



Unleash the Model Based Enterprise™

Anark Awarded US Air Force Contract to Support A-10 Wing Replacement Program

Hill Air Force Base to deploy Automatic 3D Part Report Generation System based upon Anark Core® Software to Streamline Provisioning and Maintenance Operations for A-10 Thunderbolt

Boulder, CO - September 17, 2015: Anark Corporation, leading provider of Model Based Enterprise (MBE) and Visual Communication software solutions, announced today that it has been awarded the production 3D MBE contract from Hill AFB for their Automatic 3D Part Report Generation (A3DPRG) system, which will put into production a complete system to create and modify 3D Part Reports for engineering and provisioning data from 3D Model Based Engineering (MBE) Computer Aided Design (CAD) models and associated engineering data in the A-10 Teamcenter Product Life-Cycle Management (PLM) database.

These part reports are essential to satisfying the mission requirements to support the A-10 Enhanced Wing Assembly (EWA) created under the A-10 Wing Replacement Program (WRP) and the A-10 throughout its lifecycle.

For the past six years the Department of Defense has been leading the way in developing best practices and procedures to enable the 3D Model Based Enterprise (3D MBE) through the transformation of their Native CAD plus Model Based Definition (MBD) data into open formats that are free to view and free to deploy like 3D PDF and 3D HTML.

Background

The A-10 aircraft is a 30 year old aircraft designed specifically for close air support of ground forces. It was designed in the 1970s with that era's 2D drafting and manufacturing techniques. To extend the serviceable life of this aircraft, the A-10 Wing Replacement Program was established to modify existing aircraft with new wings.

In order to reduce program costs, increase quality and provide for improved manufacturing techniques, the A-10 System Program Office chose to use 3D Model Based Definition (MBD) on the A-10 WRP parts and assemblies, rather than create a multitude of 2D Drawings which are typically hard to interpret and quickly become out of sync with the 3D CAD, PLM, and provisioning data.

This is a radically different approach than that used for all previous USAF legacy aircraft but allows for "drawing-like" documents to be generated in Adobe 3D PDF format that provides the same type of data the drawing previously provided. These new 3D PDF Part Reports have all the information that manufacturers, suppliers and casual users need to perform their support functions. 3D PDF Part Reports are native Adobe PDF documents which be viewed on every Government computer without the cost or IT complexity associated with proprietary 3D viewing software.

Under the A-10 Wing Replacement Program, over 10,000 3D PDF part reports have been generated to define the 3D technical data packages for the Enhanced Wing Assembly of the A-10.

"We are very excited to be working with Anark and their automated 3D PDF generation technology to modernize, automate, and leverage the deployment of our 3D MBD data here at Hill AFB," said Lt. Mitchell Kim, a program manager for the A-10 WRP. "Our expectations are that Hill AFB will become the model for modern 3D PDF MBE deployment for the rest of the Air Force and perhaps the rest of the DoD," Lt. Kim continued.

Reducing Costs and Overhead through 3D PDF Part Report Automation

Now that Hill AFB has successfully provisioned and cataloged 3D PDF Part Reports for the A-10 WRP, and knowing that these 3D PDF Part Reports can be automatically re-generated from their native CAD, PLM and Provisioning data sources by Anark Core Server, the power of this new automation will be put into place to ensure that these 3D PDF Part Reports and other similar part reports will always be in sync with the current revision states of the production CAD, PLM and Provisioning databases.

In addition to 3D PDF Part Reports, the contract award includes generation of these variants:

- Detail Part Reports
- Assembly Part Reports
- Composite Part Reports
- Wire Harness Part Reports

Automatic regeneration of 3D PDF Part Reports and their variants will save countless hours, QA checks and document errors generated by manual, human update and review of legacy 2D Drawing based Part Reports and 2D Technical Data Packages. All of which lead to unnecessary labor costs, manufacturing and supplier confusion as well as part scrap and rework.

Leveraging 3D Model Based Definition

In addition to the benefits of automation described above, the 3D MBD practices adopted by Hill AFB on the A-10 WRP will be leveraged to generate additional 3D PDF Manufacturing and Supplier documents which support and advance the unique A-10 business needs, practices, and formats such as:

- **3D PDF TCTO documents** for use in supporting A-10 aircraft modifications
- **3D PDF Maintenance Instructions** for use in supporting the A-10 depot maintenance operations
- **3D PDF Technical Presentations and Briefing documents** for communications with higher levels of management
- **3D PDF Ad Hoc Presentation documents** for easier communications of 3D engineering information to non-technical stakeholders (i.e. field information communications, sustainment group information communications)

"Anark is proud to be selected by Hill AFB to deliver their Automatic 3D Part Report Generation System" said Stephen Collins, President & CEO of Anark, "And, we look forward to working with the Hill AFB team to ensure they achieve substantially improved efficiency and performance within their provisioning and maintenance operations for the A-10 Wing Replacement Program."

About Hill Air Force Base

Hill Air Force Base is an Air Force Materiel Command base located in northern Utah. Hill is the Air Force's third largest base by population and size, and is home to many operational and support missions, with the host organization being the 75th Air Base Wing.

The 75th ABW provides support for many organizations, the largest being the Ogden Air Logistics Complex (OO-ALC), which provides logistics, support, maintenance and distribution for the nation's premier fighter aircraft: the F-35 Lightning II, F-22 Raptor, F-16 Fighting Falcon and A-10 Thunderbolt. In addition, it maintains the C-130 Hercules, T-38 Talon and other weapon systems, as well as the Minuteman III ICBM.

The wing oversees 1,000,000 acres and over 1,300 facilities valued at \$6.5B while providing installation support for OO-ALC, Life Cycle Management Center, Nuclear Weapons Center, 388th and 419th Fighter Wings and more than 60 other associate units totaling 20,000 personnel.

About Anark

Anark has an excellent track record for delivering successful, cost effective 3D MBE and visual communication solutions for the industry's most demanding and innovative customers that are embracing the power and efficiency gained from 3D Model Based Enterprise (MBE) practices and technologies.

Anark helps market leaders such as Boeing, Lockheed Martin, Raytheon, Tyco Electronics, Honeywell, Rockwell Collins, and the US Department of Defense successfully unlock the potential of their 3D design assets and manufacturing information to improve and accelerate product development, reduce material waste,

and to collaborate and communicate more effectively and securely with their suppliers and customers. For more information about Anark please visit www.anark.com.

Anark empowers its customers to ***Unleash the Model Based Enterprise™***.

About Anark Core

Anark Core is an automated, easy to deploy, enterprise software platform that enables manufacturers to leverage valuable engineering design data and manufacturing information to deliver highly effective downstream visual communication and collaboration applications and solutions.

Anark Core allows organizations to effectively reuse their 3D Product Definition content and Manufacturing Process content by automatically combining CAD-PLM with ERP-MES content through captured business rules to create context specific, graphically rich, manufacturing, inspection and supplier documents and applications for use throughout the enterprise and extended supply-chain.

Unlike other PLM or ERP applications, Anark's platform does not require organizations to duplicate their CAD or PLM data within their ERP system, or their MES or ERP data within their PLM system, and it is the only authoring and publishing solution available today that can provide completely accurate, high fidelity 3D PDF and 3D HTML engineering release and manufacturing process documents from virtually any CAD, PLM, or ERP data source.

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