

# Global Ultrasonic Internet Access for USAF/SAIC

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**Photographs/Prints:** Upon Request to the issuer

The USAF produces a large volume of images and data from the periodic ultrasonic scanning of aircraft composite wing components. The scanning system, designed by SAIC, acquires data from the scanning operation and both stores the raw data and a representative image of the scanned component. Due to the large amount of data produced, each aircraft wing requires several large magnetic removable disk drives to store the data. The information on the disk is cataloged and stored or transferred to another media for long-term storage. A review of the final scan data or scan image requires a substantial amount of time to find the desired aircraft, the section of the wing and the scan section in question.

SATIS, Inc. of Florence, SC has been contracted to design and implement a system operating from a Web Server and using only a standard browser on the engineer's desktop to access and display the Ultrasonic data. The system, called Global Ultrasonic Analysis and Archival System (GUS), automatically retrieves the data from the magnetic media, stores the attributes into a SQL database along with the data references for automatic cataloging and produces the final data on a CD-ROM. The CD-ROM is then loaded into the library and indexed for quick access by the system. Using this system, an engineer, with the proper credentials, can access the data anywhere in the world where Internet access is available. Upon request, the system will produce the data and the image along with any previously acquired images from the same area for analysis. All functions, including the image processing capability are performed directly in the Web Browser. In addition to Internet access to the data, users may elect to save the formatted data and reports to MS Excel or a text file for further analysis. Savings to the Command are realized in increased productivity, decreased training, increased data analysis capabilities and lower maintenance costs. GUS is based on core components develop by SATIS for similar applications.

According to Karen Works, Software Development Manager for SATIS, "The GUS system is an extension of the work we have been doing for the USAF in an effort to reduce the cost of data access. The side benefit, with big savings, is that no software at the client side is used, thus saving on maintenance and training".

The GUS system will utilize Microsoft's SQL database, Internet Information Server, Index Server and ActiveX technologies. The core software code is written in MS C++ and the user interface will be developed using MS InterDev, HTML and JAVA. Reporting functions will be developed using Seagate's Web Crystal Reports. To serve the data across the Extranet, SATIS is supplying an Intel-based Quad Xeon server with fault-tolerance capabilities, along with a HTML-capable CD-ROM server host. The server, running Intel's Xenon CPU's and based on SATIS' PixPerfect™ 1200 Series Rack servers, features over 100Gb of local magnetic storage and over 40Gb of CR-ROM storage.

**About SAIC:** SAIC, a Fortune 500 company established in 1969, is the largest employee-owned research and engineering company in the United States. The company has over 38,000

employees and offices in over 150 cities worldwide. The corporate headquarters are in San Diego, California. SAIC had over \$4.7 billion in FY 1998 revenues and won \$8 billion of new business. SAIC's staff has provided technical expertise to cleanup efforts at Three Mile Island and Prince William Sound, to the success of Operation Desert Storm, and to space missions ranging from Voyager to the Hubble Space Telescope. Now the company is using the latest networking technology to help commercial and government clients secure their data and solve Year 2000 challenges. SAIC's health care systems improve the quality of health care and the productivity of health care providers through automated patient care systems. Globally, SAIC provides state-of-the-art information technology to BP Amoco and the Venezuelan oil company Petr6leos de Venezuela, S.A.

Visit [www.saic.com](http://www.saic.com) for more information.

**About Robins Air Force Base, Air Logistics Command, Technology & Sciences Division:**

WR-ALC is located in Warner Robins, Georgia, south of Macon, Georgia. WR-ALC was dedicated in 1943 and named in honor of Brigadier General Augustine Warner Robins, one of the Army Air Corps' first General Staff Officers. The base, commanded by Major General Richard N. Goddard, is the largest industrial installation in Georgia. The base employs more than 19,000 persons and has worldwide management and engineering responsibility for the F-15 Eagle, the C-130 Hercules, the C-141 Starlifter, and the C-5 Galaxy. In addition, WR-ALC has worldwide management responsibility for the U-2 Dragon Lady. The Command's general web site is at [www.robins.af.mil](http://www.robins.af.mil).

USAF Contact: Office of Public Relations, Robins AFB, Georgia.

USAF GUS Contact: Contact SATIS, Inc. for approved contacts.

*Heritage Digital is a privately held concern located in Florence, South Carolina. The company, specializing in Internet/intranet applications, database, programming and imaging and was established in 1997.*