

Some of our satisfied clients include:



**Synergy Military Systems**

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## TECHNOLOGY in focus

**Manifest your engineering vision.** Synergy Military Systems is a specialized research and development firm that works collaboratively with military and government organizations to meet engineering goals at significant cost-savings. **Look to us** as a full-service and affordable alternative to an in-house research and development team.





## Outsource in sync

**W**ith more than 15 years of engineering experience delivering exceptional results for a range of military and government clients, Synergy is your ultimate R&D solution partner in times of design swell. We offer you a specialized team of design engineers, a proprietary collaborative platform and software resources that set us apart from our competitors.

Our robust platform ensures streamlined collaboration and accuracy of the work we produce, as well as encrypted protection of your private data in the process. At the same time, it allows us to work smarter and more efficiently through collaborative information sharing, no matter where in the world your company base or our engineers are situated.

Ultimately this adds up to:

- Expert R&D capabilities in a pinch
- Lower costs through improved technology efficiencies
- Speed of project completion
- Protection of proprietary information
- Error-free deliverables
- Improved bottom line results
- Anytime access to all folders – for convenient monitoring through all project stages

## Military focus

**W**e know your business. After a decade and a half of experience engineering complex projects from high-speed digital imaging and ground support to target acquisition and thermal weapons systems, we understand the demands of military organizations like yours. We also employ the best military engineering talent in the business, with a wide span of skills and expertise to constantly exceed your expectations. Rest assured, our military R&D specialists are at your command to meet your targets when an important project arises.

Look to us for mission critical support—and exceptional cost-saving efficiencies. We're ready to provide informed partnership to deliver on your deadlines.

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## PRESIDENT'S MESSAGE

### *Harnessing technology, protecting privacy*



**T**his is an exciting era in B2B collaboration. For companies like ours that serve military and government-related businesses, smarter technologies, communication advances and greater business efficiencies have contributed to a number of successful new corporate partnerships. We're pleased to report we've delivered on a range of ambitious new projects with favorable results.

Recent technology advances have markedly changed the face of R&D outsourcing. This has allowed us at Synergy to bridge geographical and organizational chasms in ways once thought impossible. Collaboration with our broad base of high-level clients through new forms of communication have added flexibility to our schedules and allowed us to deliver better results for lower budgets in significantly shorter timelines. For example, the new ability to quickly access specialized data, once available only by wading through hard copies of texts in libraries, has meant incredible freedom. Rich resources and instant information are now at our fingertips in a tenth of the time it took a decade ago. As a result we've added ten-fold the industry knowledge and specialized expertise to our arsenal of military systems capabilities. Moreover, new access to specialized personnel through outsourcing gives us the ability to refine and reduce budgets to a significant degree, protecting the bottom line of our clients.

According to our clients, however, what really sets Synergy apart is our ability to harness this new technology and communications freedom while also respecting and protecting proprietary information. For others in our field, the protection of clients' security and the learning curves of new technology can be challenging, but we are ready. For our extensive work with major corporations such as DRS, we've developed collaborative platforms and processes that allow a real-time communication and data flow between companies – while limiting access to relevant information, effectively protecting our clients' security and their proprietary data. This combination of security and collaborative information flow has given Synergy a real edge. And it has brought our clients both confidence and cost savings.

Our specialized R&D team is at the ready. We look forward to working with you on your next vision.

Sincerely,

*Richard Cassada*

Richard Cassada  
President





## THE WORKS

### Our suite of cost-effective services

**W**hen it comes to military engineering, we offer the works. Our specialized portfolio of consulting and research & development services are all you will need to take your idea from inspiration to assembly line, on time and on budget.

#### We provide:

- *Turnkey engineering of new products—from concept to manufacturing documentation.* Whether it's a previous application that requires an additional component or an entirely new product from scratch, our dedicated team of experienced designers can deliver.
- *Secure interaction through the Synergy Collaborative Platform.* Our Synergy Collaborative Platform allows both anytime, anywhere access and robust data security as well as ongoing file management from a dedicated IT manager assigned to your project.
- *System architecture consultation and implementation.* Our consultants can help you maximize your IT infrastructure to bring more cost-efficiencies to your operations.
- *Prototyping of new concepts including prototype PCB's.* In addition to mechanical design, we also have the in-house capabilities to prototype circuit card assembly.
- *Complete DFMA service (Design For Manufacturing and Assembly).* Includes analysis of all phases of design, manufacturing and assembly to decrease cost and increase efficiency. Through our improved processes, customers will be able to build products easier, faster and at substantial annual cost savings.



#### DRS's Common Boresight System (CBS)

Synergy was a significant contributor to the development of this state-of-the-art boresight system. It utilizes a Laser-Based Triaxial Measurement System (TMS) and Aircraft-Specific Adapters. The product is a full mil-spec qualified system with a high level of accuracy. Systems upgraded through this collaboration with Synergy were: AH-64A, AH-64D, AH-1W, AH-1F, AC-130 Radar, Hawk 100, F-16, and F-15, depot services, spares, organic depot capability and upgrades.

