Air Systems Command) - not by the US Air Force. The "Tri-Service" Program of 1962 involved the Army, Navy and Air Force sponsorship of three different V/STOL concepts. Army sponsored the Curtiss X-19, Navy the X-22A and Air Force the LTV XC-142A. The X-19 and X-22A were each Dual-tandem..

The contractually stated purpose of the X-22A was

"(1) to provide an aircraft for flight research and evaluation of the unique and potentially advantageous dual tandem ducted propeller configuration and (more importantly)
(2) through design specifications and program objectives, a highly versatile aircraft capable of general research on

V/STOL handling qualities using a Variable Stability System designed and developed specifically for the X-22A."

As it turned out, the Variable Stability System (VSS) was the most important research feature of the X-22A, extending its' useful research life to almost 20 years - far beyond the lives of the X-19 and XC-142A. The X-22A is STILL the only airplane that was ever DESIGNED to be a VSS airplane!

1962 AT&T Telstar Satellite

1963 In 1963, John F. Kennedy evidently issued an ultimatum to MJ-12, and they decided that Kennedy should be subject to an expediency -- killed. This was the era when the United States first started having its own operational disks. 1963 is the date of one of the earliest visits to an underground joint base by an abductee that came back and lived to tell about it. It is the first hint of the underground breeding facilities that are described in the Dulce Papers, events surrounding Paul Bennewitz and Thunder Scientific Corporation in Albuquerque, New Mexico, and other

insidious experiences that have been reported by scores of people from 1963 to 1989.

1964 Battelle has managed Pacific Northwest National Laboratory, for the federal government since the lab's creation in 1965. The laboratory employs about 3,500 staff members and has an annual budget of more than \$500 million. In addition to its main Richland complex, Pacific Northwest operates a marine sciences laboratory in Sequim, Washington., and has offices in Portland, Oregon; Tacoma, Washington; and Washington, D.C.

The 1964 Book - Communication Nets by Leonard Kleinrock provides the network design and queuing theory necessary to build packet networks. This work was a major factor in designing the communications network for the ARPANET. It shows that packet switching would work, whereas until the ARPANET was built in 1969, most communications experts claimed that packet switching would never work.

1964 April, **EBE-2** arrived in April 1964 for the first "official" landing and contact. Location was a highly secured Area 17 at White Sands (not Holloman AFB) located just south of the present Shuttle landing site. **EBE-2** was described during an interview on March 5th, 1983 with former AFOSI agent at Los Alamos as being 4' 9" tall and having a very thin body: He was dressed in a tight fitting jump suit and having only four fingers and no thumb. Interview reportedly took place at Los Alamos National Labs at a Site 30 inside TA49. **EBE-2** departed in 1984, according to two alleged CIA memos shown to me by a former Wright-Patterson and Sandia Labs employee. EBE-3 came as an exchange scientist in 1978 along with two aids. One aid was assigned to Groom Lake and the other assigned to Los Alamos Laboratory. EBE-3 was male and the aid at LANL was female. EBE-3 and his aids left in November 1994.

1965 Patent issues to Buehler and Wiley for development of NiTi Alloy – 55-Nitinol

1965 Forty years ago this Saturday, New Hampshire teenager Norman Muscarello walked down a dark country road into weird history. In the wee hours of Sept. 3, 1965, the 18-year-old Muscarello set out to hitchhike home from Amesbury to Exeter. At about 2 a.m., he was walking on a deserted stretch of Route 150 in Kensington, about a half-mile short of the Exeter line. "Near an open field between two houses, the Thing, as he called it, came out of the sky directly toward him," John G. Fuller later wrote in his best seller, "**Incident at Exeter.**" "It was as big as or bigger than a house. It appeared to be 80 to 90 feet in diameter, with brilliant, pulsating red lights around an apparent rim. It wobbled, yawed, and floated toward him. It made no noise whatever."

1965 **Battelle** assumed management of the federal government's Hanford Laboratories (renamed the Pacific Northwest Laboratory) on January 4. More than 2,200 former General Electric employees joined **Battelle**.

1965 716 more grooved stone discs were uncovered in the same caves. See Dropa Stones

1938 They told the story of a "space probe" by the inhabitants of another planet who came to the Baya-Kara-Ula mountain range. They had **crash** landed. Their peaceful intentions had been misinterpreted. Many of them had been hunted down and killed by members of the Han tribe, who lived in the neighboring caves.

They referred to themselves as the Dropas. They said they came down from the clouds in their space craft. It crashed landed in remote and inaccessible mountains. There was no way to build a new ship.

Legend in the area spoke of small gaunt yellow faced men who came from the clouds long ago.

The men had huge bulging heads and puny bodies. They were so ugly they were hunted down and killed. This description is similar to the bodies found in the caves.

On the walls of the caves archaeologists found crude pictures of the rising Sun, the Moon, unidentifiable stars and the earth all joined together by lines of pea-sized dots. The cave drawings have been dated around 12,000 years ago.

The cave area is still inhabited by 2 semi-troglodyte tribes known as the Hans and the Dropas.

These tribes are odd looking in appearance. They are frail and stunted in growth averaging only about 5 feet in height. They are neither typically Chinese nor Tibetan.

1965 Z Division public

In 1965, a formal relationship with the intelligence community was drawn up in a memorandum of understanding between the Central Intelligence Agency (CIA) and the Atomic Energy Commission (predecessor to the present-day Department of Energy). Livermore's Special Projects Group, known as Z Division, was established to provide the intelligence community with technical assessments of foreign nuclear programs and weapons capabilities. According to Dale

Nielsen, the first Z Division leader, the division's initial charter was twofold. "We looked at the weapons fired by Russia, and later by China, to see what they were shooting, and we developed intelligence-related equipment as requested."

As time went on, Z Division evolved to respond to the growing list of countries that concerned the nation's intelligence agencies. The division teamed regional and country-specific experts with weapons scientists and engineers to make analyses based on technical knowledge about nuclear weapons development and testing, specifics about each country's nuclear capabilities, and evaluation of nontechnical issues that motivate nuclear programs. Z Division also provided technical knowledge and intelligence information needed to control U.S. exports that could support WMD proliferation.

December 9, 1965 Kecksburg crash

James Webb, the Director of NASA at the time of the crash, visited the Special Facilities Division about six weeks after the crash. Col. Bourassa and Kenrick W. Hackett briefed Webb and key staff at NASA on January 28, 1966.

The special team from the Joint Chief of Staff visited the Special Facilities Division on January 20, 1966.

1966 In 1966, actual technology on-board far exceeded technology that was made available to the public. It is believed that a research lab in Silicon Valley had developed 3 dimensional television and had it perfected. Video tape was also in the process of being developed for release. The SR-71 blackbird, an aircraft having advanced design and special alloy skins allowing it to travel to the fringes of space, was designed and built. It was around that time period that people become acutely aware of the series of underground tunnel systems that lie under California and the other Western States that connect corporations and other facilities together. General Train (Commanding General of the U.S. First Army) was planning a visit to the SFD in January 1966. The 662nd Radar Squadron at the crash scene was an Army unit.

The 662nd squadron was responsible to Space Command at NORAD. NORAD officials announced an intention to visit the Special Facilities Division the month after the crash.

1966 X22-A The No.1 X-22A, tail No.1520, flew first on 3/17/66 and crashed on 8/8/66 on the 15th flight, after only 3.1 hours total flight time. Identical failures had occurred seconds apart in each of the two dual-redundant 3000 psi hydraulic flight-control systems! The airplane was a total loss.

1966 the Project's name (Project Dance) was changed from Project Gleem to Project Aquarius. The Project was funded by CIA confidential funds (non-appropriated). The Project was originally classified SECRET but was upgraded to its present classification in Dec. 1969 after Project Blue Book closed. The purpose of Project Aquarius was to collect all scientific, technological, medical, and intelligence information from UFO/IAC sightings, and contacts with Alien life forms. This orderly file of collected information has been used to advanced the United States Space Program.

1967-1969 The second X-22A, tail No. 1521, flew first at Bell on 1/26/67, completing 182 developmental flights at Bell on 2/28/69. In July of 1970 the contract to conduct the flight research programs with the X-22A was awarded to the Cornell Aeronautical Laboratory (CAL). The X-22A then flew 300+ research flights through October 1984, accumulating more than 500 flights in total.

1967 under the auspices of the Air Force-sponsored UFO study based at Colorado University and headed by Edward Condon, Dr. Roy Craig obtained a portion of one of the Ubatuba fragments in order to subject it to neutron activation analysis. Since a Brazilian analysis of the material in 1957 had indicated that the material was extremely pure magnesium – purer than terrestrial technology could produce, according to **APRO** – Craig contacted Dr. R. S. Busk, head of Dow's Metal Products Department.

