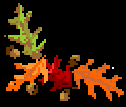




A FLIGHT PROGRAMS AND PROJECTS DIRECTORATE QUARTERLY PUBLICATION
A Newsletter Published for Code 400 Employees



**INSIDE
THIS
ISSUE:**

NOAA-L Picture Perfect	Page 1
EO-1 Prepares to Launch	Page 1
Director's Corner	Page 2
Tintypes	Page 3
Feedback	Page 3
Maryland's Senior Olympics	Page 5
FPPD Peer Awards	Page 6
HETE-2	Page 8
Code 400 & AETD Winners	Page 10
Who (Really) Said It?	Page 10
Third Straight Dividend	Page 11
Quotes of the Quarter	Page 11
GSFC Quarterly Honor Awards	Page 12
NASA Honor Awards	Page 13
Take A Bow	Page 14
Why 65?	Page 15
Social News	Page 17
Presidential Rank Awards	Page 18
Space Flight Awareness Awards	Page 18
Things You Should Know About	Page 19
Future Launches	Page 20

**NOAA-L
PICTURE PERFECT**

The NOAA-L spacecraft was successfully launched at 06:22 EDT on September 21, 2000 on a Titan II from Vandenberg Air Force Base, California. The Titan II launch vehicle was originally delivered to the Air Force in 1964. The spacecraft, built by the Lockheed Martin Space Systems Corp. in Sunnyvale, CA became NOAA-16 as it entered a near perfect orbit of 470 nmi circular polar orbit with an inclination angle of 98.79 degrees to the Equator. NOAA-16 marks the year of the fortieth anniversary of the NASA and NOAA cooperative effort to establish and maintain what has become a very successful polar meteorological program.

Once in orbit all deployments and subsystems were nominal

and the satellite was handed over to NOAA for health and safety responsibility on September 29. NASA continued the on-orbit verification responsibility with more than 100 tests completed to date with nominal results. The instrument complement provided by U.S., French, and

(NOAA-L Continued on page 4)

**EO-1 PREPARES TO
LAUNCH**

New Millenium Program's (NMP) Earth Observing- 1 (EO-1) spacecraft arrived at Vandenberg Air Force Base (VAFB) on August 21st to begin final preparations for a November 18th launch. Having successfully completed a Pre-Ship Review on August 10th, the

(EO-1 Continued on page 9)



DIRECTOR'S CORNER

MENTORING FOR SUCCESS

The significant increase in the number of Flight Programs and Projects over the last few years (today there are 54 Program/Project Offices) coupled with the reduced number of people in the Directorate due to Agency downsizing, has resulted in our personnel being frequently asked to perform jobs for which they have less experience than has been the norm in the past. This reality was the primary motivation for John Campbell, Director of FPPD, to announce his Mentoring for Success Program. At a Code 400 all hands Mentoring Kick-Off meeting on October 17, 2000 attended by 200 employees, John shared his vision for mentoring within the directorate. His vision has both a short and long term perspective. He said, " I want to have a mentor/mentee structure in place that provides support and resources, so each of us can improve our skills and feel good about what and how we are contributing. I want each of us to have the opportunity to have a safe place to go, outside the line of our supervisor, to seek guidance from someone in our field who is more experienced than we are. Someone who has been there before in their career, who knows the ropes. Someone who can serve as a sounding board and offer suggestions and encouragement to solve **short term daily challenges**. And someone who can **help guide the development of professional skills, long term**. Someone who can be an advocate." When John says "us", he includes himself. He announced that he has a professional coach and offered the same opportunity to senior directorate managers who felt that coaching would be more value added then mentoring for them at this point in their career.

In John's comments he emphasized his belief that Code 400 personnel are perfectly able to support each other and that having a formal mentor/mentee program in the directorate will facilitate such support. He remarked that, "Such support is critical to our success as individuals and as an organization now and for the future". The alternative he said, "is damage to the human spirit and failure in the mission."

Participation in the program is for everyone, unless you decide for any reason that you do not want to at this time. This means that you either do not want to be a mentor or a mentee or both. All you need to do is tell your Program Manager or let John Langmead, the Program Coordinator know. Individual mentor/mentee pairings will be communicated to all directorate employees by their Program Manager. Any pairing situations that are problematic, i.e. you already have a different mentor or mentee or the pairing is unacceptable to you for any reason, can be modified. In these cases, all you need to do is let your Program Manager or John Langmead know and the pairing will be changed to an acceptable one.

John also acknowledged that, "None of us are automatically good mentors or mentees." Therefore, the necessary training will be made available to employees for them to perform successfully in their roles as

(Mentoring Continued on page 5)

PERSONALITY TINTYPES

JIM SMITH

Jim is on detail as a Resource Analyst for the Hubble Space Telescope Development Project, Code 442.

Born: Washington, D.C.

Education: Bachelor of Science in Business Administration from Bowie State University.

On Family: Jim and his wife Karen live in Bowie, MD and just celebrated their 10th wedding anniversary.

Life on HST: About a year ago Jim thought it was time for a change and moved to HST. He now has resources responsibility for the Wide Field Camera 3 (WFC3) Instrument being built by Ball Aerospace and acts as the backup analyst for all instruments managed by the HST Instrument Development Office. It has been a steep learning curve, going from Project Support Manager (PSM) to Resource Analyst. Jim is also responsible for suballots, Swales and OSC carrier accounts. He also serves as a member of the Code 400 Diversity Committee as well as the last Peer Awards Committee. In 1995 Jim was selected to participate in the PMDE program. He received the FPPD 1999 Wild Card Peer Award for his ability as a team player and continued commitment. Jim finds his new responsibilities very challenging and satisfying.

Life before HST: Jim's GSFC career began in December 1986 as an Industrial Property Management Specialist (IPMS) for the Logistics Management Division. There, Jim completed his PIP level I and II requirements. After 8 years as an IPMS Jim felt it was time for a change, and he accepted a position as a PSM on the International Solar Terrestrial Physics (ISTP) Project. After completion of the Project, including closeout, Jim got the opportunity to be the PSM for a new start in the ESSP Project Office. This allows Jim to work the front end of a flight project giving him valuable exposure to all phases of the project life cycle.

