Orientor
DEFENSE MAPPING AGENCY AEROSPACE CENTER

Accepting the Flag

Photo by Jim Stepanik

Colonel Marcus J. Boyle (right) becomes Director of the Aerospace Center as he accepts the Center flag from Brig. Gen. Stanley O. Smith, DMA Chief of Staff. The change of command was held June 30.

Col. Boyle Assumes Command of DMAAC

The change of command ceremony symbolizes a time of transition. Last week's change of command ceremony also symbolizes the change DMA is going through. The fact that it has only been five months since the Center's last change of command illustrates how fast change happens at DMA.

In a ceremony, scheduled for the Parade Ground, that was attended by dignitaries, guests and employees, DMA Chief of Staff Brig. Gen. Stanley O. Smith, USAF, passed the command colors to Col. Marcus J.

Continued on page 3.

Inside

Vol. XXX, No. 14
July 7, 1989

It happened just twenty years ago.

See centerfold.

Special Pay Rate Approved For D.C. Area Cartographers

The Office of Personnel Management has approved a special pay rate for Washington, D.C., metro area federal employees in the cartographer series (1370). The new pay rate affects cartographers in the 5 through 11 pay grades who are employed within the Department of Defense, Commerce Department, Interior Department, Agriculture Department, and State Department. It also applies to new applicants to cartographic positions within those organizations in the Washington metro area.

The action is a result of a proposal submitted by DMA through DoD for consideration and forwarding to OPM. The proposal was approved by DoD and endorsed by the other organizations employing cartographers. DMA is the lead agency employing 75 percent of the cartographers in the D.C. metro area.

In a memorandum to the Deputy Assistant Secretary of Defense for Civilian Personnel, Maj. Gen. Robert F. Durkin, DMA director, said, "We must create economic incentives to retain employees, including those who reach retirement eligibility. Our staffing/turnover projections for the next five years indicate an increased need for cartographers. At the same time, demographic projections reflect a declining applicant pool for the skills and education we require."

According to personnel officials, one component, the Hydrographic/ Topographic Center (HTC), lost 13.7 percent of cartographers at the GS-7/ 9/11 levels. Seventy percent of those losses were at the GS-11 level. This fact, combined with replacement of losses sustained in higher-level positions due to retirement, increases the agency's total staffing needs.

HTC fell short of its 1988 hiring targets by 292 cartographers. Records indicate that approximately 5,500 potential applicants were contacted in fiscal 1988 for entry-level cartographer positions at production activities in the Washington, D.C., area. The contacts netted 738 applicants to whom job offers were made. Of that number, 314 were hired and tentative offers were made to another 40. Between October 1988 and April 1989 an additional 3,300 potential candidates were contacted, resulting in 495 D.C. area job offers, pending successful completion of the security review. Based on experience, not more than 50 percent of those to whom offers were made will be hired.

The agency also noted the high cost of living factors for the Washington, D.C., area, indicating that higher salaries are necessary to assist entry-level personnel in offsetting the cost. The cost of living is a key factor resulting in declination of job offers.

In granting the special pay rate, OPM recognized that these trends would not meet the agency's staffing needs in the production activities in the Washington metro area, thus directly affecting DMA's ability to execute its combat support mission.

The new rates for DMA employees in the D.C. area were effective with the pay period that began June 18. Currently there are 843 employees affected by the new rate.

For these employees, the GS-5, Step 1 level, changes from the regular $15,738 to $20,463. GS-7, Step 4, changes from $21,443 to $27,293. GS-11, Step 10, changes from $37,510 to $40,396. The within-grade amounts are $525 for GS-5, $650 for GS-7, $795 for GS-9, and $962 for GS-11.

Deputy Director To Retire

Rear Admiral William J.M. O'Connor, DMA deputy director, has announced his intent to retire from active military service Sept. 1.