1967 - The Carnegie family merge with the Mellon family Institute to create the Carnegie-Mellon University in Pittsburgh. The Mellon family were the founders of the original Mellon Institute whence came the "amazing" sodium fluoride/dental caries prevention discovery.

1967 CIA and Department of Defense implement Project MKNAOMI, successor to MKULTRA and designed to maintain, stockpile and test biological and chemical weapons.

1967 The 120-square-mile Arid Lands Ecology Reserve was designated as a preserve by the Atomic Energy Commission (now the Department of Energy) for operation by PNL.

1966-1969: THE END OF BLUE BOOK

In March of 1966 the USAF scientific advisory board concerning project Blue Book filed a report recommending that a new study be initiated. This was referred to as the O'Brien committee, after its Chairman Dr. Brian O'Brien. The committee did many things including a review of the Robertson Panel's investigations and a review of case histories with specific emphasis on the unidentifieds. The committee noted that the amount of resources applied to the problem were inadequate and recommended that a more thorough investigation be initiated by University scientific teams through a contract.

Like many federal bureaucracies, MJ-12 has tripled in size. Wolf reports, "It now numbers 36 members, including [former Secretary of State] Henry Kissinger and [father of the hydrogen bomb] Edward Teller. MJ-12 meets at various confidential locations, including the Battelle Memorial Institute [at Columbus, Ohio]." As an aside, Dr. Wolf confirmed that it was Dr. Edward Teller who recommended physicist Robert Lazar for his position at the secret S-4 government base south of Area 51, where Lazar helped on back-engineering the propulsion systems of extraterrestrial spacecraft.

1968 The "Roush Hearings", a strongly pro-UFO seminar, is held in Washington, D.C. This is James. E. McDonald's high point, and the nearest thing to a Congressional investigation of UFOs that has ever taken place.

1968 Project Pounce : (PROWORD: DIXIE) Originally established in 1968. Its mission was to evaluate all UFO/IAC information pertaining to space technology. PROJECT POUNCE continues. (OPR: NASA/USAF)

On May 28, 1969, former president Eisenhower dies, marking the last time a President will have full knowledge of the whole alien situation until the election of President Bush in 1988.

1969 PNL was the only Northwest organization chosen by the National Aeronautics and Space Administration (NASA) to analyze lunar material collected from the entire Apollo program.

1969 Dr. Robert MacMahan of the Department of Defense requests from congress \$10 million to develop, within 5 to 10 years, a synthetic biological agent to which no natural immunity exists.

1970 James T. Russell, working at Battelle Memorial Institute's Pacific Northwest Laboratories in Richland, Washington, patents the first systems capable of digital-to-optical recording and playback. The CD-ROM (compact disc read-only memory) is years ahead of its time, but in the mid-1980s audio companies purchase licenses to the technology. Russell goes on to earn dozens of patents for CD-ROM technology and other optical storage systems.

In the 1970s, Battelle became involved in global energy programs and was increasingly asked to develop technologies to solve world problems, such as designing a water pump rugged enough to be used in third world countries, simple enough to be manufactured with few power tools, and reliable enough to supply up to 300 people with water night and day.

By 1970 Andreason brings Nitinol, a intermetallic composition of 50% nickel and 50% titanium to orthodontics through the University of Iowa.

1970 Funding for the synthetic biological agent is obtained under H.R. 15090. The project, under the supervision of the CIA, is carried out by the Special Operations Division at Fort Detrick, the army's top secret biological weapons facility. Speculation is raised that molecular biology techniques are used to produce AIDS-like retroviruses.

1971 Rattlesnake Mountain Observatory , Rattlesnake Mountain Observatory was established at the summit of Rattlesnake Mountain in 1966 as a professional research facility. The observatory's main astronomical instrument is a 0.8-meter (32-inch) research-grade Cassegrain-style reflecting telescope housed inside a 24-foot domed enclosure (see Figure 2.14). Installed at the observatory in 1971 and owned by **Battelle** Memorial Institute, this instrument is the largest permanently mounted telescope in Washington State

1971 According to Col Steve Wilson, the first successful U.S. antigravity flight took place on July 18, 1971 at S-4 dreamland [Area 51] wherein light bending capabilities were also demonstrated to obtain total invisibilities."_A number of military whistleblowers suggest that the US currently has a fleet of ET reverse engineered ships with antigravity propulsion systems and that manned flights to the Moon and even Mars are regular occurrences by the clandestine organizations developing and using such technology.

1972 Yellow Book written by EBE-2 (female) There are three copies of the Yellow Book, one is kept by **EBE-2** and the other two are kept in a "Vault" near the Mall in Washington DC. On the floor of one of the main entries to this building that has this "Vault" is a board game called "King's

Table." The Yellow Book is said to be a sort of holographic compact disk, which can project images of the information it contains.

1972 Project Snowbird - **Project Snowbird** was established in 1972 to research and test-fly a recovered alien spacecraft. To date, attempts to resolve this claim via the Freedom of Information Act have been unsuccessful. R & D of alien technology recovered from UFO crashes.

1972 Project Outgrowth Was Project Outgrowth a secret Air Force project that attempted to utilize the knowledge gained in field propulsion research? Twenty-eight members of the Air Force Systems Command at Edward's Air Force Base published a technical report dated June, 1972 that covered such categories as: electrostatics effects, Alfvén wave propulsion, electromagnetic spacecraft propulsion, superconducting particle accelerators, and anti-gravity propulsion. The Air Force Systems Command also has a presence at Groom Lake in Area 51.

1972 and 1973 Pioneer 10 and Pioneer 11 missions launched, RTG power sources have provided all the electrical power required on the Pioneer, Voyager, Galileo, and Ulysses missions. 1972 – 1973 Robert Emenegger and Allan Sandler invited to the Pentagon and then to Norton AFB to discuss UFOs with the brass.

1972 REDLIGHT was the project to test fly recovered Alien craft. This project was postponed after every attempt resulted in the destruction of the craft and death of the pilots. This project was carried out at AREA 51, Groom Lake, (Dreamland) in Nevada. Project REDLIGHT was resumed in 1972. This project has been partially successful. UFO sightings of craft accompanied by Black Helicopters are Project REDLIGHT assets. This project is now ongoing at AREA 51 in Nevada. (Believed to have moved to Mexico at this time for testing). It was code named DREAMLAND. The installation was placed under the Department of the Navy and clearance of all personnel required a "Q" clearance as well as Executive (Presidential) approval.

A second project code named SNOWBIRD was promulgated to explain away any sightings of the REDLIGHT crafts as being Air Force experiments. The SNOWBIRD crafts were manufactured using conventional technology and were flown for the press on several occasions. Project SNOWBIRD was also used to debunk legitimate public sightings of alien craft (UFOS). Project SNOWBIRD was very successful and reports from the public declined steadily until recent years.

1973 Rockwell International purchased the Collins Radio Company and provided for the continuation of the Collins legacy.

1973 Project Hindsight analysis, produced by Battelle in 1973, and in a number of comparable studies since then. Kostoff argues that this heightened awareness of potential applications is necessary for productive fundamental research and that there are many ways to implement it.

1973 FBI Bureau was asked to launch an intensive investigation, following a series of cattle mutilations in Iowa, but the FBI was actually reluctant to get involved. Director Clarence M. Kelley stated that "the investigation of Unidentified Flying Objects is not and never has been a matter that is within the investigative jurisdiction of the FBI."

1974 The Unitek Corporation licenses the patent and offers a stabilized martensitic alloy that does not exhibit any shape-memory effect (SME) under the name, Nitinol™. 1972-1977 Dr. Wolf engaged in covert governmental research into extraterrestrial technology. Laboratories where he worked include: S-4 (near the northeast corner of the Nevada Test Range), and nearby Area 51 (where he lived for a while), the Foreign Technology Division labs at Wright-Patterson Air Force Base (Dayton, Ohio), and the former Dulce Laboratory (near the New Mexico-Colorado border). Wolf also was aware that extraterrestrials work with government scientists at Haystack Air Force Laboratory, deep under Haystack Butte at Edwards Air Force Base, California. And when the subject was brought up of the complex at Indian Springs Auxiliary Air Force Station adjacent to the Nevada Test Site, Wolf quickly responded, "I can't say anything about that."