Life before GSFC: Upon graduation from Bowie State University in December 1984, Jim began his Federal service with Department of Justice in July 1985 as a Personnel Clerk. During the fall of 1985 he accepted a professional position as an Agriculture Marketing Specialist.

Hobbies: Jim enjoys riding mountain bikes (about 2,000 miles a year), motorcycles, spending time with his family, and working on automobiles. Jim can usually be found on Sunday afternoon being a couch potato watching NASCAR racing and football, sometimes simultaneously.



KAREN HALTERMAN

Karen is the Deputy Program Manager for the Polar Operational Environmental Satellites (POES) Program.

Born: Augusta, Georgia

Education: BS Economics, University of Maryland

Family: Karen has lived in Takoma Park, MD since the mid seventies – she likes the quirky city that is a self-proclaimed nuclear free zone and has its own foreign policy. Her husband Will passed away nine years ago. Her married daughter Helen resides in San Francisco, but comes home frequently. Karen's many European cousins visit often.

Life Before POES: Karen first started working at GSFC in 1976 as a software developer with OAO Corporation. Among her assignments was writing software for: TIROS-N I&T system (same satellite series as POES), Solar Maximum Mission (SMM) I&T system where she was the first to implement the widely used STOL satellite test language, International Ultraviolet Explorer (IUE) flight software, and Landsat4 thematic mapper image processing. She became Project Manager at OAO for several GSFC contracts including Explorer Platform flight software and a support services task order contract with the old GSFC Engineering Directorate. In 1989 she joined GSFC as a civil servant where she worked on the Flight Telerobotic Servicer Project and the Thermosphere, Ionosphere, Mesosphere Energetics and Dynamics (TIMED) Project.

Life on POES: Karen finds the operational POES Program very challenging. POES is a very dynamic program with three NOAA satellites to complete plus the development of additional POES instruments for foreign partners. The successful launch of NOAA-L on September 21, 2000 was a real program highlight. Karen joined the POES Program in 1994. Initially, she worked in the data system area where she led the upgrade of NOAA spacecraft tape recorders to solid state recorders. She managed a study to accommodate next generation National POES System (NPOESS) instruments on NOAA-N'. Karen defined the comprehensive post launch checkout program that was used for NOAA-K two years ago and again on NOAA-L. She managed the Feasibility Study for the Advanced Technology Microwave Sounder (ATMS) instrument, a NASA contribution to NPOESS. Most recently, she was the POES Observatory Manager and COTR for the Lockheed-Martin prime contract.

Hobbies: Karen adores her dogs (mutts). She enjoys gardening, cooking for her friends, reading, and traveling (she took a fabulous trip to Egypt this year).



FEEDBACK

GSFC Resident Office at KSC

- The 100th Shuttle mission was launched on 11 October 2000 aboard Discovery from Kennedy Space Center (KSC). This STS-92 mission continues the construction of the International Space Station with critical payloads, the Zenith Integrated Truss and the third Pressurized Mating Adapter. The Truss will carry components of the Station's attitude, communications, thermal and power control systems, including four control moment gyroscopes as well as high and low gain antenna systems. These are the first United States built cargo elements to be flown to the International Space Station since the successful launch of the Unity element in late 1998.
- Instead of the traditional KSC "Open House", KSC sponsored a "Community Appreciation Day" on November 4, 2000. Car passes were available for people of the surrounding communities and were picked up at the NASA Exchange Stores or local libraries. Cape Canaveral Air Force Station (CCAFS) and KSC were open from 9 am to 3 pm for those with car passes.
- GSFC has a Microwave Anisotropy Probe (MAP) payload scheduled for launch, on board a Delta II rocket from PAD 17 CCAFS in May of 2001. MAP is designed to produce detailed pictures of the early universe and observe the anisotropy of the Cosmic Background Radiation.
- KSC/GSFC Resident Office supports several GSFC payloads being launched from Vandenberg Air Force Base (VAFB), California. NOAA-L is one of those and was successfully launched from VAFB on 21 September 2000. GSFC Resident Office will be involved with one more payload to be launched from VAFB this year, EO-1/SAC-C now scheduled for a 18 November 2000 launch.
- The Office continues to attend and participate in KSC security meetings required for Technology Transfer Risk Assessment (TTRA). TTRA is required whenever a foreign national requests access to KSC facilities for more than 30 days. Foreign National Visit Requests require more information on the individual and an explanation of the risk abatement.

Mary Halverstadt



Artist's Rendering Of NOAA-L

(NOAA-L Continued from page 1)

Canadian partners, consists of the Advance Very High Resolution Radiometer (AVHRR/3), High Resolution Radiation Sounder (HIRS/3), Advance Microwave Sounding Unit (AMSU-A and -B), the Solar Backscatter Ultraviolet Radiometer (SBUV/2), Space Environment Monitor (SEM), Search and Rescue Repeater and Processor (SARR and SARP), and the Data Collection System (DCS/2). All had been turned on by October 11, 2000 for evaluation, and performance appears to be nominal.

After the complete on-orbit checkout of all the

instruments the spacecraft was turned over to NOAA for operational responsibility on November 4, 2000. Visit the POES Program web site at URL: <http://poes2.gsfc.nasa.gov>. POES satellite imagery and sounding products are available from numerous sites on the web. Start at the NOAA site at URL: <http://www.noaa.gov/>.

Pat Dunn, Code 480
POES PSM

Maryland's Senior Olympics (2000 Update)

It wasn't so much that I didn't win a medal or ribbon for the first time in four attempts in the Maryland Senior Olympics, but it was more that it happened in the very year that I moved into a higher five year category of competition. One would have thought that such a move into (ok, let's say it) an older age category would have made it just a little easier to win. Far from it, indeed extremely far from it.

I guess I could explain away the basketball competition, both foul shooting and floor perimeter (seven different marked areas) shooting. That was because, instead of the usual 15 to 20 competitors in my age group, this year there was close to double that number. In a sense too, I was a victim of 'bad luck' at the foul line. Each of your 15 shots is worth one point, unless you make them consecutively; then it becomes two points. Well you guessed it, I made every other one (just about), ending up with six free throws, all worth one point each. C'est la vie.