Admiral O'Connor began his Naval service in 1955. Before joining DMA, in May 1988, he was Commander, U.S. Naval Forces Caribbean.

Rear Admiral Daniel Charles Richardson will succeed Admiral O'Connor. Admiral Richardson is now Director, Force Level Plans Division (OP-70) in the Office of the Chief of Naval Operations, Washington, D.C. He began his service in 1955 as a midshipman in the U.S. Naval Academy.

Center Guided Lunar 'Leap for Mankind'

On July 20, 1969, Neil Armstrong stepped onto the dusty surface of the moon with the words, "That's one small step for a man, one giant leap for mankind." After landing in the *Eagle* spacecraft, Armstrong and Edwin Aldrin spent 21 hours on the lunar surface, while Michael Collins circled above in lunar orbit.

Speaking to members of the St. Louis Branch of the American Geophysical Union the month before, McDonnell Douglas scientist Lawrence Maisak said, "Back in 1492 when Columbus set sail for America, he didn't know where he was going; when he got there, he didn't know where he was, and when he reached home, he didn't know where he had been. Thanks to ACIC, that will not be the case of the Apollo 11 astronauts." Recalling this Center's key contribution to the success of that mission, we have reproduced excerpts from the July 3, 1969 *Orientor* in the centerfold of this issue.

FAA Rep to Address ION

Fred Harmes, the Federal Aviation Administration aviation safety inspector for the St. Louis area, will speak at the July 27 meeting of the St. Louis Section of the Institute of Naviation.

The meeting will be held at the Coast Guard Club. Social hour at 4:30, dinner at 6, discussion at 7. For reservations and details, contact Ron Smith/8383, Roy Lewis/8222, or Bob Bradford/8270.

Colonel Boyle Takes Command Of DMAAC

Continued from page 1.

Boyle, USAF, as the DMA Director, Maj. Gen. Robert F. Durkin, USAF, had passed the colors to the outgoing AC Director, Col. Stephen F. Burrell, USAF, in January. General Smith officiated in the absence of General Durkin, who was unable to attend due to a death in the family.

Colonel Boyle thus became the 10th director of the Aerospace Center and the 25th commander/director of the organization that traces its origin in 1940 to the Map-Chart Division, Directorate of Photography, of the U.S. Army Air Corps. Colonel Burrell has been reassigned as Professor of Aerospace Science at Duke University in Durham, N.C.

In his remarks, General Smith thanked Colonel Burrell for all of his hard work. Colonel Burrell deserves praise for keeping the important work of the Center on track and the momentum moving forward, he said.

General Smith also had praise for the incoming director, citing his contribution as DMA Chief of Staff. The general tasked him to continue the outstanding work DMA has come to expect from the Aerospace Center.

Among the dignataries scheduled to attend were Penman R. Gilliam, DMA Deputy Director for Management and Technology; William N. Hogan, DMA Deputy Director for Programs, Production and Operations, members of the Boyle family and Maj. Gen. Robert A. Rosenberg, USAF, Ret., General Durkin's predecessor as DMA Director.

Colors were presented by a guard from Scott AFB, Ill. The narrator was Lt. Col. Clyde S. Araki, Director of Administration, the invocation was delivered by Albert L. Manson (LOSSV), and MSgt. James F. Walter, chief of Military Personnel, guarded the AC flag.

In recognition of his leadership as Deputy Director and Director of the Aersoapce Center, Colonel Burrell was presented the Defense Superior Service Medal. "While serving in these key positions from 19 June 1986 to 30 June 1989, Colonel Burrell's strong and effective leadership was instrumental in achieving modernization goals despite extreme budget restraints," the citation says.

His leadership resulted in "innovative improvements in support functions, enabling the Center to transfer support manpower savings to production activities. His most noteworthy accomplishments were the reduction of mishaps and revitalization of the safety program, keeping vital construction projects associated with the Agency's Digital Production System on track, and helping personnel in Kansas City overcome the trauma of field office deactivation. The distinctive accomplishments of Colonel Burrell reflect great credit upon himself, the U.S. Air Force, and the Department of Defense."