Dr. Michael Wolf served as a Viet Nam-era as an Air Force Colonel, pilot, flight surgeon, and as an I-Corps intelligence officer for the CIA and **NSA**. He has earned an MD in Neurology, a Ph.D. in Theoretical Physics, a ScD in Computer Science, a JD in Law, an M.S. in electromagnetic influences on organisms, and a B.S. in biogenetics. Basically a Buddhist, Wolf also affirms the core truths in Islam, Christianity, Judaism, Native American spirituality, and other major spiritual traditions. His personal seminal koan is: "The truth is a lie which has yet to be revealed."

Since 1979 he has served as a scientific consultant to Presidents and the National Security Council on extraterrestrial matters. He is also a member of the NSC's unacknowledged UFO information-management subcommittee, MJ-12',s panel of scientists. "The code names I used there were 'Griffin', and 'Nu Kappa Eta'." MJ-12 made Dr. Wolf the Chairman of Alphacom Team, its premier extraterrestrial-matters group, which also includes an Admiral from Naval Intelligence. MJ-12 meets at various confidential locations, including the **Battelle** Memorial Institute [at Columbus, Ohio]

On May 1st, 1975 (79 ??) , two Zeta Reticulan Greys were demonstrating a 100 percent power-producing annihilation reaction in a relatively small antimatter reactor, to two deep-cover scientists within the tunnels below Area 51, using a super-heavy element, bombarding it with protons. One Ret. Four [a slang term for a resident of the fourth planet of the Zeta II Reticuli system] was doing the display and demanded first that all rifles and especially bullets in them be removed from the room. The elite military guards refused to surrender their weapons, and in the chaotic disorder and commotion that ensued, one alien, two scientists and forty-one military personnel were killed, simply because the colonel in charge of security questioned the Grey's orders. One witness to the scene survived. All the humans had died of head wounds and resultant damage of brain matter. Since no weapon was seen by this witness, the author suggested that the Greys might be able to use their minds as weapons, in essence using their brains as a bio-chemical circuit board through which to channel electromagnetic energy via specific neural patterns or pathways. This may explain, he suggests, why the Greys have the ability to walk or phase through solid matter, read minds, send mental messages, and are able to lift and float themselves as well as abductees without observable instrumentation.

1976 MJ3 report, it was estimated the Aliens' technology was many thousands of years ahead of United States technology. Our scientists speculate that until our technology develops to a level equal to the Aliens, we cannot understand the large volume of scientific information the United States has already gained from the Aliens. This advancement of United States technology may take many hundreds of years.

1977 *Have Blue* Stealth fighter testing begins at Area 51.

1977 Voyager 1 and Voyager 2 were launched within a few weeks of each other

Have
Desk Analyses of Soviet scrap metals in **Battelle** Laboratories, Columbus, Ohio (1978)

1979 *Moonlight Express*, a robotic mouse created by Pacific Northwest researchers, won a national competition for robotic capabilities.

1979 A conference on animal mutilations was organized by Senators Harrison "Last Man on the Moon" Schmitt and attended by Scientist Henry Montieith, who had just completed ten years of research on the subject. According to Schmitt's figures, economic losses from the mutilations totaled over 2.5 million ANNUALLY. "Men In Black" are also in attendance. In October 1979, an altercation takes place between government scientists and military personnel and the resident aliens in the Dulce base. Sixty-six special forces personnel were killed.

1979 Former CIA official Victor Marchetti spelled out indirectly in 1979 everything the American people needed to know about the UFO phenomenon. His reflections are not far distanced from what Dr. Pierre Guerin described as the reason for the coveup. According to Marchetti, "We have, indeed, been contacted.....and the U.S. government, in collusion with other national powers of the Earth, is determined to keep this information from the general public..."

1979 – 1980 Paul Bennewitz begins filming UFOs over Manzano Test Range, Kirtland AFB, near Albuquerque, New Mexico.

Since the early 1980s ORNL's Center for Engineering Systems Advanced Research (CESAR) in the Engineering Physics and Mathematics Division has been studying and developing intelligent machines.

1979 January 14, 1979 the New York Times reported that the Central Intelligence Agency had been ordered by a federal judge to release nearly a thousand pages of secret documents about UFOs. This decision was the result of a freedom of information lawsuit brought against the agency by Ground Saucer Watch, a **UFO** research organization based in Phoenix, Arizona. In an interview with the Times, the director of the group, William Spalding, said that the documents

revealed that "UFOs do exist. They are real. The government has been totally untruthful and the coverup is massive."

1980 Stevenson-Wydler Technology Innovation Act, legislation over the years has told the national laboratories quite explicitly that they must transfer commercially useful technology to the private sector and has given them a framework within which to accomplish this goal. Federal laboratories have worked hard to do so. From 1992 through 1995, more than 3,500 CRADAs were signed. Sandia has about 300 CRADAs, worth about \$700 million in jointly funded research.

1980 Project Pounce

Dr. Michael Wolf would go on to become appointed executive officer of **Project Pounce**. Created in the final days of December, 1980, **Project Pounce** is an elite group of **Air Force** Black Berets and military scientists who rush to the scene of any UFO crashes, cordon off the area, retrieve the extraterrestrial spacecraft and any occupants, then "sanitize" the crash site back to its pre-crash appearance, and intimidate any outside witnesses into silence.

The 1980s brought further diversification — this time expanding a largely contract research strategy to include commercialization, intellectual property, and a deeper focus on laboratory management. This strategy led to three significant DOE contract awards in the 1990s: co-management of the Oak Ridge National Laboratory, Brookhaven National Laboratory, and the National Renewable Energy Laboratory. These were also exciting times in Battelle research, with defense research doubling and other technical markets, such as environmental restoration, optical networking, genomics, survey research, and endocrine disrupter screening gaining attention.

1983 Project PHOENIX II (MONTAUK) U.S.A.F., NSA:

Description -- Electronic multi-directional targeting of select population groups.

Targeting -- Medium range.

Frequency range: Radar, microwaves, EHF, UHF modulated with gigawatt through terawatt power.

Purpose: Loading of Earth grids, planetary sonombulescence to stave off geological activity, specific-point earthquake creation, population programming for sensitized individuals.

Pseudonym: "Rainbow," ZAP.

1983 Thinking machines founded by W. Daniel Hillis

The idea was to make a computer whose processors were fast like those of ordinary computers, but also massively parallel like in a brain. In this way, one could have the best of both worlds, and one could build a really intelligent system with perhaps hundreds of thousands or millions of computer processors tightly linked together.

Hillis holds some 40 U.S. patents - for disk arrays, **forgery** prevention methods, a color camera and various software and mechanical devices. Among all his inventions, the clock is definitely one of the coolest – one that would make any MIT hacker proud.

Thinking Machines consumed about \$100 Million from venture capital firms and wealthy individuals before it stopped manufacturing hardware. They shipped around 100 systems. The company that remained concentrated on data mining applications that **Thinking Machines** developed originally for their massively parallel platform.

1983 meeting with EBE-2 at Los Alamos National Laboratories The area was called, Site 30.

Access to this facility was gained by entering Area 49. Access to the underground facility was through building number 49-2091.

1984 Producer Jaime Shandera receives the *MJ-12 Documents* on an undeveloped roll of 35mm film.

1985 two former Air Force officers, Lieutenant Robert M. Jacobs and Major Florenz L.

[Mansmen], publicly disclosed their involvement in a highly classified incident that had occurred over 20 years earlier. Jacobs revealed that an Air Force missile test launched on September 15 1964 from [Vandenburg] Air Force base in California had a bizarre encounter with a **UFO** high over the Pacific Ocean. The former lieutenant was in charge of a photographic team that was filming the launch through a high powered radar guided telescope. Both Jacobs and his superior, Major [Mansmen], confirmed that when the film of the test was examined it revealed that the missile dummy nuclear warhead had been approached by a disc shaped object as it raced down the range towards its target. The former Major has stated that analysis of the film demonstrated

that the **UFO** was a classic disc. The center seemed to be a raised bubble. The entire lower saucer shape was glowing and rotating slowly. Said [Mansmen], "The assumption was that it was extraterrestrial."

Analyzing the film frame by frame an Air Force team was amazed to find that the **UFO** began to pace the dummy warhead. Abruptly, 4 beams of light flashed from the disc in rapid succession. Seconds later, the warhead began to tumble and soon fell into the Pacific Ocean hundreds of miles short of its target. According to Major [Mansmen] the film of this **UFO** incident was quickly confiscated by the CIA and everyone with knowledge of it was sworn to secrecy.

1985 -- ON August 5th, Scientists Paul Bennewitz observes the crash site of a US Black Delta ship in New Mexico.

