September 11, 2001

Connecting the Dots

When asked if he believed in coincidences, Albert Einstein reportedly answered, "God does not play dice with the Universe".

Lets look at the victims aboard the four hijacked aircraft on 9-11:

Flight Crew:



John Ogonowski, 52, of Dracut, Mass., was the pilot of Flight 11. <u>A</u> former Air Force pilot.



Tom McGuinness, of Portsmouth, N.H., was co-pilot of American Airlines Flight 11. *Note from the picture that co-pilot McGuinness was U.S. Navy*

Flight 175

Victor J. Saracini, 51, of Lower Makefield Township, Pa., was captain of United Flight 175. *Saracini, was a former Navy pilot*.

Flight 77

Charles Burlingame, 51, of Virginia, pilot of American Airlines Flight 77.

From the Photo we can see that Burlingame was either a Commander or Captain in the Navy (Based on Scrambled Eggs on Visor).

Flight 93

Leroy Homer, 36, of Marlton, N.J., was co-pilot of United Airlines Flight 93. <u>Friends say</u> the former U.S. Air Force pilot and Air Force Academy graduate.

Former or Current Military:

Flight 11

Charles "Chuck" Jones, 48, of Bedford, Mass., was flying to California for business and took this flight several times a month. "Everything was routine, except it wasn't," friend Claude Messamore says. Jones almost made it into outer space. He was qualified to fly on the space shuttle and was scheduled to fly a mission when the 1987 Challenger explosion indefinitely postponed launches. He graduated from the Air Force Academy and spent 24 years in the Air Force. He had two master's degrees, one in aeronautics and astronautics from MIT, the other in business MBA from California State University. Jones, who was manager of space programs for BAE Systems, leaves a wife.

Kenneth Waldie, 46, Methuen, Mass., wasn't supposed to be on the flight. "He was supposed to leave Wednesday, but he got the flight the day before," said older sister Jane Wrenshall of McCandless, near Pittsburgh. Waldie was a senior quality control engineer for electronic systems for Raytheon. <u>He graduated from the U.S. Naval Academy, where he was president of his class</u>. He taught classes to less experienced employees at Raytheon and won numerous awards for his work.

Flight 77

Richard Gabriel, 54, of Great Falls, Va., <u>a Marine lieutenant who received a Purple Heart for his duty in Vietnam</u>, was flying to Australia via Los Angeles, on business. Gabriel owned his own firm, Stratin Consulting.

Bryan Jack, 48, was from Alexandria, Va. Jack, who worked at the Pentagon, was headed to California to give a lecture at the Naval Postgraduate School when American Airlines Flight 77 slammed into the Pentagon. Colleagues say Jack, 48, was a brilliant mathematician. As head of programming and fiscal economics in the Office of the Secretary of Defense, he was a top budget analyst. He had worked at the Pentagon 23 years.

Wilson "Bud" and Darlene "Dee" **Flagg** of Millwood, Va., planned to visit family and friends in Orange County. <u>Wilson Flagg was a retired Navy admiral and current pilot for American Airlines.</u>

John Yamnicky, 71, of Waldorf, Md., graduated from the <u>Naval Academy and spent 30</u> years with the Navy, including a stint flying jets in Vietnam. An aeronautical engineer for Veridian

Flight 175

Alfred Marchand, 44, of Alamogordo, N.M., was a flight attendant with United Airlines. Marchand <u>enlisted in the military after graduating from Shanley High School in Fargo, N.D.</u> A year later, he left the service, when his father died, and became a police officer in New Mexico. He spent 21 years in law enforcement.

Note: the Following Individual is also listed on Flight 11:

Alfred Marchand, 44, retired as an Alamogordo, N.M., police officer on March 1 and began a second career as a flight attendant for United Airlines. He was a police officer for 21 years and retired as a lieutenant. He spent the weekend before the disaster in Boston with his wife, Rebecca, whom he married 4 years ago. They took a ferry to Martha's Vineyard and spent time on the beach and riding mopeds. While she boarded a plane to return to Albuquerque, he went off to work his duty flight to Los Angeles.