Farewell Dinner

Photo by Jim Stepanik

Outgoing Aerospace Center Director Col. Stephen F. Burrell (second from left) listens to colleagues during the social hour preceding the farewell dinner held in his honor at Orlando Gardens Banquet Center.

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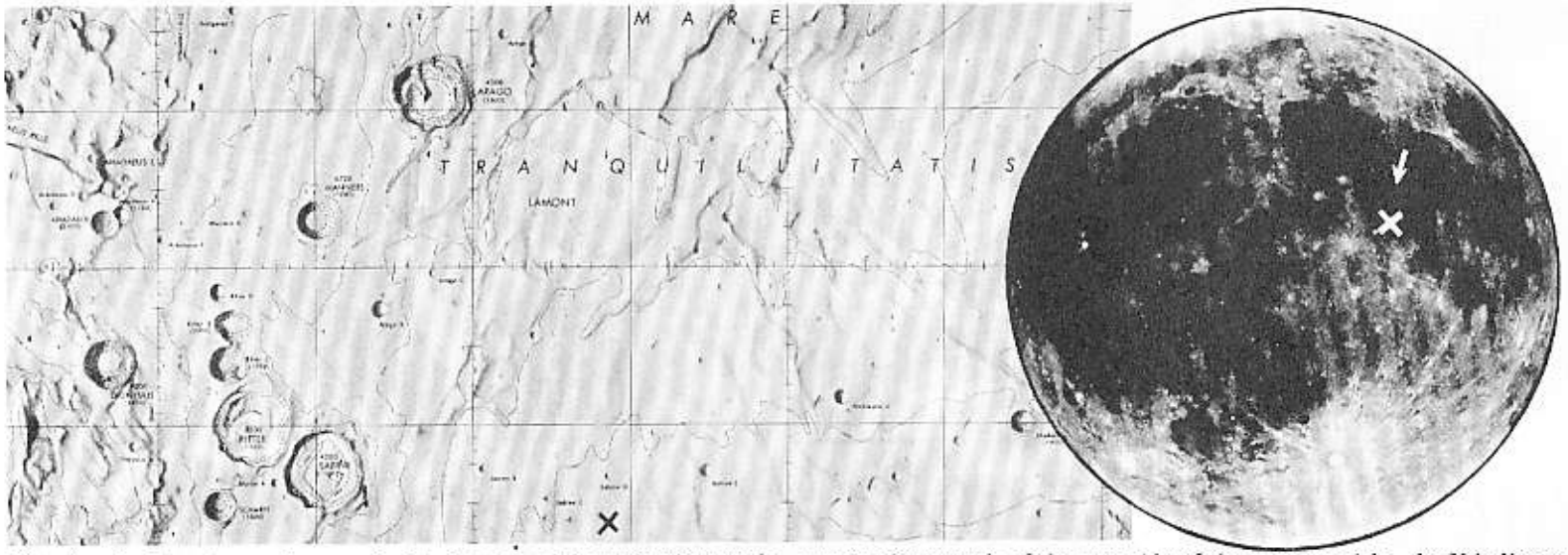
Look-ing Back

ORIENTOR

USAF AERONAUTICAL CHART AND INFORMATION CENTER
Second and Arsenal Streets, St. Louis, Missouri

Vol. XI, No. 14
July 3, 1969

ACIC Charts Will Help Astronauts Land on Moon



The Apollo 11 astronauts are scheduled to touchdown in the southwestern corner of the Sea of Tranquility, as shown on the ACIC chart above. The area pictured is roughly 43,000 square miles or about equal to 60 percent of the area of the State of Missouri. In the telescopic photograph of the near side of the moon at right, the X indicates the general area shown on the map. The black area extending north and east of the X is the Sea of Tranquility.