1986 April 27 Death of famed Astronomer and UFOlogist J. Allen Hynek, buried in Arizona
By 1986, two "superelastic" alloys are offered—a Japanese NiTi^{109,110} and a Chinese NiTi.^{34,111}

These are active austenitic alloys that form stress-induced martensite

1980s There was also a Timberwind pebble bed reactor concept under the Defence Dept Multi-Megawatt (MMW) space power program during the late 1980s, in collaboration with DOE. This had power requirements well beyond any civil space program.

1987 -- In 1987, the "Dulce Papers" are first released. Data on five entrances to the Dulce lab is leaked, and the [secret-fraternal-corporate] government takes care of the leaks by destroying buildings and building new ones in odd locations for apparently no perceivable reason. On the 27th of November, groups of US Army rangers attempt and apparently bungle an attempt to enter a joint alien facility in New Mexico [apparently a continuation of the Dulce Wars which began in 1979]. In December, the CIA begins to contact everyone who was ever in its employ that ever had anything to do with the alien problem. A woman draws a picture of a black-mirrored spherical craft she says belongs to the National Security Agency. On the 14th of December, John Lear offers to host the MUFON Convention that would be held in Las Vegas in July of 1989.

1988 - George Bush elected President.

NOTE: President Bush did not need a briefing as President-Elect concerning MJ-12, because he was MJ-1 while he was CIA Director.

1988 -- Word comes from New Mexico to researchers that Los Alamos has developed an antimatter weapon, which allegedly will be used as a last resort "if the Greys cannot be pried away from the planet". The number of Greys on [inside] Earth is estimated at 20 million. In December, Steven White [President of Bechtel Investments] dies. Bechtel has been heavily involved in underground construction and is the world's largest construction firm.

1989 Project TRIDENT, ONR, NSA: Description -- Electronic directed targeting of individuals or populations.

Targeting: Large population groups assembled.

Frequency range: VHF, HF, UHF, modulated at ELF. Local transmission and reception.

Purpose: Crowd dispersion and others.

Display: Black helicopters flying in triad formation

9 Mar 89 There is an article in the March 5th EE Times about a radio astronomy observatory on the moon that will be erected and maintained by a robot vehicle.

According to the article:

A concept designed by **Battelle** calls for a six wheeled, 3100 pound vehicle with two arms mounted near the front and a payload bay to carry 600 very low frequency antennae that it would set up as the observatory in a crater on the far side of the moon. The vehicle would be powered by four radio-isotope **thermoelectric generators** with secondary lithium batteries for peak loading. It would navigate over a 5,000 km range with an inertial navigation system with laser triangulation calibration. The vehicle will map the entire area before building the observatory. On-board sensors will help it avoid dangerous objects, and it will be designed to stop and await commands from earth if it encounters objects it does not recognize. The concept calls for speeds of up to 3 km/hour and a capability to negotiate slopes of up to 30 degrees, climb over foot-high

obstacles and cross crevasses up to 1-m wide. The vehicle would be expected to operate on the lunar surface for 7 to 10 years. Hmmm did this ever come to pass ????

1989 -- Data on Project Excaliber is released. The project is involved in developing a warhead that will penetrate 1000 meters of earth and then detonate. Useful for destroying underground bases.

1990 The Human Genome Project was launched in October 1990. Its main aim was to sequence the entire human genome. Other targets included identifying the genes that are encoded with this information, developing techniques for analysing this data, and addressing the ethical, legal and social issues that may ensue. Two American agencies, the Department of Energy and the National Institutes of Health jointly produced the original plan that was to be publicly funded. Six years later, however, and a private company, Celera, joined in the effort and the project turned into a race. There was a fear in the scientific community that Celera would patent the information it uncovered, so the public consortium increased its efforts to prevent the genome becoming privatised. In the end both parties announced at the White House on 26th June 2000 that they had each completed a working draft of the genome. By the end of February 2001 this draft had been finalised and both teams published the genome in scientific journals – showing the 30,000 or so genes that it contained.

1991, Pin and Alex Bangs of CESAR and Steve Killough of ORNL's Robotics and Process Systems Division automated several manipulation and safety-enhancing functions on an outdoor material-handling vehicle prototype.

1992 Air Force Materiel Command, with headquarters at Wright-Patterson Air Force Base, Ohio, was created July 1, 1992. The command was formed through the reorganization of Air Force Logistics Command and Air Force Systems Command.

AFMC's mission is to develop, deliver and sustain the best products for the world's best Air Force. It is the Air Force's largest command in terms of employees and funding. AFMC supports other U.S. military forces and allies and handles major aerospace responsibilities for the Department of Defense. This includes research, development, testing, and evaluation of satellites, boosters, space probes and associated systems needed to support specific National Aeronautics and Space Administration projects.

AFMC researches, develops, tests, acquires, delivers and logistically supports every Air Force weapon system as well as other military non-weapon systems. AFMC works closely with its customers - the operational commands - to ensure each has the most capable aircraft, missiles and support equipment possible.

Aeronautical Systems Center, at Wright-Patterson AFB, Ohio, is responsible for research, development, test, evaluation and initial acquisition of aeronautical systems and related equipment for the Air Force. Its major active programs are the B-2 and B-1B bombers, C-17 airlifter, F-22 fighter and continuing work on the F-117A fighter, F-15 Eagle and F-16 Fighting Falcon.

Electronic Systems Center, at Hanscom AFB, Mass., develops and acquires command, control, communications, computer and intelligence systems. Among the systems developed by the center are mission planning systems, the Airborne Warning and Control System, the Ballistic Missile Early Warning System, the Joint Surveillance Target Attack Radar System and the North American Aerospace Defense Command Center in Cheyenne Mountain, Colo.

Space and Missile Systems Center, at Los Angeles AFB, Calif., designs and acquires all Air Force and most DOD space systems. It oversees launches, completes on-orbit checkouts, then turns systems over to user agencies. It supports the Program Executive Office for Space on the Navstar Global Positioning, Defense Satellite Communications and Milstar systems. SMSC also supports the Titan IV, Defense Meteorological Satellite and Defense Support programs, and Follow-on Early Warning System. In addition, it supports development and acquisition of land-based intercontinental ballistic missiles for the Air Force Program Executive Office - Strategic Systems.

Human Systems Center, at Brooks AFB, Texas, has the role of integrating and maintaining people in Air Force systems and operations. The center concentrates on crew-system integration, crew protection, environmental protection and force readiness (human resources and aerospace medicine). It develops and acquires systems such as life support, chemical warfare defense, air base support and aeromedical casualty.

The Air Force Research Laboratory's mission is to identify and provide advanced, affordable, integrated technologies to keep the U.S. Air Force the best in the world. As a full-spectrum laboratory, it is responsible for planning and executing the Air Force's entire science and technology budget. The headquarters, located at Wright-Patterson AFB, directs the activities of research facilities across the nation.

Arnold Engineering Development Center, at Arnold AFB, Tenn., has the nation's most advanced and largest complex of flight simulation test facilities. The center has more than 50 aerodynamic and propulsion wind tunnels, rocket and turbine engine test cells, space environmental chambers, arc heaters, ballistics ranges and other units. The center tests aircraft, missiles and space systems and subsystems at flight conditions they will experience during a mission.

Aerospace Maintenance and Regeneration Center, at Davis-Monthan AFB, Ariz., is the site for storing surplus aircraft and for aircraft regeneration. The center stores preserved aircraft indefinitely with minimum deterioration and corrosion because of the meager rainfall, low humidity and alkaline soil in the Tucson area. It presently stores more than 3,600 aircraft from all the services. When production of older aircraft ceases, the center sometimes is the sole source for parts. Reclamation projects have become a major part of the center's work load.

1993 Firexx conducted its first instrumented tests in 1993 on Firexx Fortification at the Battelle Laboratory in Ohio. In that test, Firexx was proven to reduce overpressures by 98%.

1993 September 1993 issue of *Just Cause* (Citizens Against UFO Secrecy, P.O. Box 218, Coventry, CT 06238) which states this ethic better than we can. "The **research Battelle** undertakes is done with integrity and an ethical regard for the confidentiality of its clients, both governmental and industrial (commercial). **Battelle** will not discuss with others the work it does for its clients. Because of this ethical approach to its work, including due regard to matters of national security, **Battelle** will not respond to inquiries about *Blue Book* or any of its other work...This should not be seen as proof of cooperation in any sort of imagined cover up. It is part of the ethical tradition that has been part of the **Battelle** business philosophy since its founding in 1929."