Then came the one mile 'recreational walk.' If ever there was a poorly titled competition that was it. Some of those in my age group were counting the competition beforehand and then whispering how to get rid of some of the better physical specimens no doubt. These guys were so competitive that they would have walked over their own mothers to get an advantage, no less poor folk like me. They would have plain stomped on me. You would think they were competing in Sydney for a gold medal to be followed by the playing of the Star Spangled Banner. I think I beat out four or five out of about 75.

What am I going to do about it? How am I going to avenge this disgraceful performance? Am I going into year long training? I think not. My best guess is, I'm going to conserve my strength. Think I'll skip next year and get ready for 2002. Even if it means no article in The Critical Path about the Senior Olympics in 2001. But I can always change my mind between now and then. Keep you posted.

The Editor

(Mentoring Continued from page 2)

mentors and mentees. The first training installment is an orientation session which is for all Code 400 employees. This 3 hour session will introduce you to mentoring and provide you with the information that you need to get started in your mentor/mentee relationship. An e-mail containing all the necessary information on available dates and location of training was sent to all directorate employees. At this time over half the directorate has registered for the orientation. There are available opportunities at Greenbelt through December 14th. A session is also being planned at Wallops for Code 400 personnel stationed there. Additional more in-depth skill training classes are planned for the new year. Information on this training opportunity will be communicated to all employees in the very near future.

There are also excellent resources on the web to support you in mentoring and career development. Three web pages are the Code 400 Career Development Web-page <http://fpd.gsfc.nasa.gov/cd.html>, the Business Management Information Center (BMIC) Web-page <http://bmic.gsfc.nasa.gov/>, and the Center Mentoring Web-page <http://ohr.gsfc.nasa.gov/DevGuide/DevPrograms/Mentor/mentor.htm>.

Remember, this program is focused on your success and the importance of your contribution to the directorate and Center success. If there is any support that you need or question you may have that will facilitate your success as either a mentor or a mentee contact John Langmead at 6-5566 or send an e-mail to John.T.Langmead.1@gsfc.nasa.gov. Another excellent resource for discussing your training needs is Nichole Richmond. Nichole is the Center Mentoring Program Manager and can be reached at 6-5757 or e-mail her at Nichole.L.Richmond.1@gsfc.nasa.gov.

John Langmead/Code 400



FPPD Peer Awards



The Code 400 Flight Programs and Projects Directorate Peer Awards for 2000 were presented on September 19. The winners and categories appear below:

Boundless Energy:

Colleen M. Rapp/Code 442

For your boundless energy and outstanding personal dedication in a wide variety of official and volunteer efforts that always resulted in efficient, friendly, and professional work for the Hubble Space Telescope Project.

Thomas M Gostomski/Code 491/568

In recognition of the EMI testing, integration, and launch vehicle interface work you did for the EO-1 mission and the boundless energy that you displayed performing it.

James F. Jeletic/Code 441

For dedication, commitment to excellence, and willingness to go the extra mile in support of the Hubble Space Telescope Project and the Next Generation Space Telescope Project.

Mission Impossible:

Ron Brade/Code 423/214.6

The Mission Impossible Peer Award is presented to Ron Brade for his indomitable pursuit of excellence in ESDIS contract change processes; his results to date have been nothing short of revolutionary.

John Fiorello/Code 415/543

In recognition of your mission operations expertise and leadership on the GOES I-Q spacecraft programs. Your efforts on the GOES Program significantly contribute to assuring a healthy constellation of GOES spacecraft for NASA, NOAA and the Nation.

Nicholas J Speciale/Code 491/730

For your outstanding accomplishments on EO-1 as Chief Technologist, Thermal Vacuum Test Conductor, Launch Director, and Instrument Data Processing Manager. The Mission truly would not be ready to fly without your "Mission Impossible" level of effort.

Rookie of the Year:

Valda D. Jones/Code 441

Recognizing the valuable contributions of Ms. Valda Jones, who has demonstrated agility, dedication and teamwork to an exceptional degree in the short time since her arrival in the Space Science Mission Operations Business Office.

Valerie Plotter/Code 442

*To Valerie for always taking every assignment as a challenge and a vehicle for expanding her knowledge. For her Rookie stands for **R**esponsible, **O**rganized, **O**utstanding, **K**nowledgeable, **I**ntuitive, **E**mployee!*

Taylor Hale/Code 303/480

For your outstanding contributions as leader of the Terra Data Working Group and your success at quickly implementing significant process improvements in the Terra science data delivery after just six months in your position.

(FPPD Peer Awards Continued on page 7)



FPPD Peer Awards



(FPPD Peer Awards Continued from page 6)

Steady Helm:

Karen Blynn/Code 400

In recognition of her dead reckoning, steady leadership, even hand, and unflappable positive attitude in meeting any challenge great or small with humor, a positive outlook, team spirit, and exceptional professional competence.

Richard C. King, Jr. /Code 442

In recognition of your outstanding commitment to the success of the HST Development Project as demonstrated through your integrity, respect, and team building abilities.

Rich Fink/Code 442

For your outstanding professional efforts for all aspects of Extra Vehicular Activities that have made HST EVA - intensive servicing missions so successful.

Jack Long/Code 453

For your dedication to safety, attention to detail, hard work and for the many hours on the road; for making a straight path to customer satisfaction for each and every Customer and Project you support.

Unsung Hero:

Curtis Emerson/Code 450

Curtis Emerson, you are the Unsung Hero for CSOC at GSFC. Your thoroughness, expertise, and dedication have made you a vital member of the CSOC Management Team. Your contributions are appreciated at GSFC, JPL, MSFC and JSC.

Regan E. Howard/Code 425

Regan Howard, you are a Goddard unsung hero. You consistently step up and beyond the call of duty, reserving the spotlight for someone else. Your "can do" attitude serves as an example for us all.

Cheryl A. Jones/Code 400

For contributing to the Directorate Mission by volunteering for committees, providing instant advice and support to Project personnel, and encouraging an environment wherein people feel helped, supported, and integral parts of the FPPD team.