By Charles R. Miller

When the Apollo 11 astronauts roar off the pad at Cape Kennedy this month on their way to a moon landing, the three space pioneers will be carrying cartographic products specially produced here at the Air Force's Aeronautical Chart and Information Center. The flight items are another milestone in the decade of space support provided by the employees of ACIC.

In addition to the dozens of ACIC products required to support NASA's Project Apollo, two new series will make their training and operational debut during the Apollo 11 mission. These are the Lunar Module (LM) Descent Monitoring Chart series and the Lunar Surface Exploration Map Data Package.

The LM Descent Monitoring Chart Series, prepared from Orbiter IV and Apollo Mission 10 photography, is produced to cover each of the three potential Apollo 11 landing sites. These graphics, 3 or more per landing site, are designed to cover the landing site area, approach and departure corridors to provide the LM flight crew with visual descent and ascent monitoring capability. The series will provide coverage for approximately 1100 nautical miles east and 200 nautical miles west of each site for descent and ascent monitoring respectively. In addi-

U.S. Air Force Pioneered Modern Lunar Mapping

Lunar Chief Recalls History Of ACIC Space Programs

In 1959, when the Air Force first authorized ACIC to begin its project to systematically chart the lunar surface, the undertaking was virtually unprecedented. There was no coordinated series of maps depicting portions of the moon in existence at that time, while possibly the most accurate moon map had been designed by the German astronomer, Julius Schmidt, in 1874.

ACIC's initial objective was simply to study and collect data that would be useful in charting the moon. But two years later, the National Aeronautics and Space Administration asked ACIC to con-

scientific illustrators to Lowell Observatory in Flagstaff, Ariz. Using high-powered telescopes, members of the team recorded lunar features in the fleeting moments when they were least obscured by the earth's atmosphere.

The illustrators were able to improve upon the accuracy of lunar photographs because their eyes

By Robert W. Carder

On this eve of man's greatest space adventure - a manned lunar landing - I recall with a bit of nostalgia that time period 10 years ago when ACIC turned its cartographic attention toward the moon and space. It was in the summer of 1959 that Robert Kingsley, ACIC's Technical Director at that time, stopped me in the corridor early one morning and asked, "Bob, do you have any ideas on how we can publish a Lunar Atlas" -- and that was the beginning of our moon program.

Our first action was to assemble a small space team in the P & D Plant, headed by Howard Holmes and assisted by Al Burkhardt, Bill Cannell, Ken Walters, Pat Bridges, Walt Lueber, Jim Perry, Jake Nelson, Ed Roth, Harry Jenkins, and Alex Jablonski. Those were hectic days, almost like the blind leading the blind for all we knew about the moon; but with help and assistance from Dr. Gerard Kuiper, Director of Yerkes Observatory, we managed to unveil our first lunar items in March 1960 at the ASP-ACSM national meeting in Washington.

Mr. Robert Carder
Chief, NASA Project Office

It wasn't too long before Dr. Kuiper convinced us that we needed a large telescope if we were to map the moon. Why not use the Naval Telescope at Flagstaff, Arizona, someone suggested. This seemed like a good idea, so after some high level negotiating with the Naval Observatory in Washington, we dispatched Bill Cannell with his suitcase packed for Flagstaff. Bill's reception at the Naval Station was "lukewarm" to say the least; for the director Dr. Hoag, a Stellar astronomer with no particular love for the moon, wasn't too happy about being pushed off his telescope by a cartographer with a priority from Washington.

The following day, Dr. Hoag tactfully suggested to Bill that while in Flagstaff he might like to observe the moon through the 24-inch refractor at Lowell. This was soon arranged with Dr. Hall, the director at Lowell, and so commenced our Lunar Mapping Program at Lowell which was to last for nine years. However, this was not the end of our association with the Naval Station. Bill Cannell and Dr. Hoag subsequently became close friends and when the Navy installed their new 61-inch telescope, Dr. Hoag agreed to take some long exposure full moon plates for ACIC which played a major role in our Selenodetic Program.