By 1993 researchers led by John Bates had developed a thin-film lithium microbattery for computer memory chips and small devices. The technology was licensed and the microbattery has been at various stages of manufacturing scaleup.

Omni-directional robotic vehicles (including a wheelchair concept that was licensed for potential commercial development) were invented by Francois Pin and Stephen Killough.

1993 The Air Intelligence Agency, headquartered at Kelly Air Force Base, Texas, is a field operating agency reporting directly to the Headquarters U.S. Air Force assistant chief of staff for intelligence. AIA, activated on Oct. 1, 1993, is the Air Force's single source intelligence agency, combining various intelligence disciplines to provide current, accurate data to air component commanders and national decision makers.

The NAIC was formed Oct. 1, 1993, by combining the Foreign Aerospace Science and Technology Center, which focuses primarily on the production of scientific and technical intelligence, and the 480th Intelligence Group, which focuses on the preparation of cockpit-oriented target material and mission planning intelligence. The 480th includes the 20th, 27th, 36th and 123rd Intelligence squadrons. In July 1994, the 497th Intelligence Group Directorate of Assessments, which provides analysis support directly to the Air Staff and other intelligence organizations in the Washington, D.C., area, was integrated into NAIC. The consolidation of these three units resulted in a significant mission expansion enabling NAIC to provide fully integrated intelligence products tailored to customer requirements.

Sept. 10, 1993 The Air Force Information Warfare Center (AFIWC) was activated on Sept. 10, 1993. Formerly the Air Force Electronic Warfare Center, AFIWC was established by combining the securities functions of the Air Force Cryptologic Support Center with the functions performed by AFEWC. The center is the focal point for development and application of information dominance in future warfare. It provides commanders with products and services to wage command and control warfare.

Sept. 7, 1993 The 544th IG, headquartered at Peterson Air Force Base, Colo., provides intelligence and information to Air Force Space Command (AFSPC). The group was established to provide a single focal point for continental U.S. based operational space issues and to posture AIA to better support AFSPC and national agencies. The group was activated on Sept. 7, 1993.

Oct. 1, 1993 The 67th Intelligence Wing (IW), headquartered at Kelly Air Force Base, Texas, manages the agency's global mission. The wing manages the planning of all-source intelligence, information warfare and security support. It assists Air Force components in the development of concepts, exercises and employment of AIA forces to support low-intensity conflict, counterdrugs and special operations as AIA's integrated wing. Subordinated to the wing are four intelligence groups located in the continental U.S., Hawaii and Germany.

More than 9,600 personnel are assigned to the 67th IW, making it the largest wing in the Air Force in terms of geographical area of coverage and number of people assigned. The wing was activated on Oct. 1, 1993.

1994 Mike Ramsey invented the "lab on a chip," which shows promise as an inexpensive method for DNA sequencing and forensic fingerprinting, environmental monitoring, diagnosing disease, and discovering new drugs. It is now being produced and marketed by Caliper Technologies for DNA, RNA, and proteins analyses of biomedical interest.

1994 ULTOR: or ULTIMATE VICTOR, a Pentagon deep black project optimized to wage _non-lethal_ "cybernetic/informatic" conflict - the supreme silent weapon for quiet wars.

Completed in 1994, the ULTOR is a neurally-netted, parallel-processed, multiple logic-gated vast interactive

semi-autonomous system developed by Scientific Applications while working on projects used to implement the SIOP (Single Integrated Operational Plan), America's evolving battle strategy for spasmodic, escalating nuclear war. The ULTOR machine, located in a secret complex at **Battelle** Pacific Northwest, is designed to aid in the development of the logic for its successor, the completely autonomous MOLOCH (Mnemonic Overseer and Logical Ontological Conscious Herald) project, slated to go on-line in late 1999.

1995 In January, ORNL had the fastest parallel supercomputer in the world- the Intel Paragon XP/S 150. This machine was used for calculations on a variety of important problems such as global climate modeling, materials science simulations, theoretical physics, and bioinformatics. It was also used to model the flow of pollutants in groundwater.

A team of computer scientists from Oak Ridge, Los Alamos, Sandia, and Lawrence Livermore National Laboratories, in conjunction with IBM, developed an ultra-fast data storage system known as the High Performance Storage System. This software applies the concept of parallelism to the data storage regime to achieve speeds that have been unattainable using conventional storage strategies.

ORNL researchers led by Randall Wetherington developed a sonar array and signal analysis system for the U.S. Navy. The signal analysis system employed a real-time supercomputer to extract the noise signature from passing submarines that is below that of the ambient sea noises.

1995 Fire and explosion proof barrier

Battelle performed explosion tests in a specially designed bunker. Researchers placed the equivalent of one-quarter pound of TNT five inches away from a six-inch-thick concrete block wall. After the explosive was detonated, the wall was found to have suffered significant structural damage. A similar test then was conducted with a four-inch Firexx pad between the wall and the explosive. After detonation, damage to the wall was limited to minimal surface markings.

Scientists concluded that the Firexx padding had reduced the over-pressure of the blast from a damaging 1,000 pounds per square inch to a mere two pounds per square inch. This means that the Firexx pad absorbed and dispersed 99.8% of the blast's force!

Battelle engineers found that Firexx protects against three pounds of TNT at a distance of one foot; five pounds at three feet; and 3,400 pounds at 10 feet. (The bomb that destroyed the Oklahoma City Federal Building was detonated at a distance of 10 to 15 feet. Its blast was equivalent to about 3,000 pounds of TNT.)

For example, the construction industry will use Firexx as a fire-stop product. The material can be used in wallboards, firewalls and bulkheads, ceilings and roofs, and as cladding for beams, wires, and pipes.

Or take a proprietary composite board similar in width to the gypsum panel which includes a mixture of gypsum, perlite, expanded Firexx and other materials. It had a burn-through rate of six hours!

1995 - Remember to "nerve gas" attack in Japan's subway system. The nerve gas with the trade

name Sarin is isopropyl methylphosphonofluoride. The raid on the compound producing it in Japan turned up tons of sodium fluoride.

1995 the NATO Advisory Group on Aerospace R&D (AGARD) commissioned a study to:

- assess how emerging technology may influence aerospace systems and operational concepts
- make aware possible threats that technology may pose when acquired by adversaries
- recommend the most promising future aerospace technologies.

The report was published in September 1997 and runs to 3 volumes. Materials & Structures inputs (some 60 pages) are on file. A summary of the main features is given below: http://www.iom3.org/foresight/nac/html_docs/AGARD%201.htm

1995 there has been a remarkable news report from China: In the province of Sichuan, which lies on the eastern border of the Baian-Kara-Ula mountains, 120 people of a previously ethnologically unclassified tribe have been discovered. The most important aspect of this new tribe is the size of its people: No taller than 3 ft. 10 in., the smallest adult measuring only 2 ft. 1 in.!

1996 James Klett and Tim Burchell discovered how to make a graphite foam that transfers heat unusually well. Its potential applications are legion. They include smaller radiators that enable racecars and future energy-efficient automobiles to be more aerodynamic in design; improved cooling to enable operation of faster computer chips; and more comfortable protective suits for emergency responders.

ORNL's Steve Kerchel and Bill Dress helped Oak Ridge Y-12 Plant researchers develop a heartbeat detector to spot terrorists concealed in vehicles entering government facilities. It is being used to locate escaping prisoners.

1996 – Discovery of Transfer Capacitor – www.compamerica.com. www.accpc.com
And as if that isn't enough, one of CSS's chief research scientists discovered a semiconductor technology in the mid 90's that even has Intel worried, the Million Gigahertz Transistor technology, as it is called in lay terms, known as the N-Alkane Silver Thiozole Transfer Capacitor, a device using (and its a very long word) "metal insulator dielectric junction electron trap oscillators" to operate as memory and logic for computation at speeds of up to 100 Million Gigahertz, over 50 million times faster than today's Pentium 4! The technology is also so tiny, that you could place 90 Billion 32 Bit Words of storage onto a chip the size of a common Poker Chip, connect it to a clock battery and power it for 10 years as a mechanical disk drive replacement, with all the speed benefits indicated and the ability to read its binary contents with ordinary Light! While it is going to take years to commercially develop and exploit this technology, CSS is already on the road to success, parallel research at Lawrence Berkley and Harvard have already proven the basics in physics that CSS published (and was challenged) in the mid 90's!!

1996 In June 1996, a prototype engine built by NASA/Lewis began a long-duration test in a vacuum chamber at JPL simulating conditions of outer space. The test concluded in September 1997 after the engine successfully logged more than 8,000 hours of operation. Results of the NSTAR tests were used to define the design of flight hardware that was built for Deep Space 1.