Error in reporting?

Raytheon:

Flight 11

Peter Gay, 54, of Tewksbury, Mass., was vice president of operations for electronic systems, Raytheon. He had been on special assignment to a company office in El Segundo, Calif. So he could see his family, he flew to California every Monday and returned every Friday. Last week, he left for the West on Tuesday morning instead.

Kenneth Waldie, 46, Methuen, Mass., wasn't supposed to be on the flight. "He was supposed to leave Wednesday, but he got the flight the day before," said older sister Jane Wrenshall of McCandless, near Pittsburgh. Waldie was a senior quality control engineer for electronic systems for Raytheon. He graduated from the U.S. Naval Academy, where he was president of his class. He taught classes to less experienced employees at Raytheon and won numerous awards for his work.

Flight 77

Stanley Hall, 68, of Clifton, Va., was "<u>our dean of electronic warfare</u>," said a colleague at Raytheon, a defense contractor. Hall, director of program management for Raytheon Electronics Warfare, helped develop and build anti-radar technology.

BAE, Boeing & Technology

Flight 11

Charles "Chuck" Jones, 48, of Bedford, Mass.,. He was qualified to fly on the space shuttle and was scheduled to fly a mission when the 1987 Challenger explosion indefinitely postponed launches. He graduated from the Air Force Academy and spent 24 years in the Air Force. He had two master's degrees, one in aeronautics and astronautics from MIT, the other in business MBA from California State University. Jones, who was manager of space programs for **BAE Systems.**

Flight 77

Chandler Keller, 29, of Marina del Rey, Calif. His wife Lisa, said. "He was a rocket scientist." Keller was an engineer at **Boeing**.

Ruben Ornedo, 39, of Los Angeles, was a propulsion engineer for Boeing

Robert Penninger, 63, of Poway, Calif., was an electrical engineer who had worked for defense contractor **BAE Systems**

Robert R. Ploger III, 59 and his wife, Zandra Cooper were from Annandale, Va. Ploger worker for 20 years at **Lockheed Martin**

Lisa Raines, 42, was senior vice president of government relations for **Genzyme**, a biotechnology firm.

John Sammartino of Annandale, Va. A technical manager for **XonTech**, an Arlington, Va., science and technology firm...

Leonard Taylor, A technical manager for XonTech...

Charles S. Falkenberg, was a software engineer for **ECOlogic**. He helped develop software to evaluate the effects of the 1989 Exxon Valdez oil spill and was working on a project **for NASA**.

John Yamnicky, 71, of Waldorf, Md., graduated from the Naval Academy and spent 30 years with the Navy.. An aeronautical engineer for **Veridian.**

Flight 93

Edward Porter Felt, 41, of Matawan, N.J., was a computer engineer for **BEA Systems** and was traveling on business to San Francisco. The graduate of Colgate and Cornell universities was a Utica, N.Y

Flight 175

Carl Max Hammond Jr., 37, of Boston, worked for a technology research firm in Boston. Hammond earned a bachelor's degree in physics from Georgia Tech and a doctorate in physics from UCLA. He had begun work at MIT Research in Boston in January

James Hayden, 47, of Westford, Mass., was chief financial officer of high-tech firm **Netegrity**

Information on Companies Listed:



Leadership in aerospace control innovation BAE SYSTEMS Controls has been leading provider of reliable aerospace controls for more than 50 years. The skilled and experienced people at Controls design, develop, produce, and support aircraft electronics systems that include fly-by-wire flight controls, avionics systems, mission computers, and power electronics for U.S. military fighter and transport aircraft. Aerospace Controls' strengths include extensive experience in hardware and software design, development, and integration

World-class avionics and materials Integrated Systems is a long-respected leader and growing provider of aircraft integrated vehicle management and utility control systems, navigation guidance and control systems, unmanned aerial vehicles, and support systems and services. Integrated Systems also produces commercial and general-aviation, international military, UAV, and light rotorcraft control systems, fuelmanagement systems, active and passive pilot stick controllers, radar-absorbing materials, and composite structures.