Thinking "Way Out"

While one group was working on the moon, another ACIC group was formed which turned its attention toward designing an earth orbit chart for the Mercury Program. John Dornbach (now with NASA) was selected to spearhead this effort, later to be taken over by Joe McKinney for Gemini and currently managed by Charlie Miller for Apollo. Our thinking had to be "way out" when it came to designing an earth chart to be with the added objective of providing lunar charts for Project Apollo.

Continued on page 7.

To collect data for its first series of maps, ACIC sent a team of snatches of lunar detail that camera exposures could not.

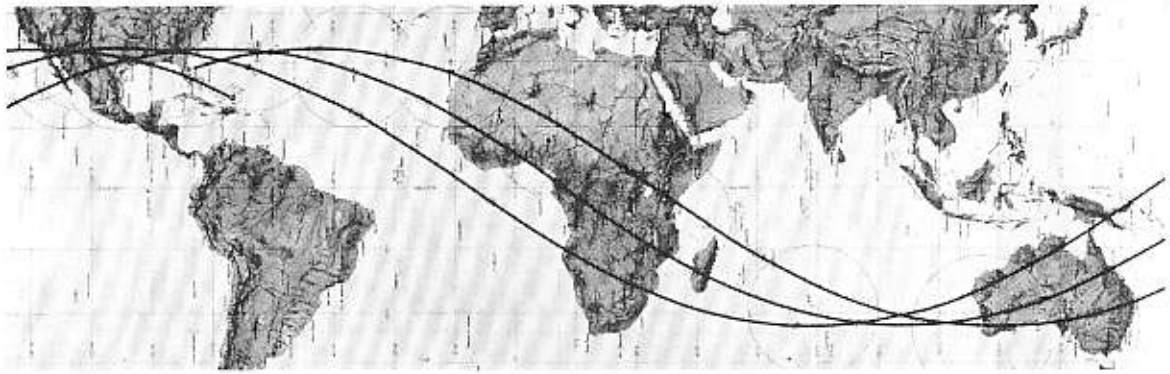
On the basis of the telescopic observations made at Lowell and

Continued on page 6.

tion, graphics prepared from oblique photography are produced for the primary and alternate sites.

To achieve the broad scientific

Continued on page 7.



This Mercury Orbit Chart was produced by ACIC in December 1961 for use as an on-board flight item and for the DoD recovery forces in America's first manned orbital flight by Col. John H. Glenn Jr. It is now an "antique," in the words of Robert W. Carder, chief of ACIC's NASA Project Office, but the basic format is still being used in the earth orbital charts produced for Apollo 11.

ACIC Has Aided Space Men For 10 Years

When astronauts Armstrong and Aldrin set foot on the moon this month, the act will culminate 10 years of cartographic support for the manned space program by ACIC.

Over the past 10 years ACIC has provided each of 20 manned space missions with literally hundreds of cartographic products, ranging from the small-scale earth orbit charts now familiar to ACIC employees to simulation filmstrips for astronaut training, flight crew navigational charts and capsule recovery graphics.

This program started in 1959 when the National Aeronautics and Space Administration requested the Department of Defense to provide cartographic support for the DoD forces that were to be utilized in recovery operations for Project Mercury.

At that time ACIC was identified as the agency most capable of providing this support because of experience gained in satisfying similar requirements for aircraft operations.

For the one-man Mercury missions, ACIC provided a series of Mercury Orbit Charts that combined in one map, terrestrial ground track and orbit data covering the entire circumferance of the earth.

Ground track data included the location and facilities of airfields and radar stations, while the orbit data established the path of the space vehicle in relation to the earth, marked at each 10-minute interval from time of launch.

This basic format was later used in providing earth orbit charts for the Gemini and Apollo missions. A separate spacecraft recovery chart was also provided for Project Mercury.