1997 Project Clear Vision

The Central Intelligence Agency built and tested a model of a Soviet-designed germ bomb that agency officials feared was being sold on the international market. The C.I.A. device lacked a fuse and other parts that would make it a working bomb, intelligence officials said.

Battelle's "Aerosol Engineering and Biological Defense Science" description relays that their "Aerosol Science and Technology (AS&T) group develops lab experimental and field test procedures for . . . point-source emissions and the transport and atmospheric fate of aerosols by means of modeling and field assessments for industrial process."

Both the Pentagon's aerosol operations and its limited nuclear wars are deeply interconnected. We can trace the beginnings of Operation Cloverleaf right to the Strangelove brain of Dr. Edward Teller, father of the hydrogen bomb and proponent of nuking inhabited coast lines to rearrange them for economic projects.³¹ Before he died in 2003, Teller was director emeritus of Lawrence Livermore National Laboratory, where plans for nuclear, biological and directed energy weapons

are crafted. In 1997, Teller publicly outlined his proposal to use aircraft to scatter in the stratosphere millions of tons of electrically -conductive metallic materials, ostensibly to reduce global warming.

"Project Jefferson" was ongoing around the same time American anthrax ace William C. Patrick III was apparently contracted by Battelle Memorial Institute to develop a report on the ramifications of mailing powdered anthrax, much the same as what occurred in the wake of the October anthrax mailings.

1997 Water pik invented by Battelle

1997 ORNL researchers led by Wayne Griest began developing a second-generation mass spectrometer for the U.S. Army to detect chemical and biological warfare agents more quickly and accurately, reducing the number of false positives experienced by the first-generation mass spectrometer during the Persian Gulf War (1990-91).

1997 Mesosystems created. MesoSystems is committed to providing fast, effective and affordable bio-threat solutions. Founder and CTO Chuck Call, Ph.D., is the visionary behind the product line. Chuck directs the MesoSystems' scientific and engineering staff in creating elegant solutions to unthinkable threats. Chuck launched his 'biocareer' with the Battelle Memorial Institute.

1998 – The Carlyle Group purchases EG&G, a support company for government installations that has a monopoly on live HAZMAT training for government personnel. Carlyle also purchases Sprayway, an aerosol company, and Sprayway's subsidiary Claire Manufacturing, which also makes aerosols. Carlyle also purchases Medpointe, a medical database company, and Empi, which makes a new hi-tech vaccine delivery system.

1998 ORNL computing scientists developed Tennessee/Oak Ridge Clusters (TORC), a set of dedicated clusters of Linux/NT desktop computers used for research in parallel computing and applied mathematical and scientific computations. Built using off-the-shelf components (Pentium Pro motherboards, Linus/NT, Fast Ethernet, Myrinet), TORC can achieve gigaflop performance for around \$30,000, making it comparable to systems costing many times more.

1998 Deep Space 1 was launched in October 1998 as part of NASA's New Millennium Program, which is managed by JPL for NASA's Office of Space Science, Washington, DC. The California Institute of Technology in Pasadena manages JPL for NASA. It works of an Ion propulsion system. Many believe the Ion propulsion system was reversed engineered.

<http://nmp.jpl.nasa.gov/ds1/>

1998 James Watson (discoverer of DNA) used the occasion of this 50th anniversary of the double helix discovery to break through this barrier. In a just-published book, "DNA: The Secret of Life," he acknowledges the problem. "A failed germ-line experiment would be an unthinkable catastrophe -- a human being born flawed, perhaps unimaginably so, owing to our manipulation of his or her genes," he writes. "The consequences would be tragic. Not only would the affected family suffer, but all of humankind would lose because science would be set back." That's why, Watson writes, "the start of human experimentation will require resolute courage; the promise of enormous benefit won't be fulfilled except through experiments that will ultimately put some lives at risk."

1999 Vitex spin off from Battelle

Flexible Glass' and 'Barix' products were first developed at Pacific Northwest National Laboratory, administered by Battelle, Memorial Institute, where Vitex now has staff continuing development of the encapsulation tool, "Guardian "

Privately held Vitex was incubated at the world-class Battelle Memorial Institute, a global leader in science and technology research. Spun-off as an independent company in 1999, Vitex is armed with a strong IP portfolio and technology solutions to become a market leader for thin-film barrier coatings and flexible substrates for the burgeoning FPD market. Vitex's landmark development of a thin-film moisture barrier technology continues to gain acceptance within the industry due to its demonstrated ability to meet the rigorous environmental requirements for thin-film encapsulation of bottom- and top-emission OLEDs. In addition, this technology can be applied to a wide range of organic semiconductor applications such as photovoltaics and batteries.

1999 Livermore scientists and engineers unveiled the Handheld Advanced Nucleic Acid Analyzer (HANAA), the first truly portable battery-powered device for identifying bioagents in the field.

HANAA can analyze samples in less than 30 minutes, compared to the hours or days that regular

laboratory tests typically require.

1999 ORNL's Michael Paulus and Shaun Gleason developed the MicroCAT scanner, an X-ray computed tomography system for mapping internal defects and organ changes in experimental mice. By the end of 2002, their company, ImTek, Inc., had sold 17 scanners for cancer, genetics, and drug discovery research; 75% of their customers are universities, the rest, private firms.

2001 Battelle, connected with The Battelle Memorial Institute, provides services as "a military contractor in Ohio," and "has experience making powdered germs. . . . Battelle participated in a secret CIA program, code-named Clear Vision that began in 1997, that used allegedly benign substances similar to anthrax. Battelle, as a CIA contractor, partnered with Bioport for America's sole anthrax vaccine production. Bioport-largely owned by Britain's top secret biowarfare consortium PortonDown, bin Laden family associate Faud El Hibri, Admiral William J. Crowe, Jr., a former Chairman of the Joint Chiefs of Staff, and others. that managed bin Laden family millions prior to 9-11, directed by past CIA director Frank Carlucci, James Baker III (->), and Past President George H.W. Bush); "Project Jefferson" was ongoing around the same time American anthrax ace William C. Patrick III (See Usamriid), was contracted by Battelle Memorial Institute to develop a report on the ramifications of mailing powdered anthrax, much the same as what occurred in the wake of the October anthrax mailings. ...William C. Patrick III and Russian defector Kanatjan Alibekov (alias, "Ken Alibek" ->)-the world's two leading anthrax experts-were very "close friends!" Both men held classified consulting contracts with the CIA and Battelle, Alibekov was on the CIA's payroll at that time, according to Preston, and he was fully employed by the Battelle Memorial Institute (BMI). ...Thus, the government "contractor" for whom anthrax expert William C. Patrick III wrote his mailed anthrax aerosol dispersal assessment could have only been Battelle for whom "Ken Alibek" worked; Robert Myers, Bioport's Chief Operating Officer affiliated; and Hauer, Jerome in New York's emergency management helped facilitate tests In addition to Battelle's voluminous research, development, and testing activities, this private institute co-manages America's most secret enterprises including the DoE's Brookhaven National Laboratory, National Renewable Energy Laboratory, Oak Ridge Laboratory, and fully manages several others including the Pacific Northwest National Laboratory .

that the source of the anthrax weapon used in the mailings was the Ames, Iowa strain of silica-impregnated and electro-statically charged anthrax produced by the Battelle Memorial Institute under their classified Defense Department "Project Jefferson" and/or CIA project "Clear Vision." This hyper-weaponized germ was likely produced with the help (or under the direction) of Dr. Alibekov and/or Dr. Patrick. The fact that these Battelle agents and CIA-affiliated agencies gained notoriety, if not financially, as a result of the anthrax mailings and fright fits the parameters of organized conspiracy to commit military-industrial sabotage and serial homicide approaching economic genocide.

October 2001 – The Anthrax attacks begin. Key news people and Democrats are sent Anthrax in the mail, which we now know was Fort Detrick/Battelle Anthrax. EG&G, a Carlyle Group Subsidiary, has access to Battelle and Fort Detrick Anthrax by way of its service contract with Battelle, but to date there's been no investigation of EG&G by Robert Mueller and the FBI.

October 2001 – Under cover of the Anthrax attacks, EG&G receives a billion dollar hazmat disposal contract from the White House. Meanwhile, EG&G employees at Area 51 are on strike, where EG&G has a security contract, among other contracts. EG&G has enjoyed this contract since Area 51 was opened. The guards are on strike because they hadn't received a raise since the 1970s.