Wild Card:

Casey DeKramer/Code 442/523

You are awarded a Wild Card Peer Award for your outstanding support to many flight projects while continuing to provide outstanding support to the HST Flight Systems and Servicing Project in their preparations for the servicing missions.

Carl M Wagenfuehrer/Code 400.1

Through your exceptional financial management skills, dedication to work, and in depth knowledge of the way NASA does business, you have made a very significant contribution to the overall success of the NASA Technology Planning and Integration Office.

HETE-2

Off Without a Hitch

The High Energy Transient Explorer (HETE-2) was successfully launched October 9, 2000, on a Pegasus launcher from Kwajalein Atoll. The orbit was excellent: 590km x 650km, with an inclination of 1.95 degrees. During the first three orbits, the satellite was detumbled and despun as it was gradually powered up. The solar panels were deployed during the third orbit. The spacecraft successfully achieved its targeted anti-sun pointing configuration during the fourth orbit. Satellite telemetry has been successfully received and commands reliably issued at both the Kwajalein and Singapore ground stations. Testing with the Cayenne ground station will take place later. Activation and complete testing of the spacecraft systems, as well as the network of Burst Alert Stations (BAS), has continued.

HETE-2 is a small scientific satellite designed to detect and localize gamma-ray bursts (GRBs). The coordinates of GRBs detected by HETE will be distributed to interested ground-based observers within seconds of burst detection, thereby allowing detailed observations of the initial phases of GRBs.

The HETE program is an international collaboration led by the Center for Space Research at the Massachusetts Institute of Technology. GSFC's collaborating institutions include the Institute for Chemistry and Physics (RIKEN), Los Alamos National Laboratory (LANL), Centre d'Etude Spatiale des Rayonnements (CESR), University of Chicago, University of California, Berkeley, University of California, Santa Cruz, Centre Nationale d'Etudes Spatiales (CNES), Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (Sup'Aero), and the Consiglio Nazionale delle Ricerche (CNR).

Primary goals of the HETE mission are the multi-wavelength observation of gamma-ray bursts and prompt distribution of precise GRB coordinates to

the astronomical community for immediate follow-up observations.

In addition to the study of GRBs, the HETE instruments will conduct a survey of the X-ray sky. Not only will HETE be able to detect X-ray sources as faint as a few milliCrab in a day's observations, but it will be sensitive to any flares from X-ray sources in the sky.

Because of the anti-solar orientation of HETE, ground observers will always know approximately where HETE is observing. In addition, all bursts detected by HETE will be at least 120 degrees from the Sun and, therefore, in prime position for observations by ground-based optical observers.

The scientific instruments operate during orbit twilight and night, when the Earth is not blocking their view.

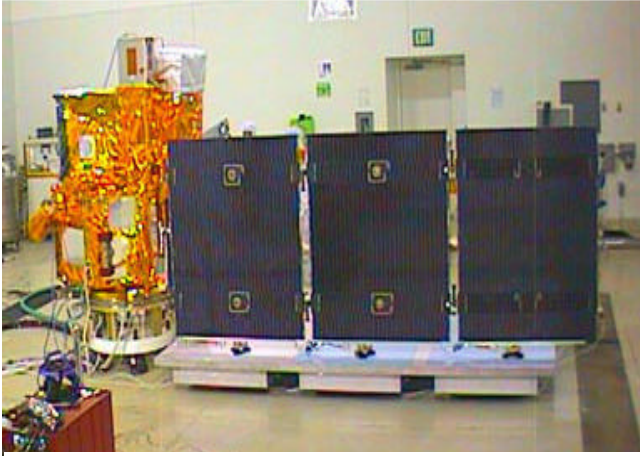
When a GRB is detected by HETE, a summary of the collected burst data is sent to a series of listen-only ground stations distributed around the equator. These data are forwarded to MIT, where they are distributed to ground observers via the GRB Coordinates Network (GCN). Subscribers to GCN or visitors to the GCN web site can receive notification of HETE GRB coordinates within seconds of burst onset.

HETE's Mission Manager is Gustave J. Comeyne, Jr. (404)

Project Scientist is Dr. Thomas L. Cline (660)

The Editor

(EO-1 Continued from page 1)



EO-1 Spacecraft in the Astrotech Payload Processing Facility at Vandenberg AFB.

Ground Support Equipment (GSE) left Goddard the next day, followed by the spacecraft a week later. EO-1 is an advanced land-imaging mission that will validate technologies intended to reduce the cost of LANDSAT-7 follow-on missions. Once on orbit, EO-1 will fly in formation with LANDSAT-7 and EOS/Terra as part of the technology validation program.

For the move to Vandenberg, EO-1 was carefully packed on board a specially instrumented air-ride moving van and was monitored continuously by a team from the prime contractor, Swales Aerospace, and Goddard Logistics Division, Code 230, during the long, cross-country haul. Personnel from Code 230 were also present to off-load and unpack the spacecraft and GSE. The spacecraft is now at the Astrotech payload processing facility at VAFB undergoing final integration and testing.

While at Vandenberg, the EO-1 Team accomplished a major technical milestone by reintegrating the spacecraft's S-band transponder. The transponder had been removed from the spacecraft at Goddard and returned to the manufacturer for repair prior to shipment because of a malfunction discovered during spacecraft thermal-vacuum testing. Following extensive testing by the manufacturer, the now fully operational transponder was hand-carried directly to Vandenberg. The spacecraft also passed its Mission

Readiness Review (MRR) and Operations Readiness Review (ORR) in October, clearing the way for launch onboard a Boeing Delta II 7320 rocket.

The launch will be a milestone for NASA and Boeing in that it will be the first operational flight of Boeing's new Dual Payload Attach Fitting (DPAF), which permits two satellites to be deployed from the same launch vehicle at different times and altitudes. The other spacecraft co-manifested with EO-1 in the DPAF makes this launch unique in a second way: it is an international project, Argentina's SAC-C spacecraft, also now undergoing final processing at Vandenberg. EO-1 will ride on the top part of the DPAF and will deploy first into orbit, followed by SAC-C over 30 minutes later at a slightly higher altitude.