As a result of ACIC's responsiveness to Mercury requirements, both in terms of product and meeting schedules, NASA requested and Hq. USAF authorized continued ACIC support for Project Gemini.

Cartographic support for the Gemini missions consisted both of modified Mercury products and new products to satisfy requirements unique to the Gemini programs. Included among these new products were earth simulation filmstrips for astronaut training, Gemini Flight Charts for training and spacecraft navigation and a Spacecraft Weather Briefing Chart for use by Mission Control.

From an original two series of charts used to support Project Mercury, the list of ACIC support items for Project Apollo has grown to well over 30. These include several series of new charts and graphics designed to support lunar mission operations, including lunar orbit, landing and surface exploration phases.

(This article is based largely on a report prepared by Charles R. Miller, ACIC Apollo Project Officer, NASA Project Office.)

Honor Roll

PERFORMANCE AWARDS

Quality Step Increase
Harris, Albert K.

Outstanding Performance/ PMS Performance Award
Amsden, Stephen C.
Barnes, Suzanne E.
Bosma, Sydney J.
Brannon, James D.
Bratton, Catherine A.
Childers, John A., Jr.
Claywell, Mark Allen
Collins, Arthur Lee
Comer, Jerry R.
Connor, Jack W.
Corbett, Mary Catherine
Degonia, Robert L.
Dennett, Robert B.
Dexter, Ronald L.
Ferguson, Kathleen A.
Fiedler, William J.
Gibson, Emil W., Jr.
Greenwald, Michael J.
Hall, James R.
Harmon, Terry W.
Hoelker, Christine E.
Hume, Connie J.
Hutchison, Martin S.
Iversen, Steven D.
Jones, Sheri A.
Kammer, Irene A.
Kerley, Carolyn J.
Kuennen, Clarissa A.
Lemakis, Harry
Manning, William W.
Manson, Albert
Martin, Judith C.
McClure, James F.
McIntyre, Peggy L.
Meder, Kathryn E.
Miller, Robert W.
Morris, Marion F.
Moses, Stephanie R.
Maguire, Carl R.
Muehleisen, Mark G.
Mulkey, Michael J.
Pleasant, Doris A.
Poucher, Shirley R.
Rambo, Lawrence V.
Reinhardt, Patricia A.
Rogers, Jeff C.
Scheiblhofer, Edward C.
Shaver, Melvin R.
Soscia, George L.
Stewart, Kay E.
Stines, Delores J.
Stoessel, Karen L.
Tangeman, Kirk A.
Thompson, Wilmena R.
Tidwell, Hubert C.
Turner, Clyde S.
Vollmer, William T.
Wagner, Gregory R.
Webb, Kenneth W.
Whitlow, Kenneth L., Jr.
Woehrle, Virginia R.

PMS Performance Award
Adams, Kilburn
Austin, Arthur E.
Baumgartner, David M.
Bender, Nancy L.
Blakey, Karen K.
Bowman, David G.
Bradley, Robert L.
Brabec, Linda
Cameron, Mark A.
Carter, Warren A.
Chin, Dick K.
Dellinger, John D., Jr.
Donner, James A.
Fizer, Judith M.
Foster, Andrew J. G.
Grover, Arthur W.
Goldman, Terry A.
Hiles, Deborah J.
Hartje, Lacey E., Jr.
Hesselbein, Forest L.
Holland, Robert L.
Hopper, Lorraine A.
Johnson, Debra Ann
Kenniston, Kent E.
King, Steven L.
Labeau, Robert E.
Lefave, Joseph W.
Lehrmann, Bonnie M.
Massey, Sharon R.
Nolan, Michael J., Jr.
Olson, James T.
Perry, Kevin J.
Parson, Victoria L.
Ottinger, Carol B.
Quint, John E.
Ropac, Brenda
Rothove, James
Scheble, John P.
Schleifer, Christina J.
Snedaker, Marshall G.
Stevens, Elizabeth A.
Stoll, Robert L.
Strother, Jon M.
Taylor, Byron W.
Tsugita, Edward T.
Traina, John P.
Ulrich, Margaret G.
Underwood, Samuel B.
Washington, Marie L.
Westfall, David A.
Wynn, James F.