I have worked with Synergy for approximately one year. In that period of time, Synergy contributed significantly to the efficiency and productivity of Koch Membrane's Design Department. Synergy's expertise helped myself as well as others in the engineering group. I would gladly outsource Koch Membrane Systems' work to Synergy in the future. Synergy's expert knowledge assures that I will get a correct design per my specifications. They have also demonstrated a dedication to engineering that is tough to find in this day. I know I could count on them to meet deadlines per our project schedule.

— **James Morrison**, Director of Engineering  
Koch Membrane Systems





## TEN REASONS to select Synergy

### 1. Fast

Our capable engineering team can help you cut project timelines by as much as 50%—to meet expectations under deadline.

### 2. Efficient

Our collaborative technology platform and tried-and-true processes mean no wasted time, money or effort. Just timely deliverables, whatever the engineering project.

### 3. Accurate

Reduce instances where duplication of work, revision confusion and lost files cost you time and money. You can have confidence in the accuracy of our work and our systems.

### 4. Cost-effective

By outsourcing to Synergy, you can save hundreds of thousands of dollars a year. We bring substantial savings on staff and infrastructure, as well as cost-cutting opportunities through increased efficiencies.

### 5. Safe

Our technology platform not only allows collaborative work on files, it also protects your information and data.

### 6. R&D

Our expert research and development team are at your disposal and can work responsively as a remote division of your company. No need to add staff in-house to meet the R&D needs of a short or long-term project.

### 7. Precise

We take a craftsman's approach to every project, however large or small. We never guess or cut corners. Our processes and technology provide painstaking accuracy on every file while also allowing timely delivery.

### 8. Smart

Our R&D team comprises 75-plus years of experience on challenging projects. Their advanced degrees, track records of industry success and professional mastery means you have some of the best brains in the business working on your projects.

### 9. Successful

Our excellent industry reputation says it all. Synergy has brought tremendous cost-savings and efficiencies to military clients in the nation.

### 10. Specialized

We know your business. Our military-specialized engineers make it a priority to remain up-to-date on the latest advances and requirements of your specific military-focused markets.



## Our efficiency edge

*Bridge distances, trim timelines and reduce budgets...with The Synergy Collaborative Platform™*

**T**here are many R&D partners ready to answer your outsourcing needs. But Synergy brings the powerful advantage of the Synergy Collaborative Platform™, a patent pending system that allows accurate and efficient engineering collaboration from any location.

We offer this proprietary platform to our customers free of charge.

It is far more than a piece of client software; It is a means of ensuring precision, speed of project delivery, information security, cost-savings and remote information sharing. Unlike other competitive client software in the marketplace, our Collaborative Platform is fully adaptable to different programs. This allows your engineers the freedom to remotely and securely access files and work on a given project, anywhere in the world.

I have worked with Synergy Parametrics, LLC over the course of 5 years. In that period of time, Synergy has contributed significantly to the efficiency and productivity of DRS Data and Imaging's Engineering department. I have found Synergy's work to be cost effective and timely as per project deadlines. Synergy's engineers and designers have supported the F-16 and F-15 Boresight project, the ASVS camera and Hadland programs.

I am very happy with Synergy's contribution and look forward to contracting additional work to them in the future.

— **John Baylouny**, Vice President  
DRS Data and Imaging

## Like clockwork: How Synergy's Collaborative Platform™ ticks

**S**ynergy's Collaborative Platform™ integrates the following elements:

### *Common language to enhance collaboration*

Synergy offers a Webdav compliant server to make communications clear and easy between remote engineers working on deadline. Our server uses a software protocol that improves the ease and reliability of collaborative file sharing and engineer communications.

### *Robust information and data security*

Our Linux-based server with SSL protocol brings extra security against attacks by hackers and online threats. Our robust SSL-based web browser protocol is commonly used on the Internet for the most secure credit card transactions.

### *Security to go*

Wherever you work and access information, you can take system security with you. Our wireless data transmissions are encrypted, giving security and freedom wherever you go—and allowing engineers the ability to work where needed.

### *Dedicated support 24/7*

Complimentary system support will be yours when you need it. A dedicated Synergy IT professional will be assigned to your business to handle any issues that may arise with the system or platform.

### *Protection from overwriting errors*

Our specialized system with its access restrictions allows our team and yours to lock files that are being edited, thereby allowing engineers to share files without overwriting them. Only one participating user may have an editable version open. In this way, we prevent duplicated efforts, slowdowns and errors along the path to project completion. Locked files cannot be edited but may be opened as "Read Only" at any given time.