SAC-C

SAC-C is an international cooperative mission between NASA and the Argentine Commission on Space Activities (CONAE). The spacecraft is provided by Argentina and the launch vehicle and some science instruments by NASA. JPL will provide a scalar helium magnetometer and an advanced TurboRogue Global Positioning Sensor (GPS). Argentina will provide a Multispectral Medium Resolution Scanner (MMRS) and the Danish Research Institute, a Magnetic Mapping Payload (MMP).

SAC-C will study the terrestrial and marine ecosystems, monitor atmosphere temperature and water vapor, determine variability in ionospheric structure, provide for space observatory quality measurement of the geometric field, and measure the long wavelength component of the gravity field valuable to many studies including the determination of polar ice cap mass flux and oceanic circulation

Once on orbit, EO-1 will begin a 60-day checkout period of all of its systems and instruments, followed by 10 months of operational validation of its three land-

(EO-1 Continued on page 15)

Code 400 (and AETD) – Another Winner!

The Black Sox won the GSFC 5:30 Wednesday night softball league with an 11-7 record. After coming in first in the Tuesday league last year, winning the Wednesday league was a great accomplishment. The Black Sox went 8-1, winning the first half and setting themselves up for the playoffs against the second half winner, The Coral Reef Gobblers. In a best of 3, the Black Sox made it look easy winning 2 in a row. The team consisted of 15 Flight Programs & Projects Directorate (FPPD) employees and 4 AETD players. FPPD'ers were: Jim Mannion, Mike and John Doyle/400.1 (sons of Eva Doyle), Nick Christimos, Pietro Campanella, and Don Dodson/470, Bob Melis/415, Steve Dobroseilski and Bill LeBair/415, Mitch Coccia/421, Mark Seidleck/430, Rich Ryan/455, Joe Cerullo/471, Terry Scavullo/480, and Dave Baden/490. AETD employees were Wes Ousley/545, Jim Stephens and Ed Hicks/566, and Steve Coyle/581. Mitch Coccia and Mark Seidleck coached the team.

In the Thursday night league, Cipriano Liquors won both the 5:30 and 6:30 divisions with a 13-1 record in each. Cipriano also won both last year and continues to be the number one team at Goddard. Cipriano played Red, Hot and Blue in both of the finals. It took the full 3 games in each championship to decide the winners but in the end, Cipriano came out on top. Cipriano continued their winning ways by winning the end of year tournament also. The make-up of this team is spread throughout most directorates, but the majority still come from FPPD; John and Mike Doyle, Bob Melis, Mike Mitchell/423, George Davis/440, Frank Stocklin/451, and Dave Baden. AETD personnel included Mike Clark/543, George Meadows/545 and Ed Hicks/566. From Procurement Tom Russell and Jim Debelius/214, and Jim Becker/210H. From OSSMA Dick Reamy/300, and Randy Clark from NOAA. The team also included contractors Frank Bowles, Bill and Charlie Chick, Ed Franco, Pat Hickey and Mike Rodriguez. Pat Hickey and Dick Reamy coached the team. Thanks to Cipriano Liquors for its continued support and sponsorship and to Kendall Mitchell/450 and his support team for supplying the necessary refreshments.

Who (Really) Said It?

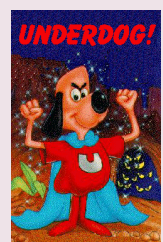
In the last issue of The Critical Path (Summer Quarter 2000) we printed the following quotation attributed to Prussian King Frederick II:

“The more I see of men, the better I like my dog.”

Within a week, one of our many readers challenged this assertion. Claudette J. Wlasuk from Glenn Research Center sent us the very same quotation. The only problem was that in her case the quote was attributed to Madame Roland.

Do we hear any other voices on the subject? By the time the next issue comes around, perhaps we'll be able to conduct some research on the matter and come up with a definitive answer.

Who really said it?



Third Straight Dividend \$\$\$\$

More than 600 GSFC NEBA members celebrated receipt of refunds in sums ranging from \$18 to \$250 during October. Once again, for the third straight year, NEBA reserves far exceeded an amount necessary for prudent insurance coverage.

NEBA planholders also salute the Chairman of its Board of Directors and CFO/Glenn Research Center, Robert Fails, for being presented with the Presidential Meritorious Executive Award.

Goddard employees interested in joining NEBA, NASA's own insurance program may call either Secretary-Treasurer, Ann Travis (x6-5494) or President Howard Ottenstein (x6-8583) for more information.

Howard Ottenstein, President
NEBA/Goddard Chapter

Quotes of the Quarter



"Near this spot are deposited the Remains of one who possessed Beauty without Vanity, Strength without Insolence, Courage without Ferocity, and all the Virtues of Man, without his Vices."

— Lord Byron (about his Newfoundland dog) —

"A truth that's told with bad intent beats all the lies you can invent"

— William Blake —



"And so time passes, passes over, passes away and through and pass the butter, please. Sometimes time passes by so fast ... you can't even see those seconds make their little streaks of reentry into your heart."

— Jan Kerovac —



"Whenever I prepare for a journey I prepare as though for death. Should I never return, all is in order. This is what life has taught me."

— Katherine Mansfield —

GSFC (3rd) Quarterly Honor Awards (September)

QUALITY AND PROCESS IMPROVEMENT

This award recognizes individuals and groups whose contributions enhance the Center's business and work processes and improve the quality of products and services.

Program-Project Management Handbook Team (Code 400)

In recognition of your outstanding support in the production of the Program-Project Management Handbook.

Modify Office Operations Team (Code 400)

In recognition of your exceptional and superior team efforts and accomplishments that resulted in greatly increasing the efficiency of the secretarial function at the Goddard Space Flight Center.

GSFC Program Analysis and Control (PAAC) Procurement Team (Code 400)

In recognition of outstanding teamwork in the source selection activities of the Program Analysis and Control (PAAC) procurement.

INSTITUTIONAL SUPPORT-PROGRAMMATIC

This award recognizes individuals and groups whose significant achievements, directly or through partnerships, further the development and use of the Center's physical resources to meet National Resource and Center of Excellence Goals.

Jule A. Johnson (Code 410)

In recognition of your demonstrated performance and significant contributions to the Explorers Program, particularly in the area of applied cost modeling techniques.