Special Act Awards
Kubik, Mary E. - $1,000
Callahan, Cynthia A. - $500
Himes, Randall M. - $500

Suggestion Awards
DuMey, Dennis E. - $273
Simpson, Richard E. - $51

...USAF Pioneered Modern Lunar Mapping

Continued from centerfold.

lunar photography, ACIC produced the first coordinated 1:1,000,000-scale series of charts covering the side of the moon facing the earth. This series is known as the Lunar Astronautical Chart (LAC) Series.

The charts portray the moon in relief rendered from an idealized light source that simulates evening illumination. Differences in steepness of features are portrayed by varying tone densities; the lighter the tone, the more shallow the feature. Meter contours are printed in brown to complement the olive green relief, while special colors are used to portray different lunar features, such as the ray systems, which are shown in blue gray.

ACIC reached a milestone in the summer of 1964 with the crash landing on the moon of Ranger VII. More than 4,000 photographs of Mare Cognitum, taken during the last 1,120 miles of the Ranger's approach, resulted from this mission. They represented the first significant amount of lunar image data collected from outside the earth's atmosphere. Later Ranger and soft-landing Surveyor missions provided more image data.

From thousands of Ranger photos, ACIC cartographers compiled sets of photo mosaics at desired scales for chart production. Scientific illustrators then translated the photo mosaics into shaded-relief charts.

Designated the RLC series, the Ranger charts range in scale from one inch equaling 16 miles to one inch equaling 32 feet. Each chart is related to other charts of the same area drawn on different scales and also to the LAC charts, which provide the primary network of lunar chart control.

The first orbiting satellites of the moon began to return photographs in the summer of 1966. From the sharp, close-range photographs of these missions, ACIC produced large-scale graphics covering potential landing areas for the astronauts. Two of the Lunar Orbiters supplied photographic coverage used in the production of the first complete chart of the far side hemisphere at a scale of one inch equaling 80 miles.

Last December the Apollo 8 moon mission for the first time combined use of ACIC products that were developed from a decade of lunar charting with other ACIC products that were compiled from the manned earth orbital missions.

For the Apollo 11 mission and beyond, ACIC's lunar charting activities are being directed toward supporting moon orbital navigation, manned landings, and the occupation of the lunar surface.

Retirements

(Years of federal service are given.)

June 2

Booker G. Bowers (LOSSD), material destruction equipment operator leader, 30 years.

Louis Bryson (FEMCA), custodial worker leader, 27 years,

Harold L. Gill (MCAAB), cartographer, 35 years.

Lorraine A. Hopper (DSMCE), lead cartographic clerk, 20 years.

Carl R. Maguire (DAP), supervisory management analyst, 35 years.

Donald L. Meyer (WG), geodesist, 36 years.

Harvey M. Nelson (MCBEB), supervisory aeronautical information specialist, 43 years.

Earle P. Zelsman (FEEE), architect, 10 years.

May 31

Christina L. Stegall (CMFCA), payroll clerk, 10 years.

John Tiner

Nancy Burns

Director's Awards

Supervisor Meets Staff Shortage; Security Clerk Cited for Initiative

Cartographer **John H. Tiner** received the Director's Award for the first quarter of 1989. As chief of the ADP Operations Branch (DSCB), he is responsible for providing computer support to 2,500 users of AC's central-site computer systems. He was praised for achieving "excellent results in staffing computer operator positions," despite chronic vacancy problems. His close monitoring of the recruitment process and cooperation with personnel officials in scheduling computer operations personnel to visit junior colleges led to an increase in the percentage of filled positions from 43 to 61 percent.