Major Integrated Systems products include:

Boeing 777 Actuator Control Electronics and Boeing 757/757 Thrust Management System
Navigation guidance and integrated sensor products
Autonomous Landing Guidance System (ALG)
Skyeye® unmanned aerial vehicles

BAE SYSTEMS engine controls are aboard these commercial platforms:

Boeing 757 Boeing 767 **BAE SYSTEMS Gaithersburg, Maryland**, was the first company to offer a software definable receiver with a software developer's kit providing the user with powerful tools to fully customize the radio. This allows programmers to download tailored DSP algorithms that employ IQ filtering, special demodulation, signal pre-processing, or signal post-processing techniques to enhance the receiver's signal quality or signal identification capability for specific mission environments.

(Editors note: BAE Systems is a prime Hardware Contractor for Echelon)



Enhance Processing Capability with FPGAs:

Recently-introduced, high-density FPGAs (field programmable gate arrays) now offer a popular alternative to the general purpose DSP for handling compute-intensive signal processing tasks. Virtually all of Pentek's recent software radio products include FPGA devices that can be configured bycustomers to perform tasks such as decoding, demodulation, decryption, filtering and many other functions.

(Editors note: Necessary for Echelon type RF Surveillance)



Raytheon's El Segundo, California-based Sensors and Electronics Systems division. Makes components for the Predator Un-Manned Aerial Vehicle.

Raytheon's JSOW Unitary Variant Successfully Completes Second Free-Flight....

The U.S. Navy/Raytheon Company team successfully completed its second free-flight demonstration of the AGM-154C, the unitary warhead variant of the Joint Standoff Weapon (JSOW), at the Naval Air Systems Command western test range complex today. The flight exercised the waypoint navigation and autonomous target acquisition (ATA) capability in the AGM-154C and demonstrated the ATA capability against a dual height, multiple level target. Released from an F/A-18 C/D flying at 29,000 feet and 0.9 Mach, the weapon navigated autonomously through several enroute waypoints to begin searching for the target approximately 32 miles from the launch point. Aircraft separation, flyout

The AGM-154C also will be the first U.S. weapon to incorporate the Broach penetration multiple warhead, developed by the United Kingdom's BAE.

navigation followed by target acquisition and subsequent impact were completed as predicted.

genzyme

Antigen Discovery

Because a potent immune response is dependent on the presentation of an antigen or antigens to the immune system, identifying cancer antigens is a critical prerequisite for the development of potent cancer vaccines. Genzyme Molecular Oncology's antigen discovery program is the key foundation to its immunotherapy program.

Genzyme Molecular Oncology has achieved a significant competitive advantage in this area through the integration of several novel technologies that enable the identification of new tumor antigens, greatly accelerate the speed at which antigens can be discovered and enable the optimization of antigens to generate a more potent immune response.



XonTech is an international R&D firm specializing in the development of state-of-the-art sensor technologies, concepts and systems for numerous defense and industry programs in the fields of:

Sensor and Missile Phenomenology Radar and Communications Applied Physics Data Analysis

We solve complex sensor-derived problems using signal processing, systems integration, data collection and analysis, test planning and management, radar design and system performance analysis. Our customers include: ONR, NSWC, NAVSEA, BMDO, TRW, US Navy, and Boeing.

Key XonTech Personnel Have Extensive Cruise Missile Defense Experience. CEO and President: Kenneth W. Schultz - Lt.Gen., USAF (RET)



Veridian Systems

Extensive product lines in the area of test and data acquisition products. These products have been designed to meet the demands of flight test engineers, missile launch centers, satellite command and control facilities...