OUTSTANDING TEAMWORK

This award recognizes groups whose teamwork, mutual accountability and responsibility, commitment, and consideration of diverse, innovative, and creative ideas result in superior performance by the team. These awards focus on the success of the team or group process (rather than the products of the team). Teams may be temporary, ad hoc, or permanent parts of an organizational structure.

Earth Observatory System/AM (EOS/AM) Project Team (Code 420)

In recognition of your outstanding contributions to the successful development, launch, and activation of the EOS Terra mission.

Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) Science and Mission Operations Center (SMOC) Team (Code 410)

In recognition of your exceptional and critical support of the IMAGE launch and early orbit operations leading to successful initiation of full science operations.

Integrated Mission Design Center (IMDC) Engineering Team (Code 450)

In recognition of your engineering excellence, creativity, innovation, flexibility, and dedication in the execution of nine IMDC mission design studies over an 11 week period.

Hubble Space Telescope (HST) Servicing Mission 3A (SM3A) Team (Code 440)

(GSFC Continued on page 13)

(GSFC Continued from page 12)

In recognition of your demonstrated team skills, dedication, and sacrifice resulting in the flawless execution of Servicing Mission 3A, December 1999, in restoring and insuring the Hubble Space Telescope's science productivity.

Leslie M. Cusick (Code 460) QSS Group, Inc.

In recognition of your exceptional performance and contributions in creation of the Solar Terrestrial Probe's (STP) Education and Outreach Program.

Melinda A. Deyarmin (Code 440)

In recognition of your personal dedication to, and superior accomplishment fostering the public's awareness of, the Hubble Space Telescope's (HST) Servicing program and science, and for sustained efforts contributing to the morale and esprit de corps of HST employees.

Otilia I. Rodriguez-Alvarez (Code 410)

In recognition of your dedication to ensuring the delivery of the critical star trackers for the Microwave Anisotropy Probe Mission (MAP).



**NASA Honor Awards
(August 2000)**

NASA Group Achievement Award

This award is given in recognition of an outstanding accomplishment that has been made through the coordination of many individual efforts and has contributed substantially to the accomplishment of the mission of NASA.

Earth Observing System (EOS) Mission Operations System (EMOS) Development Team (Code 423)

In recognition of your outstanding engineering contributions in developing and implementing a new control center architecture for the Terra mission.

Goddard Space Flight Center (GSFC) Rehousing/Earth Systems Science Building (ESSB) Move-in Team (Code 400)

In recognition of your innovative approach in successfully completing the strategic goals of the GSFC's rehousing and ESSB move-in activities.

Landsat-7 Government Industry Team (Code 420)

In recognition of your outstanding teamwork in developing, launching, and operating Landsat-7, exemplifying the best Government-industry partnering, while providing the latest and highest quality land remote sensing data.

Quick Scatterometer (QuikSCAT) Observatory and Mission Operations Team (Code 470)

In recognition of your exceptional efforts, dedication, innovation, and outstanding accomplishments throughout the development, launch, and on-orbit operations of the QuikSCAT Observatory.

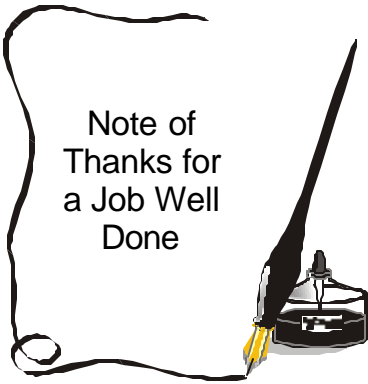
NASA Public Service Medal

This medal is granted to any United States citizen who is not an employee of the Federal Government or was not an employee

(NASA Awards Continued on page 16)

“Take a Bow”

“On behalf of the Integrated Financial Management Program (IFMP) and NASA, I would like to thank you for your significant contributions to IFMP over the past two years. Our goal to integrate NASA’s financial and administrative processes, data, and systems is an extremely complex undertaking. Your efforts to assist the Agency in achieving its objectives have been exemplary.



As Business Manager for the IFMP, you served in one of those very demanding, seemingly impossible jobs. While you simultaneously supported two organizations: the IFM Program Office at HQ, and the IFMP Technical and Contracts Office (TACO) at GSFC, which is no small feat, you also managed the TACO budget, sub-allocating funds to the Centers. This included preparing POP calls and endless reporting requirements. You managed to correct a business system weakness identified during the Program’s first Independent Annual Review (IAR) by organizing the IFMP budget process and developing a cost tracking system for the Program.

Because of your efforts to tactfully coordinate cost and manpower reporting with the 10 different Center Transition Managers who were responsible for planning and implementing IFMP at their respective Centers, we were able to receive a clean report on the Program’s budget and budget processes at the subsequent IAR. For this, we are very thankful.

In closing, I commend you not only for your steadfast dedication and commitment to IFMP, but also for your ability to successfully juggle competing priorities and work persistently to get the job done. As we move forward with the Program, please know that your contributions have made a lasting and beneficial impact. We wish you all the best in your new assignment with Solar Terrestrial Probes.”

Arnold Holz, Chief Financial Officer, NASA to Cindy Peslen, DPMR/IFMP, Code 455



On October 12th, Our Rapid Spacecraft Development Office (Code 456) received a very prestigious award for “Business Solutions in the Public Interest.” *Government Executive* magazine and the Council for Excellence in Government administer the award in partnership with the Office of Federal Procurement Policy. The citation stated, “By using fixed price, performance-based, open-ended delivery and quantity contracts, NASA has compiled a catalog of small to medium commercially built spacecraft for project managers and customers. This program has cut the time to award contracts by 80 percent, slashed delivery time by 40 percent, and saves NASA up to \$20 million per mission.”

(EO-1 Continued from page 9)

imaging instruments and six other advanced technologies. The instruments are the Advanced Land Imager (ALI), the "Hyperion" hyperspectral imager and the Linear Etalon Imaging Spectrometer Array (LEISA) Atmospheric Corrector (AC). ALI is a multispectral imager, built by Massachusetts Institute of Technology's Lincoln Laboratory (MIT/LL). It is capable of producing images comparable to LANDSAT-7's Enhanced Thematic Mapper Plus (ETM+), but at a fraction of the cost and weight. Hyperion is a science-grade hyperspectral imager, built by TRW at Redondo Beach, California. The LEISA AC is a Goddard-built instrument, designed to improve surface reflectance estimates by more accurately measuring atmospheric absorption due to water vapor and aerosols. The New Millennium Program technologies to be validated are the X band Phased Array Antenna (XPAA), Enhanced Formation Flying (EFF) software, the Pulse Plasma Thruster (PPT), the Lightweight, Flexible Solar Array (LFSA) and the Carbon-Carbon Radiator (CCR). A Global Positioning System (GPS) receiver will assist EFF in permitting EO-1 to fly in close formation with LANDSAT-7 and EOS/Terra. Also to be validated on orbit and critical to mission success is the Wideband, Advanced Recorder-Processor (WARP). All data from the ALI, Hyperion and the AC will be collected and stored by the WARP before being downlinked to Earth. WARP was developed by Goddard's Applied Engineering and Technology Directorate (AETD).

For more information on the EO-1 Mission, visit our website at <http://eo1.gsfc.nasa.gov>

Brett L. Weeks
PSS/RA, Code 490

Why 65?

Ever wonder why 65 was the age Social Security used for retirement? Some stories have it that when the system was set up, in 1935, the United States was merely following the German old-age social insurance program. That system, designed by Chancellor Otto von Bismarck, became the first of its kind in the world when it was adopted in 1889. A persistent myth about the German system is that they used 65 as the retirement age because that was Bismarck's age. The fact, however, is that Germany initially set the retirement age at 70: Bismarck himself was 74 at the time. It wasn't until 1916 that Germany lowered the retirement age to 65.

When the United States moved to social insurance in 1935, the Committee on Economic Security proposed age 65 as the retirement age, not because of any philosophical principle or European precedent. The decision was pragmatic, stemming from two sources.

One was a general observation about prevailing retirement ages in the old-age pension systems then in operation in 30 states and the few private pension systems in existence at the time. Roughly half of the state pension systems used 65 as the retirement age and half used 70. In addition, the new federal railroad retirement system passed by Congress in 1934, also used age 65 as its retirement age. Taking all this into account, the committee planners made a rough judgment that age 65 was probably more reasonable than age 70.

This judgment was then confirmed by actuarial studies, which showed that using 65 as the retirement age produced a manageable system that could easily be made self-sustaining with only modest levels of payroll taxation. So these two factors – a judgment about prevailing retirement ages at the time and the favorable actuarial outcome of using 65 as the retirement age – combined to be the real

(WHY 65? Continued on page 19)

(NASA AWARDS Continued from page 13)

during this period in which the service was performed. This award is granted for exceptional contributions to the mission of NASA.

Peter T. Burr, Jr. (Code 480) QSS Group, Inc.

In recognition of your outstanding expertise and initiative in assuring timely import and export of scientific instruments for the Polar Operational Environmental Satellite (POES) Program.

Cary W. Ludtke (Code 470) Ball Aerospace Technologies Corporation

In recognition of your extraordinary effort and outstanding leadership throughout the development, launch, and on-orbit operations of the NASA Quick Scatterometer (QuikSCAT) Mission Observatory.

NASA Exceptional Service Medal

This medal is awarded for significant, sustained performance characterized by unusual initiative or creative ability that clearly demonstrates substantial improvements in engineering, aeronautics, space flight, administration, support, or space-related endeavors which contributes to NASA's mission.

Clifton E. Jackson (Code 410)

In recognition of your engineering excellence and accomplishments on several of Goddard's highest priority efforts, especially as the Proposal Manager and Instrument Systems Engineer on the Microwave Anisotropy Probe (MAP).

Dawn R. Lowe (Code 423)

In recognition of your determination, vigilance, and continuous initiative that assured the readiness of the Earth Observing System Data and Information System (EOSDIS) science systems to support Landsat-7 and Terra.

Paul A. Westmeyer (Code 420)

In recognition of your sustained and visionary systems engineering leadership in the development of the Earth Observing System (EOS) Terra system and emerging Earth Science long term strategy/missions.

NASA Exceptional Achievement Medal

This medal is awarded for a significant, specific accomplishment or contribution clearly characterized by a substantial and significant improvement in operations, efficiency, service, financial savings, science, or technology which contributes to the mission of NASA.

James N. Caldwell (Code 410)

In recognition of your exemplary leadership and attention to detail associated with the development and implementation of the Microwave Anisotropy Probe (MAP) instrument electronics design and completing the task under the estimate and allocation for both manpower and budget.

Edward G. Grems III (Code 470)

In recognition of your outstanding effort, innovation, and teamwork throughout the development, launch, and on-orbit operations of the NASA Quick Scatterometer Mission (QuikSCAT) Observatory.

Alexander Krimchansky (Code 423)

In recognition of your outstanding contributions to ensuring the successful operation of the new technologies and concepts utilized by the Terra ground system.

Jack E. Leibee (Code 420)

In recognition of your outstanding performance in establishing the launch readiness of the new Earth Observing System (EOS) Terra ground system and launch readiness of the flight operations team.

(Awards Continued on page 17)

(Awards Continued from page 16)

Anthony E. Maione (Code 450)

In recognition of your superb management of the Y2K corrections to critical NASA Mission Operational Systems.

Raymond J. Pages (Code 470)

In recognition of your outstanding effort, innovation, and leadership throughout the development of NASA's Quick Scatterometer (QuikSCAT) Mission Ground System.

Kenneth O. Schwer (Code 470)

In recognition of your dedication and determination in successfully leading the Quick Scatterometer (QuikSCAT) Observatory effort in the NASA initiative of "Faster, Better, Cheaper".

Wynn J. Watson (Code 441)

In recognition of your innovative spirit and exceptional achievement in the design and implementation of the Hubble Space Telescope (HST) Network.

NASA Outstanding Leadership Medal

This medal is awarded for notably outstanding leadership, which has a pronounced effect upon the aerospace, technological, or administrative programs of NASA.

Gilberto Colon (Code 460)

In recognition of the exceptional guidance and skills you contribute in leading the Solar Terrestrial Probes (STP) Program and the Goddard Space Flight Center (GSFC) community.

John M. Moore (Code 423)

In recognition of your outstanding leadership in the development of the Earth Observing System Data and Information System (EOSDIS) Core System Science Data Processing System.



Critical Path Social News

B_I

Brendan Daniel Fitzgerald was born on June 7, 2000 to Rick Fitzgerald (Code 471) and wife Caroline. Brendan was 8 lbs. 5 oz. and 20 3/4 inches long. Brothers Brain (5) and Kevin (2) are very excited



Presidential Rank Award Winners Announced

The winners of the Presidential Rank Awards have been announced for 2000. Each year, the President confers the rank of Distinguished Executive and Meritorious Executive on a select group of career SES individuals who have provided exceptional service to the American public over an extended period of time. The Distinguished Executive rank is awarded to those who achieve extraordinary results. A maximum of one percent of the SES may receive this award. The Meritorious Executive rank is given for sustained accomplishments. A maximum of five percent of the SES may receive this award.

One of the NASA employees to win the Distinguished Executive award, was former Goddard Director of Applied Engineering and Technology, Brian Keegan (now NASA Chief Engineer).

GSFC personnel winning the Meritorious Executive Award were three Code 400 individuals: Frank Cepollina (Code 442), Dorothy Perkins (Code 423), and Chris Scolese (Code 420). A fourth GSFC awardee was Mike Ladomirak (Code 200), Associate Director for Acquisition.

Two former Goddard (now HQ) employees to also won the award were former Center Director Joe Rothenberg and STAAC Director Of Orlando Figueroa.



And still more (Space Flight Awareness) Awards

Mr. Chris Wilkinson - (441)

You are being honored for your outstanding contributions to the Hubble Space Telescope Project and for your outstanding leadership in the preparation, planning, and execution of Hubble Space Telescope servicing missions.

Ms. Lih-Er Lu - (CSC)

You are being honored for your outstanding support as lead for the Hubble Space Telescope DF-224 flight software planning activities during the Hubble Space Telescope Servicing Mission 3A.

Mr. Edward Rezac – (LMTO)

You are being honored for your many outstanding efforts as Hubble Space Telescope Extra Vehicular Activity systems engineer contributing to successful Extra Vehicular Activity-intensive Hubble Space Telescope servicing missions.

Mr. James Simrall – (LMTO)

You are being honored in recognition of your extraordinary efforts in providing an outstanding network infrastructure for the Hubble Space Telescope SM3A Servicing Mission.

Dr. Arthur Whipple - (J&T)

You are being honored in recognition of your extraordinary technical efforts and leadership in support of the Hubble Space Telescope Anomaly Resolution Management team during the Hubble Space Telescope Servicing Mission 3A.

Mr. Gregory Wilmot - (CSC)

You are being honored for your personal dedication and technical excellence in developing and supporting the Sensor Analysis and Calibration subsystem in the Hubble Space Telescope Control Center System.

Astronaut Heide Sltefanyshyn-Piper presented awards to the winners at a special awards ceremony at KSC in early October.

Things You Should Know About

Combined Federal Campaign

Once again the Flight Programs and Projects Directorate has far exceeded its annual CFC goal. At the completion of the campaign \$66,406 was pledged versus a goal of \$52,537 (more than 25% over goal). Great work, Code 400! Although the Center as a whole is at the 88% level at this point in time (November 13, 2000), contributions will be accepted until the end of the week. It is anticipated that the Centerwide goal of \$445,029 will be achieved at that time.

Federal Employees Health Benefits (FEHB) Open Season

Today, November 13, 2000, begins the annual FEHB Open Season. It will conclude on December 11. You need not take any action if you prefer to continue with your present plan. You are encouraged to carefully review whatever plan you presently hold as there are substantial changes to many of them, especially cost. Use Employee Express to make all changes. Direct any questions to Krista White at 6-8208.

Thrift Savings Plan (TSP)

The next TSP Open Season starts on November 15, 2000 and ends on January 31, 2001. In the coming year, two new additional fund options will be available to all participants and changes will be processed more swiftly than at the current time. TSP questions may also be directed to Krista White at 6-8208.

(WHY 65? Continued from page 15)

basis for choosing 65 as the age for retirement.

Starting this year, the normal retirement age is being gradually raised to 67. Someone born in 1938, for example, will have to be 65 and 2 months to collect full retirement benefits. Of course, workers now have other options too. They can elect early retirement, with benefits beginning as early as age 62. Or they can delay collecting retirement benefits earning extra credit and larger benefits up to age 70.

Coincidentally, the year 2000 marks the 65th anniversary of Social Security, in August 1935.

The Editor



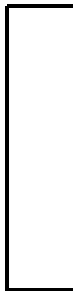
Happy Thanksgiving



FUTURE LAUNCHES CALENDAR YEAR 2000—2001	
SAC-C	NOVEMBER
EO-1	NOVEMBER
JASON/TIMED	MARCH
HESSI	MARCH
QUIKTOMS	APRIL
MAP	MAY
NOAA-M	MAY
GOES-M	JULY
AQUA	JULY
HST-SVC 3B	NOVEMBER
GRACE	NOVEMBER
CATSAT (STEDI)	DECEMBER
ICESAT	DECEMBER

**ATTENTION INTERNET
BROWSERS:**

We're on the WEB
[http://fpd.gsfc.nasa.gov/
news.html](http://fpd.gsfc.nasa.gov/news.html)
 Or via the New "Code 400"
 Homepage
<http://fpd.gsfc.nasa.gov>



The Critical Path
 Published Quarterly by the Flight Programs and Projects Directorate
 — In February, May, August, and November —

Howard K. Ottenstein,
Editor

Nancy L. White,
Production Assistant

Paula L. Wood,
Editorial Assistant

If you have a story idea, news item, or letter for The Critical Path, please let us know about it. Send your note to Howard Ottenstein via Email: hottenst@pop400.gsfc.nasa.gov, Mail: Code 403, or Phone: 6-8583. Don't forget to include your name and telephone number. Deadline for the next issue is January 31, 2001.