2001 – overseas work

lengthy negotiations by Livermore scientists culminated in a formal agreement between a Russian weapons assembly facility and a medical equipment manufacturer to establish a commercial manufacturing facility at Sarov.

July 21, 2002 – The Carlyle Group sells EG&G, where it has had union problems in 2001, for a

tidy profit.

2002 *Air Line Pilot*, November/December 2002, page 15

By Jan W. Steenblik, Technical Editor

Richard Healing, director of transportation safety and security for the **Battelle Corporation**, talked about **Battelle's** many ongoing aviation projects for government agencies and private industry, including

Aircraft wiring—with government/industry cooperation, **Battelle** is conducting several programs focusing on reducing wiring-related threats, and developing methods for mitigating these threats.

Fire detection and suppression —**Battelle** is involved in ongoing research, including realistic testing of inservice aircraft at altitude.

Aviation security—**Battelle** has several areas of focus, including reducing weight and increasing speed of explosive detection systems, a confidential system similar to ASRS for reporting security problems, nonlethal weapons that could be used in aircraft, and an agreement with Port Columbus (Ohio) Airport to use a holistic approach to develop a "smart" airport providing required security with minimal effect on operations.

Interesting is the bio of another director of the MBNA **Corporation**: Bernadine P. Healy. She serves as a trustee of the **Battelle** Memorial Institute and is President and CEO of the American Red Cross.

2002

The IBM Power4 "Cheetah" supercomputer at ORNL, the 16th fastest in the world at the end of 2002, began operation. ORNL and Cray Inc., forged a partnership under the guidance of DOE and the cooperation of other national laboratories. This collaboration was expected to result in supercomputers that will exceed the capabilities of Japan's 40-teraflop Earth Simulator, the fastest computer in the world in 2002.

2002 Biological Aerosol Sentry and Information System.

Laboratory scientists also worked with their counterparts at Los Alamos to develop the Biological Aerosol Sentry and Information System.

ORNL management identified Laboratory technologies that could be used for homeland security and national defense. Jim Kulesz came up with the SensorNet concept, which won national attention and some funding; the idea was to locate radiation, chem-bio, and wind-direction monitors, computers, and communication devices at cell-phone towers to alert affected populations, emergency responders, and health-care facilities about terrorist attacks so they could take appropriate action to save lives.

2001-2003

The 8,000-employee, nonprofit research center in Columbus won't discuss its anthrax work, other than to acknowledge its development of a vaccine for the Department of Defense. At Battelle's sprawling 20-building campus across from Ohio State University, the anthrax project is easily overshadowed.

2002 The general public who have missed these signals, however, are another matter entirely. The first nuclear initiative request was slashed twice in 2002 as it passed through both the House of Representatives and Senate. Now it stands at only 107 million dollars, a pitiful amount for a completely new program, and far short of what would be necessary to meet NASA's heightened goals.

2003

The Chemical and Biological Defense Information Analysis Center (CBIAC) is a Department of Defense (DoD)-sponsored Information Analysis Center (IAC) operated by Battelle Memorial Institute and administered by the Defense Information Systems Agency (DISA), Defense Technical Information Center (DTIC) under the DoD IAC

Program Office (Contract No. SPO700-00-D-3180).

The CBIAC is supported by Horne Engineering Services, Inc., Innovative Emergency Management, Inc., MTS Technologies, Inc., QuickSilver Analytics Inc., and SciTech, Inc. Contact the CBIAC Contracting Officer's Technical Representative (COTR) at: The CBIAC is located in Building E3330, Room 150, Aberdeen Proving Ground - Edgewood Area, Maryland 21010. For further information or assistance, visit or contact the CBIAC. CBIAC Aberdeen Proving Ground - Edgewood Area P.O. Box 196 Gunpowder, MD 21010-0196 Tel: (410) 676-9030 Fax: (410) 676-9703 E-Mail: cbiac@battelle.org URL: <http://www.cbic.apgea.army.mil/>

2004
Project Starlight

Starlight, the leading edge of an emerging class of information systems that couples advanced information modeling and management techniques within a visual interface, links data and information top points on a map.

By Brian Kritzstein - is a technology specialist at Battelle
Starlight is the leading edge of an emerging class of information systems that couples advanced information modeling and management techniques within a visual interface. The advantage of Starlight lies in its ability to make the relationships among vast amounts of data visible. By displaying the correlations visually, Starlight brings to analysts, researchers and decision-makers a powerful new set of tools to access, exploit and control information buried in vast amounts of data. http://www.military-geospatial-technology.com/print_article.cfm?DocID=339
2004 Space - Fuel for the future, Neptunium stored at the Savannah River Site is slated to be processed at Oak Ridge National Laboratory and provide fuel for future space missions. Under the proposed program, the material would be transported from Savannah River to Oak Ridge, where it would be blended with an aluminum-metal powder, pressed into pellets, irradiated and undergo chemical processing at ORNL. After encapsulation and additional processing at Idaho National Engineering and Environmental and Los Alamos National labs, the material -- plutonium-238 -- could supply NASA's power needs for **radioisotope thermoelectric generators** for decades. The processing would be done at an existing ORNL facility. Bob Wham of ORNL's Nuclear Science and Technology Division said a record of decision has been signed, and the next step involves getting funding from the Department of Energy. [Contact: Ron Walli; 865.576.0226; wallira@ornl.gov]
2004 Project Prometheus – could herald the human exploration of Mars next decade. Project Prometheus is a nuclear-powered propulsion system tripling the speed of current space travel. This theoretically makes it possible for humans to reach Mars in as little as two months as opposed to at least six months for traditional chemical boosters.

The five year, \$800 million NASA Project Prometheus (formerly the Nuclear Systems Initiative) -- to be managed by NASA's Office of Space Science and coordinated with the Department of Energy would fund the development of new nuclear power generation and nuclear propulsion systems. The Nuclear Systems Initiative currently includes three elements; an advanced RTG power source which will see first use on the 2009 Mars Mobile Laboratory, Nuclear Fission Power, and Nuclear Fission Propulsion. These systems will enable complex surface operations over extended periods of time, and allow for complex spacecraft maneuvering. For distant planets it will also lead to reduced travel times. It will not, however, be useful for the New Horizons mission to Pluto and the Kuiper Belt.

NASA did quietly roll out its proposed budget for Fiscal Year 2004 on February 3. As a NASA new initiative, requested funds for Project Prometheus includes \$279 million, with \$3 billion to be spent on the effort over five years. This consists of \$186 million (\$1 billion over five-years) from the Nuclear Systems Initiative introduced in Fiscal Year 2003 and adds \$93 million (\$2 billion over five-years) for a first flight mission, dubbed the Jupiter Icy Moon Orbiter, or JIMO for short. A gangly collection of small, stainless steel pipes lashed together in a hexagonal shape could

how Marshall Space Flight Center engineers how to build a nuclear-powered spacecraft. Department of Energy's (DOE) Naval Reactors Program which has a lot of experience in developing rugged, compact, long-lived reactor systems for use in harsh conditions. In September 2004, NASA's JPL (Jet Propulsion Laboratory) selected Northrop Grumman Space Technology, Redondo Beach, Calif., as the contractor for co-designing the proposed **Prometheus** JIMO spacecraft. The contract award is for approximately \$400 million, covering work through mid-2008.

"The decision by NASA to revive its nuclear rocket development program is a tremendously positive step. It will greatly enhance the prospects for human exploration and settlement of the Solar System," he told *SPACE.com* .

In 2002, NASA GRC was selected by NASA Headquarters Office of Space Science, Solar System Exploration Division, under a competitive NRA to develop high-power electric propulsion for nuclear systems. In 2003, the propulsion technologies unique to nuclear power systems were transferred to NASA's technology initiative under Project Prometheus.

<http://prometheus.jpl.nasa.gov/>

Wednesday, April 7, 2004 – apparently sort of classified meeting

Project Title: Opportunities for Space Science Enabled by Nuclear Power and Propulsion: A Vision for Beyond 2015 Project Identification Number: SSBX-L-03-07-A

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2003 Terry Weisshaar, manager of DARPA's morphing aircraft structures programme at the Pentagon explains how telescoping and folding wings will help future planes to tailor their wing shape and size for each part of a mission. Terry Weisshaar, DARPA morphing aircraft structures program: The purpose is to give military airplanes the ability to perform drastically different mission roles [during a single flight]. NextGen is looking at a sliding skins idea, Raytheon at telescoping wings and Lockheed Martin at rotating and folding wings.

