

ABL FOCUS



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Integrated Maintenance Facility

As the ABL program approaches first light testing in the Systems Integration Lab (SIL) at Edwards AFB, CA, Team ABL is hard at work preparing the Integrated Maintenance Facility (IMF) to begin receiving the bulk chemicals used to fuel the laser sub-system and produce the Mixed-base or Basic Hydrogen Peroxide (BHP) needed to produce the laser light. The IMF is located



IMF at Edwards AFB, used for storing and processing ABL laser chemicals

about 1.2 miles east of the edge of the SIL at the Rodgers Dry Lakebed and will be the first stop for all chemicals related to the ABL weapon system.

One of the key events in the process of preparing the facility to store and process these chemicals is the safety review process. On 23 Apr, the facility began this three-step process with a

safety review board (SRB). The review was conducted by the Air Force Flight Test Center's executive director Mr Les Bordelon and covered the storage and use of chemicals at



BHP mix room inside the IMF

the IMF. The process ensured that the facility met all legal requirements for safety and environmental hazard prevention and risk mitigation. The review was successful pending a few open action items.

Another key event was the delivery and cold flow test of the liquid Carbon Dioxide storage system at the IMF. LCO₂ is the primary cooling agent for the BHP mix tank during mix operations at the IMF. The LCO₂ system is required to keep the BHP chilled at 2 degrees F, to keep the mixture stable as it is moved to the fill cart for transport to the SIL. On 24 Apr, the IMF took receipt of 20 tons of LCO₂ and performed a cold flow test through the piping in the IMF to verify proper function of the system under expected operational conditions. The test was successful overall; however some problems were discovered regarding the vent system. Re-design and



LCO₂ storage tank outside the IMF

repairs have been accomplished and the IMF is now storing LCO₂ on site.

Finally, the heart of the IMF, its computer software, has been undergoing system checkout to verify the proper function of the procedures that have been written. The IMF is designed to minimize the need for human interaction with the chemicals and processes used to prepare and deliver chemicals to the weapon system. The IMF software contains all of the processes that will be required to mix BHP, transfer it to a ground support cart, and process the used or dumped chemicals so they can be safely disposed. With about 70% of the software routines done, the IMF engineers are moving rapidly toward having the capability to run the BHP mix process for the first time at the IMF this summer.

Contributed by Capt Tony Rivera, ABL SPO

Spring Ball Highlights

Friday, 30 May, marked an evening of dinner, dancing, conversation, and inspiration for nearly 150 attendees at the Airborne Laser's Spring Ball, held at the Mountain View Club on Kirtland AFB. The ballroom was decorated in red, white, and blue, and everything from the table settings to the programs complemented the evening's theme..."from first flight to first light."

Lt Gen Ronald T. Kadish, Director of the Missile Defense Agency was the guest speaker. When the ABL program transitioned from an Air Force acquisition program to a development capability within the Missile Defense Agency (MDA) in FY02, we became part of the Ballistic Missile Defense System. MDA is presidentially-chartered and mandated by Congress to acquire highly effective ballistic missile defense systems for forward-deployed and expeditionary elements of the U.S. armed forces, as well to develop options and, if directed, acquire systems for ballistic missile defense of the United States. As director, the general is the acquisition executive for all ballistic missile defense systems and programs.



Lt Gen Ronald Kadish

Gen Kadish applauded Team ABL's efforts, and stressed how important and challenging our work will be in the future – and how much our nation is depending on us. He said we have the best and the brightest people working on the program, and our mission is to continue solving the "impossible" technical challenges – just as we have in the past.



"Baghdad Bob" and his Interpreter (aka Capt Matthew Whiteman and Capt Steve Ott)

The evening ended with dancing to the music of the Carl Silva Revue.

Judy Sherman, ABL SPO

TMF Undergoes A Makeover

In FY97, the Airborne Laser System Program Office (ABL SPO) was shaped by the Air Force as a streamlined acquisition program operating under the Acquisition Reforms tenets, as laid out by the Assistant Secretary of the Air Force for Acquisition. The organization, previously manned as a "50-person" program office, focused on executing a Program Definition and Risk Reduction (PDRR) contract. When the program transitioned to the Missile Defense Agency (MDA) in FY02, it was noted by the MDA Director that our approach to Research & Development (R&D) acquisition required a change to better manage and plan for new technologies. These changes brought about a new philosophy.

ABL now operates using a spiral development process that uses multiple development blocks, leveraging and incrementally building next generation technologies to insert into subsequent R&D Blocks. This "new look" acquisition approach has enabled the program to better define and plan for next generation ABLs. The "Block" approach to acquisition led to increased program requirements and therefore, as an Element of the Ballistic Missile Defense System (BMDS), we have adjusted our manpower requirements to accommodate the new spiral development Block acquisition approach.

Block Business Managers						
	Block 2004	Block 2006	Block 2008	Iron Bird	Infrastructure Improvement	Technology Insertion
IPT Business Managers	Aircraft	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required	As Required
	Laser	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required
	BC/FC	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required
	BMC4I	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required	As Required
	AVIT	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required
	AITs	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As-Required	EVM Spt/Forecasting Cost Analysis/Trades Scheduling Financial (CCaRS)	As Required	As Required

The ASC/TMF workforce expanded commensurate with the "new look" of the ABL BMDS Program Element. Program Control reorganized to better support program management needs and the goal of shooting down a boosting ballistic missile. The chart above depicts how Program Control is currently organized to assist in the execution of our Block program strategy.

IPT Business Managers support the technical Integrated Product Teams/Analysis & Integration Teams (IPTs/AITs) in the fiscal management of their business areas. These services include earned value management support, cost estimating, cost analysis/trade studies, scheduling analysis, forecasting, and fiscal support using the Comprehensive Cost & Requirement System (CCaRS). IPT Business Managers also support the program office in performing "what-if" drills, responding to internal/external taskings, and providing overall programmatic

analyses. They are integral to the day-to-day execution of their respective IPTs. The primary purpose of the IPT Business Manager is to provide the IPT leads financial expertise to effectively manage cost and schedule for their respective areas.

Block Business Managers are responsible for ensuring multiple Block capabilities and requirements are being met. Block Business Managers have the responsibility of pulling together the IPT Business Managers and focusing them on the larger block-related issues. These issues could range from preparation of the Cost Analysis Requirements Description (CARD) to proposal and source selection support. They are also involved in program analysis, scheduling support, financial analysis, and acquisition strategy development and formulation. They provide guidance on overall Block strategies and serve as a communication conduit between the Block Program Managers, IPT leads, and their contractor counterparts. Block Business Managers integrate the analysis and interpret data prepared by the IPT Business Managers, and make recommendations to the Chief of Program Control and their respective Block leads.

The IPT and Block Business Managers will provide a major service to the program office ensuring that the best information is available in order to make sound fiscal decisions. There is no substitute for providing the best financial services to the ABL mission element so it can realize its mission of defending the United States, our deployed forces, and our friends and allies by shooting down boosting ballistic missiles.

Contributed by Al Milton, ABL SPO

Awards and Recognition

ABL SPO Members Win ASC Awards

Two members of the Airborne Laser System Program Office were picked from hundreds of competitors recently for awards from the Aeronautical Systems Center (ASC) at Wright-Patterson Air Force Base, Ohio.

Captain Barrett McCann, lead engineer for the High Energy Laser Integrated Product Team, was named Company Grade Officer of the Quarter, and Airman LeAnne Frazier was chosen Airman of the Quarter. McCann, 30, from San Antonio, TX, graduated from the US Air Force Academy in 1995, and in 1996 he earned a master's degree from Texas A&M University. Both degrees were in aeronautical engineering. From 1997-99 he served as a warhead analyst and designer at Eglin Air Force Base, FL. He joined the ABL SPO in June 1999. Frazier, 25, from Taft, TN, joined the Air Force in February 2001. The ABL SPO is her first assignment.

...And Kirtland AFB Awards

Congratulations (again!) to Captain Barrett McCann as Kirtland AFB's Company Grade Officer of the Quarter, as well as to Ms Lyn Kirkwood, Civilian Category IV of the Quarter. Lyn is a Financial Manager in the Program Control Division, and has been with the ABL program

office for over four years. In addition to her outstanding organizational and leadership abilities, she is active in several professional government and management organizations.

Softball Champions!

The Airborne Laser co-ed softball team successfully defended its league and base championship title with a 17-2 victory over the Medical Group to finish the season with a 10-2 record.

ABL expanded its softball presence on the base by fielding two different teams this year. ABL #1



struggled through the regular season due to TDYs and injuries, but came up with a string of five victories in a row to close out the season and take the league championship. With the full team available for the base championship tournament, ABL demonstrated why they are back-to-back champions with crushing victories over their three opponents by a combined score of 58-12. The ABL #2 team didn't enjoy the same level of success as the first team, but they did avenge an earlier defeat with a key victory in the playoffs to eliminate the Services team. The coach brought in their secret weapon, Col Ellen Pawlikowski, to work over and intimidate the umpire. Apparently it worked as the final out of the game came on a called third strike.



This season wasn't without casualties as two different people were inflicted with season-ending injuries (broken hand and a separated knee cap respectively). There were many bumps and bruises to go with each of the games but in the end, ABL was the lone team left standing.

Contributed by Lt Col John Williams, ABL SPO

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