### *Archiving of revision history*

Our client software protects you in case you need to return to an earlier stage in a design project. While only the most recent revision is immediately visible, engineers can access previous drafts to retrace steps if and when needed.

### *Best-in-class engineer-to-engineer communications*

We provide our clients special access to a range of high-end efficiency-based communication tools to ensure timely collaboration. These include instant conferencing and VOIP.



### **The Airborne Separation Video System (ASVS)**

Synergy collaborated with DRS in the development of The Airborne Separation Video System (ASVS). It replaces high-speed film cameras for recording in-flight separation of bombs, rockets, flares, fuel tanks, auxiliary suspension equipment and captive carriage events during daylight hours, over land and sea. ASVS is the only system designed and qualified to support airborne weapons separation testing.

#### Current Users:

- US Navy: F/A-18 E/F, C-130 and SH-60
- US Air Force: F-16 and F-15
- KAI: T-50 Trainer
- LM Aero: F-16 and other programs
- RCAF - F-18



## SUCCESS STORY

Synergy brings flight follower system to “manufacture ready” at 50% time and cost savings to DRS (D&IS).



The **DRS Flight Follower** has been developed to meet the high-speed imaging needs of modern ammunition designers. Synergy contributed to the development of this product by creating a ready-for-manufacturing engineering package.

### DRS’s Challenge:

DRS Data and Imaging, Inc. (DRS D&IS) is a leading manufacturer of innovative products and combat systems. In 2003, it acquired several Hadland product lines and was impressed by the profit potential of one of them in particular: Its Flight Follower system had sparked promising government interest. The DRS executive team knew that if this acquired system could be taken from concept to engineered product and created in greater volume with more efficient timelines, the company stood to generate strong returns.

The market was ready. The government customers for this unique military product were waiting. The DRS team now needed a partnering R&D firm to bring their manufacturing vision to the next level in order to increase the value and revenue potential of this new product line.

Enter Synergy.

### Synergy’s Solution

Discussions between Synergy and DRS (D&IS) began in June 2003. The team at Synergy offered DRS the ability to reduce cost of production and increase efficiencies of operation in bringing the Flight Follower to market. They brought to the table state of the art DFMA (Design For Manufacturing and Assembly), efficient and streamlined computer design technology and military-specific expertise, making the whole product manufacturing process a more professional and cost-effective undertaking.

I would gladly outsource any job requirements to Synergy for company work in the future. Synergy incorporates efficient technology, leading-edge expertise and the ability to meet deadlines per project schedule!

— **Kevin Gann**, Director of Engineering  
DRS Data and Imaging



### Results

Within three short months, Synergy produced a superior manufacturing-ready data package for the Flight Follower at a strong price point. The low cost and speed of delivery exceeded DRS’s expectations. In fact, Synergy completed the job in half the anticipated time with an estimated 50% savings in research and development.



## Outsourcing advantages

**R**ush project? Limited resources? Tight timelines? Like many managers, you probably find yourself grappling with these questions:

- Can my budget allow for new in-house designers/engineers?
- Do I have office space for new designers/engineers?
- Do I have enough computers and am I equipped for the job?
- Should I hire five designers or can I do the job?
- What if the project is cancelled? Will I be able to downsize?
- What about recruitment and training? How do I determine if new candidates have skills necessary?

In many cases, outsourcing is the sensible answer.

And with Synergy's research and development team, you can minimize headaches and maximize project results—with no long-term staffing commitments, infrastructure investment or lengthy recruitment process.

With Synergy, you'll save substantially by eliminating a need for the following:

- *No direct hires (including recruitment and training costs).* Synergy functions as a remote R&D unit of your company for as long as you need us.
- *No in-house R&D expenses.* We offer a complete suite of specialized R&D capabilities at an affordable rate.
- *No additional office space.* Our engineers work self-sufficiently from Synergy's location, while collaborating with you closely on files through our collaborative system.
- *No extra computer and software expenses.* Synergy brings you its own state-of-the-art systems, technology and software to significantly save your company on infrastructure costs.
- *No wasted time.* You can regulate your R&D man-hours as necessary from week to week, as your project demands.
- *No long-term commitment.* You can downsize your project or extend your requirements with us on short notice.



### Ultra High Speed Digital Cameras

Synergy has years of experience in providing design support to DRS's high-speed digital imaging program. The ultra high-speed digital imaging includes framing cameras, streak cameras, ballistic imaging systems and intensified lens systems to support testing requirements for various scientific research programs. The Frame speeds range between 100-200,000,000 fps.

Seeking a responsive R&D solution for your next project?

Contact Synergy Military Systems today for more information and a competitive quote. Call

**Jonathan Brown**, Director of Business Development at  
**(706) 548-7177**

Or email [jgbrown@SynergyParametrics.com](mailto:jgbrown@SynergyParametrics.com)