NS: What was the aeroelastic wing meant to do for the plane? **PD:** The projections are for a 20 per cent boost in fuel efficiency. It gives better lift, for instance. In the future, morphing systems will be able to optimise an aircraft's performance: take off and landing have different requirements to flight. And for UCAVs, you have the concept of hunter-killer, when you are seeking or observing you have one kind of loitering flight pattern and then a different one when you go in and attack.

DARPA is developing new piezoelectric actuators in what we call the Compact Hybrid Actuators Program (CHAP). These are very efficient, very volumetrically small. They can sit in small spaces in the wing and bring your actuation power to the place in the mechanism where it's needed. If you had one big actuator you'd have to do force transmission from a central location and that adds a lot of material and weight.

We are also thinking about controlling the airplane using morphing. So you might operate bird-like control by pulling one wing in and rolling the other one, like a sea gull. You'd save weight by not needing the usual control surfaces. There's real resonance with the Wright Brothers there, because they developed their wing warping controls after watching birds.

The CHAPs are a heaven-sent device for this because they are very good at operating at low frequencies for periods of several seconds or even minutes to move the wing to a new configuration. But they can also operate at tenths of seconds to give the control forces.

Thursday, April 8, 2004

8:30 a.m.

Introduction to **Project Prometheus**, - Alan Newhouse, NASA, Code T

10:15 a.m.

Status of the **Prometheus** Mission Studies, - Leonard Dudzinski, NASA Code T

11:15 a.m.

Status of the Jupiter Icy Moons Orbiter, - Raynor Taylor, NASA, Code T

1:00 p.m.

Science Planning for JIMO and Expectations for Post-JIMO Missions - Curt Niebur, NASA, Code S

2:00 p.m.

Brief Overview of **Prometheus** Reactor Power, and Propulsion Systems - Carl Walz, NASA Code T

3:00

Nuclear Power and Propulsion for Human Exploration Mission - Carl Walz, NASA Code T

The following committee members were present at the closed sessions of the meeting:

William Anders, co-chair, Eastsound, WA

Ellen R. Stofan, co-chair, Rectortown, VA

Reta Beebe New Mexico State University

William B. McKinnon, Washington University

William Cochran, University of Texas

Robert Farquhar, Johns Hopkins University

William G. Hoover, Williamsburg, VA 23185

Sergio B. Guarro, The Aerospace **Corporation**

William Madia, **Battelle** Memorial Institute

Nathan A. Schwadron, Southwest Research Institute

Rather, the aim is to identify scientifically promising missions that might effectively utilize Prometheus technologies and be ready for implementation in the timeframe 2015 to 2030 and beyond.

2005 Glass Box work

NSA recently awarded Battelle a \$1.507-million contract to continue its Glass Box work from last January through June 2006. The agency had sought sources for Glass Box work in September 2004, according to Federal Sources Inc., a consulting firm that tracks IT contracts. "This information may emerge from discoveries in the content and patterning of new data, or discoveries resulting from 'out-of-the-box' analytical reinterpretations of existing data," according to the government. "Novel intelligence often equates to 'suspicious revelations' in one-time or first-time events, or in hidden connections between seemingly independent events or entities, or in puzzle pieces collected long ago but that suddenly make sense in light of recent observations."

Battelle responded to an e-mail inquiry by stating that analysts working on the Glass Box experiment have processed more than 70 intelligence analysis tasks and produced more than 80 reports. "More than 48 gigabytes of data are now contained in the Glass Box database and file store," Battelle said.

"From examining the Glass Box data, researchers have created visualizations of the analytic process, identified inefficiencies in the current analytic work environment, improved search techniques, created user models that help tools understand and predict analyst behaviors, and more," according to the research institute.

2005 University of New Mexico is part of the **Battelle** Energy Alliance, led by nonprofit research giant **Battelle** Memorial Institute. The alliance won a \$4.8 billion contract to manage the lab. Date unknown: Johnson Space Center has been leading the development of a high-power, electrothermal plasma rocket — the variable-specific-impulse magnetoplasma rocket (VASIMR) (<http://www.nasatech.com/Briefs/Sep01/MS23041.html>) — that is capable of exhaust modulation at constant power. The design of the VASIMR is so original that a prototype is being developed in collaboration with the Department of Energy and with the Oak Ridge National Laboratory (Battelle owned) and its Center for Manufacturing Technology. The VASIMR is expected to be commercially useful for boosting communication satellites and other Earth-orbiting spacecraft to higher orbits, retrieving and servicing spacecraft in high orbits around the Earth, and boosting high-payload robotic spacecraft on very fast missions to other planets. Similarly, the VASIMR should make it possible for robotic spacecraft to travel quickly to the outer reaches of the Solar system and begin probing interstellar space. By far, the greatest potential of the VASIMR is expected to lie in its ability to significantly reduce the trip times for human missions to

Mars and beyond. This reduction in times is expected to enable long-term exploration of outer space by humans — something that conventional rocket designs now preclude.

2005 As of March 25, 2005, the fastest supercomputer in a single installation is IBM's Blue Gene/L prototype, with 32,768 processors. It is capable of 135.5 TFLOPS. The Blue Gene/L prototype is a customized version of IBM's PowerPC architecture. The prototype currently sits at IBM's Rochester, Minnesota facility, but production versions will be at various sites, including Lawrence Livermore National Laboratory (LLNL). The LLNL system is expected to achieve at least 360 TFLOPS, and a future update will take it to 1.5 PFLOPS.

2005 US Visit Program – contracted from ?? apparently up to 9 different sources

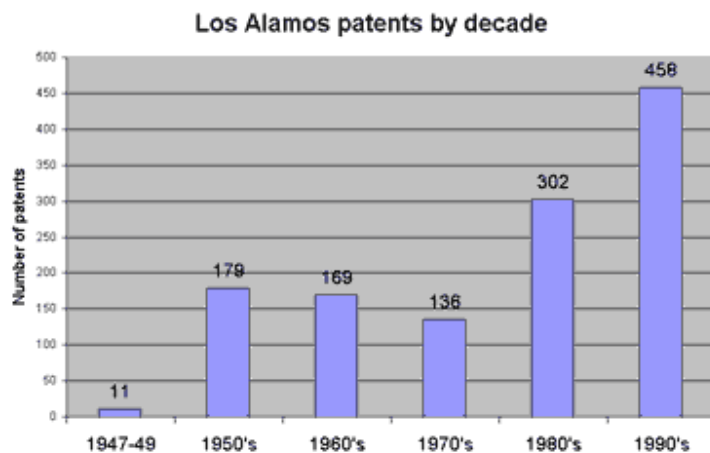
http://govtsecurity.securitysolutions.com/ar/security_usvisit_implemented_nationwide/index.htm

Immigrant tracking program based on three things, tracking of this program is Database Microsoft sponsored SQL engine project for global databases. Dell supplying computers as needed.

- 1) facial photograph
- 2) Two fingerprints
- 3) microchip imbedded in paper required to be carried by immigrants

Individuals able to be tracked via GPS system, implemented by Battelle several years ago.

Senator Daniel K. Inouye "There exists a shadowy Government with its own Air Force, its own Navy, its own fundraising mechanism, and the ability to pursue its own ideas of the national interest, free from all checks and balances, and free from the law itself."



Unknown: In the opinion of these two famous scientists the interior of the craft contained a compartment with an atomic engine. The device was a donut-shaped tube approximately thirty-five feet in diameter, made of what appeared to be plastic material around a central core. A large rod centered inside the tube was wrapped in a coil and the investigators believed it to be the source of electrical potential which ionized the surrounding air around the craft.(2)

For people who have worked in the program, including military members, breaking that oath could have any on of the following direct consequences:

- A verbal warning accompanied by a review of the security oath.
- A stronger warning, sometimes accompanied by a brow-beating and intimidation.
- Psychologically working on an individual to bring on depression that will lead to suicide.

- Murder of the person made to appear as a suicide or accident.
- Strange and sudden accidents, always fatal.
- Confinement in special "detention centers."
- Confinement in "insane asylums" where they are "treated" by mind-control and deprogramming techniques. Individuals are released with changed personalities, identities, and altered memories.
- Bringing the individual into the "inside," where he is employed and works for "them," and where he can be watched. This is usually in closed facilities with little contact with the outside world. Underground facilities are the usual place for this.

Any individual who they perceive to be "too close to the truth" will be treated in the same manner. MJ-12 will go to any length to preserve and protect the ultimate secret. As we will see later, the characteristics of what this ultimate secret would turn out to be would change drastically, for it was something even MJ-12 could not predict -- actual contact with alien groups.