Product -- Series-30/OMEGA

Series-30/OMEGA is an integral component of Boeing's Advanced Telemetry Analysis System (ATLAS II)

(August 28, 2001)

WASHINGTON -- The Defense Intelligence Agency (DIA) said it plans to award a contract to security firm Veridian to study intrusions and attacks against U.S. Department of Defense (DOD) networks "from computers located in a particular foreign country." Intelligence experts said that country is China.

Pacific-Sierra Research (PSR®) is an operating company of **Veridian.** Founded in 1971 as an applied research firm, PSR has evolved into an applied science company that provides products, services, and analysis to **government defense and intelligence agencies**, as well as to domestic and foreign commercial clients

Veridian is a knowledge applications company delivering trusted solutions in the areas of **national defense**, critical infrastructure and essential business systems. The company employs nearly 5,000 computer scientists and software development engineers, information security specialists, systems analysts, scientists, engineers and other information technology professionals.

Veridian Engineering (formerly Calspan) operates several highly modified experimental-category aircraft that can duplicate the flight characteristics of other aircraft. The simulation code is run on a set of floating-point DSPs that operate in parallel. The hardware used is from dSPACE, a partner of The MathWorks. The aircraft and flight control systems are first modeled on the ground with block diagrams in Simulink. Then, C code is generated with Real-Time Workshop and downloaded to the dSPACE DSP boards on the aircraft. As the test plane flies, the test pilot can evaluate the aircraft and flight controls as the aircraft is controlled by the programmed DSP boards. Immediately, various control parameters can be adjusted in-flight and downloaded to the hardware and tested. This type of real-time testing saves time and money - an aircraft control system can be almost fully tested long before the first prototype is built!

For more than 50 years, we have addressed the critical information needs of our customers. Our distinctive core capabilities can be integrated into a comprehensive set of solutions supporting our customers' growing requirements.

These capabilities include:

Network Security & Enterprise Protection Intelligence, Surveillance & Reconnaissance Knowledge Discovery & Decision Support Chemical, Biological & Nuclear Detection Network & Enterprise Management Systems Engineering Services BOARD OF DIRECTORS AND MANAGEMENT

NEIL A. ARMSTRONG – Apollo 11

DR. SALLY K. RIDE – Shuttle Mission Specialist

DR. JOSEPH P. ALLEN, CHAIRMAN OF THE BOARD

Dr. Allen was a member of the physics faculty at the University of Washington in Seattle when, in 1967, NASA selected him as a member of its astronaut corps. While at NASA, Dr. Allen flew as a mission specialist on two Space Shuttle flights. He also served as a mission controller for Apollo 15 and 17, and for the first test flight of the space shuttle. Additionally, Dr. Allen served as Assistant Administrator of NASA (Legislative Affairs) in the 1970's and as the Director of Astronaut Training in the early 1980's. A Fulbright Scholar, Dr. Allen holds a B.S. degree in math-physics from DePauw University and M.S. and Ph.D. degrees in physics from Yale University.



Customers:

- ❖ Defense Information Systems Agency
- **US** Air Force Supply
- Lockheed Martin

Flight 77 – Now you see it...now you don't

I've been to my share of commercial jet crashes, including a similar one in Kenner (New Orleans), Louisiana, where a 727 pancaked into the ground and plowed through a residential neighborhood.

With the exception of Value Jet's crash in the Everglades, there is always debris and unfortunately body parts.

Most notably, because they are hardened, we always found engine components and landing gear trucks (wheel assemblies).

Normally, the vertical stabilizer snaps off and is found adjacent to the crash site.

Here at the Pentagon, we have absolutely NOTHING!

If as suggested, Fl 77 hit the ground first and slid into the building there would be obvious ground strike signs...ground ripped up, grass torn out....basically a big scar. But not here.

I'm not saying it didn't happen. There is one piece of debris that is clearly from an American Airlines plane. I'll let the following photo's tell the tale:









