

# Mission Success Bulletin



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<http://www.lockheedmartin.com/michoud/>

## CDR Board Concurs with Bipod Redesign Plans

*Additional areas require study before final approval can be granted*

Michoud Operations took crucial steps toward completion of the bipod fitting redesign during the Critical Design Review (CDR) Board meeting held recently.

“While there are some issues we still need to resolve, the board agrees that the plan we’re going forward with is a good one, and they support it fully,” said team lead **Matt Wallo**.

The bipod team is addressing several issues that could impact the redesign. Most critical is the recently updated analysis by NASA that suggests the bipod heating rates (thermal environments) are higher than originally anticipated. NASA is reviewing the data, based on wind tunnel testing, to determine if the rates need to be refined.

Increased aerodynamic loads on the Liquid Oxygen feedline support bracket resulting from redesign activity is another area Wallo’s group is investigating. The team is assessing the latest analysis and will schedule a structural test to correlate its data.

The team is also determining operational requirements for the bipod heater power supply. Michoud is working with NASA to develop an installation plan at the Kennedy Space Center (KSC). The team conducted a successful technical interchange with KSC personnel recently to establish requirements and procedures.

Although Wallo’s team is working diligently on these areas, he points out that Thermal Protection Systems (TPS) verifica-

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**Neil Otte (left), NASA ET chief engineer, discusses modifications to the bipod fitting with Ron Wetmore, Lockheed Martin ET Return to Flight manager; astronaut Tony Antonelli; and Denny Kross, NASA ET RTF manager, during the Critical Design Review Board meeting.**

## Coleman Named NASA’s ET Project Manager



**Sandy Coleman**

Marshall Space Flight Center Director **Dave King** has named **Sandy Coleman** as the new External Tank Project Manager, effective immediately. She succeeds Jerry Smelser who is retiring later this month.

Coleman joined NASA in 1965 in the Saturn Program Office. Later, she became a member of the Space Shuttle Task Team and worked in three of the four main project offices – External Tank, Solid Rocket Booster and Reusable Solid Rocket Motor.

There, she served in a number of managerial positions of increasing responsibility.

She also has headed the National Space Science and Technology Center, and for the past year has served as deputy manager, Space Shuttle Projects Office.

Coleman holds a bachelor’s degree in accounting from the University of Alabama, Huntsville, and a master’s degree in industrial engineering from the University of Alabama, Tuscaloosa. She has received the Silver Snoopy Award, the NASA Outstanding Leadership Medal and the NASA Exceptional Achievement Medal. ■

# Michoud Stems Brain Drain with Local Graduates

Over the past several months, Michoud Operations has begun hiring experienced engineers and technicians to support Return to Flight (RTF) activities. Recently, 76 college students and new graduates traveled to New Orleans to learn about Lockheed Martin – and more specifically – to determine how their skills and knowledge might benefit the External Tank Project.

“A lot of top quality candidates accepted our invitation,” said **Glen Dobbins**, Human Resources staffing supervisor.

The college job fair drew students from a diverse group of schools, including Carnegie-Mellon, Georgia Tech, Grambling, Loyola, Auburn and LSU.

“The college fair allowed us to pool these students in one place and explain the External Tank Project to them. As a result, we were able to extend quite a few offers,” Dobbins said.

Of those attending the two-day job fair, 44 received employment offers and 34 accepted. Many who accepted positions graduated from Louisiana schools.

**Daniel Fontenot**, with a mechanical engineering degree from LSU, was attracted to Michoud Operations so he could remain close to his family in Baton Rouge.

University of New Orleans graduate **Patrick Garrity** dreaded the possibility of relocating his family to another part of the country in order to apply his master’s degree in physics.

“I was searching the web for a thermal analysis position when I came across a job posting on the Lockheed Martin website, and so I applied,” Garrity said.

The majority of those graduates hired will backfill positions vacated by experienced personnel reassigned to RTF activities.

“The new hires will have an advantage,” commented **Stephanie Zulauf** who escorted some of the recent graduates through Quality Engineering. “They are coming in on the ground floor when everything we have done in the past is being



Louisiana engineering graduates Daniel Fontenot (top) and Katie Carr (bottom) listen as TPS Quality Assurance engineer Stephanie Zulauf points out various hardware components on top of ET-126. The two are part of the ET team to ensure the quality of the foam application processes.

rethought, and they are going to learn it fast.”

For some like **Quoc Vo**, a University of New Orleans graduate, fast cannot come soon enough.

“I knew almost nothing about the ET when I first started in mechanical engineering, and it’s just huge. Even from the small portion I work on – the flange – I’ve spent days reviewing drawings and asking for a lot of information.”

Garrity said he is glad to contribute in a small way to the ET team. “I just started a Return to Flight project, and I’m beginning to get a grasp of what needs to be done and the whole philosophy of Return to Flight. What I will be doing is one piece of the equation.”

For the year, Michoud Operations has filled approximately 125 new positions in support of NASA’s RTF efforts. About half are recent college graduates. ■



**Sigur receives Silver Snoopy.** Tony Antonelli presents Wanda Sigur with a Silver Snoopy Award for outstanding leadership and personal dedication in co-leading the STS-107 Investigation Team and for her work as director of Engineering & Technology Laboratories.



## Not far behind the Wright Brothers

Commemorating 100 years of flight, Lockheed Martin honors one of its founding fathers, Glenn L. Martin, who started his career as an aviator and showman. His performances demonstrated the benefits of powered flight. In this 1910 photo, Martin sits at the controls of his pusher biplane in California. He started the Martin Company in 1910 and first made airplanes.

# Employees Voice Positive Thoughts on Internal Communications



The October edition of the *Mission Success Bulletin* included a survey on how the Communications Department can do a better job of providing timely information to employees.

The survey included questions about *Mission Success Bulletin*, *Info SPACE*, employee television (ETV) and Michoud's Gumbo Intranet. Of approximately 2,000 Michoud Operations employees, almost ten percent responded.

Employees generally have a favorable opinion about the *Mission Success Bulletin* (MSB) and the publication's frequency. More read a paper copy than the electronic version posted to Gumbo. Employees found the ET Program, New Business, Employee News, Milestones and Shuttle Program News as top areas of interest.

Several employees said they don't see MSB distributed through their departments, so copies will be made available in cafeterias and lobbies beginning with the February 2004 issue.

*Info SPACE*, the electronic newsletter distributed twice weekly, also received positive scores. Although two-thirds of all employees responding to the survey read *Info Space*, it is only available to those with computer access.

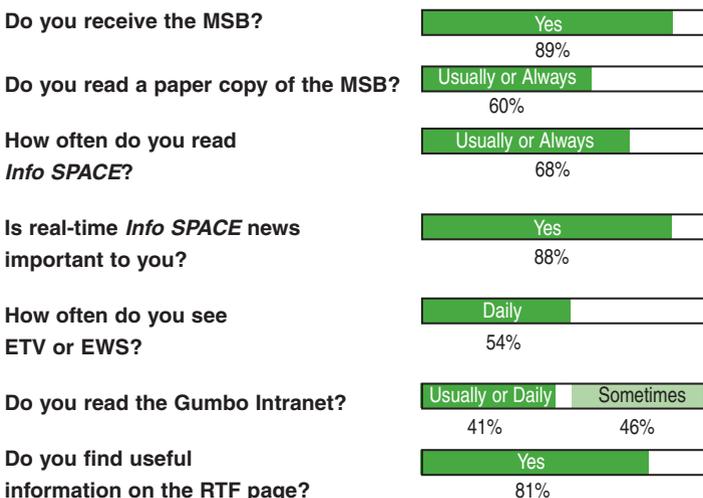
*Info SPACE* features Return to Flight news on Mondays and other news on Wednesdays. Top areas of interest to employees include news about Return to Flight, Lockheed Martin, discount promotions, healthcare & benefits and special events.

Fewer respondents watch ETV each day. Due to survey results, programming changes have added more information about traffic and weather, Return to Flight, safety and employee awards.

The location and condition of ETV monitors continue to be an issue for employees. Respondents said ETV programming was unavailable because monitors were tuned to another channel.

Regarding the Gumbo Intranet, respondents recommended changes to the RTF site.

In the months ahead, the Communications Department will respond to these and other survey results to make news and information more readily available to all employees. ■



## Fall Festival funds benefit Children's Hospital.

Joined by five young patients, Roger Gorman (back row, right) of Children's Hospital in New Orleans accepts a contribution check from Marion LaNasa, director, Communications. Michoud Operations employees raised over \$5,000 conducting games and raffles at Fall Fest. Lockheed Martin added another \$1,000 to benefit the hospital, which will use the money at its Audrey Hepburn Children At Risk Evaluation (CARE) Center. The CARE Center evaluates and treats children who have been victimized by abuse or neglect.

## CDR Board

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tion and validation activities must be completed before installation of a redesigned bipod can take place on the ET. Work is under way to develop the methodology needed to be able to validate the spray process required for the bipod fitting area.

**Faye Baillif** leads the team developing manual spray techniques for closing out the bipod area. The goal is to eliminate or greatly reduce any potential defects in the remaining foam insulation that surrounds the bipod.

In the past, Michoud technicians performed the bipod TPS closeout in one spray, including the installation of the foam ramp over the bipod. Closeouts on retrofitted bipods will be applied in two sprays.

The first spray will provide wedges for the bipod fitting heater wires to transition over the flange and into an Intertank stringer. Wedges will also be located aft of the bipod fitting where the heater cartridge wires come out.

After the wires are bonded and the bipod is installed, a final closeout spray will be applied, using the same methods as the first spray. The final closeout trim will cover the base of the bipod in lieu of a ramp.

Once the closeout spray process is selected, the next step will be to verify the process for production use. A full-scale test article will be used, recreating a production environment.

Four successive sprays are planned, with dissection following each one to determine if criteria established by the TPS Verification Team have been met. Once spray operations meet the requirements, the validation process begins with two additional spray applications and inspections on the test article.

Following acceptance of these, the process will be deemed ready for production, and bipod installation can begin. ■

# Milestones

Employees celebrating anniversaries with Lockheed Martin in November, December 2003 and January 2004

## 30 years

Reshelle Beslin  
Cheryl Bourgeois  
Feltus Kennedy  
Daniel Locke  
Bernard Ory  
Pamela Ramirez  
Leo Schmitt  
Ronald Waguespack

## 25 years

Mario Arthur  
Michael Balch  
Troylynn Bass  
Jeffrey Beale  
Susan Bullington  
Conrad Carriere  
Dennis Delaney  
Antoine Dupre  
John Eastin  
Charlene Farin  
Ram Goswami  
Harry Hampton

Karl Keys

Joseph Knezevich  
John LaBorde  
Jo Ann Lyons  
Thomas McCain  
John McPhail  
William Olson  
Shelly O'Neal  
David Otto  
Dane Pearl  
Eric Rabalais  
Dale Shorba  
Wanda Sigur  
Dennis Silbernagel  
Hal Simoneaux  
Lee Stewart  
Daniel Swords  
Anita Wilson  
Michael Witter

## 20 years

Mark Arthur  
Anita August

Nathan Ayo

Harold Barrios  
James Benoit  
David Cooper  
Talitha Cooper  
Rodney Dietrich  
Donald Diodene  
John Eaton  
Norman Elfer  
Kenneth Ezell  
Myra Fedele  
Kevin Gauley  
David Goga  
John Gray  
Ester Hall  
Kimberly Hammers  
Charles Kirch  
Curtis Ladner  
Woon Lee  
Oscar Lewis  
Joey Pena  
Peter Smith  
James Stephenson

Todd Surla

Andrew Thompson  
Glen Wadge  
Cinder Walters  
Elmer Wiggins  
Joseph Wooley  
Michael Zimmerman

## 15 years

Susan Caillouet  
Susan Daigle  
Keith Domingue  
Edward Dragon  
Donald Grogan  
Gregory Lee  
Michael Magnon  
Harry Maillet  
Jean Malek  
Nicky Parr  
Adrienne Rankins  
Ken Scheffler  
John Seither  
Dianne Turner

Joseph Vitari  
Mary Voelkel

## 10 years

Benny Acosta  
Jeffrey Henton  
Randy Stevens

## 5 years

Jeremy Bordes  
Michael DeBlanc  
Rita Forsythe  
Robert Forsythe  
William Frey  
Phillip Gabelmann  
Tiffany Green  
Irina McAllister  
Jason Meyer  
David Petry  
Delton Rodriguez  
Cassandra Roy  
Ryan Rudewick

## No Cell Phones with Cameras

NASA and the Lockheed Martin Security department remind all employees and facility visitors that cameras are not allowed on site without prior authorization. This policy includes new technology such as cell phones with cameras. ■



## Emergency Information

To find out the work status at Michoud, call **257-1MAF** or **1-800-611-3116**; check ETV; listen to **WWL-870** radio or **WWL-TV**; or go to [www.mafstatus.com](http://www.mafstatus.com)

## Mission Success Bulletin

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