Receiving the Director's Award in the non-supervisory category was **Nancy J. Burns.** During a recent inspection by the DMA Inspector General, the key control system that she developed and coordinated was rated the best in DMA, officials said. The system had been rated unsatisfactory after the two previous inspections. She also identified a potential problem of lost production time during the issuing of new badges and took action by moving the issuing process to job sites, saving $32,700.

Aerospace Charting Seniors Luncheon

The bi-monthly luncheon of the Aerospace Charting Seniors will be Aug. 9 at the Holiday Inn Southwest/ Viking Conference Center, Watson and Lindbergh. Social hour at 11:30. Lunch--choice of baked stuffed pork chop or salad sampler (chicken, tuna, etc.)--at 12:30.

Call Grace Riechmann/832-5066, Harley Jennings/428-3356, or Pat Cronin/846-8567; or mail reservation with entree choice not later than Aug. 2 (firm) to ACS, P.O. Box 6942, St. Louis, MO 63123. Cost is $10.75.

...Lunar Chief

Continued from centerfold.

used at an altitude of 100-120 miles. After our cartographers came up with a terrain presentation that gave a kind of bird's-eye view from high above the earth, we encountered problems in finding printing materials that would meet the stringent environmental conditions in space.

Eventually all problems were solved, and it was an exciting day in ACIC when we received an autographed photograph of Col. John Glenn using our Mercury Orbit Chart.

As I look back on those early days of the ACIC space efforts, I realize we had two things going for us. First, we made friends with the astronomers,

Autographed photo from John Glenn reads "Best regards to ACIC and many thanks for all the help. The charts worked fine."

who provided invaluable advisory assistance; and second, we developed an ACIC team effort, instilled with enthusiasm for meeting new challenges. This combination, I believe, has been the key to our success in meeting NASA's space needs.

...ACIC Charts

Continued from centerfold.

objectives of lunar exploration, the Lunar Surface Exploration Map Data Package was prepared by the U.S. Army Topographic Command for the primary and one alternate site and ACIC for another alternate site. Geology data was compiled by the U.S. Geological Survey. The package is composed of one 1:100,000-scale graphic covering the landing site and surrounding area, three 1:25,000-scale graphics to refine the Lunar Module's location, and 92 1:5,000 scale graphics to provide detailed planning of lunar surface traverses.

The two new series have already been used during astronaut training.

DMAAC Corporate Run a Success

Photo by Malon Radcliffe

A good time was had by all at the Striders first Corporate Challenge Run.

Co-sponsored by the Civilian Welfare Council, the Aerospace Striders first Corporate Challenge Run was held against Anheuser-Busch and Ralston Purina June 22. Despite the hot temperatures and small turnout (33 runners), it was a good time had by all. DMAAC teams took first, second and fourth place.

Steve Mrotek led over the three-mile course in 16:35, with Dave Talburtt (17:01) and Gary Lorenz (17:18) hot on his tail. Daryl Hollmann, Mike McAmis and Ron Tomlinson all ran under 18 minutes to make up the 2nd- place team. The 4th-place team was Stu Pagenstecher, Marty Staples and Vince Lauter. The lone DMAAC woman runner was Kathy Huening.

Thrift Savings Plan Enrollment Open

Employees may join the Thrift Savings Plan or change the amount of their contribution during the open season that ends July 31. All employees with continuous service who were hired before July 1, 1988, are eligible. Open seasons are held every six months--May 15 through July 31 and Nov. 15 through Jan. 31.

Those enrolled in the Federal Employees Retirement System can also allocate or reallocate their contributions among the three investment funds open to them.

Forms and update sheeets have been provided to department, directorate and staff offices for all employees. For questions, contact Janice Hehmeyer (POX) at 4292.

Win Biathlon

James Murray (DPICB) and Steve Mrotek (DPICA) beat over 300 participants to win this year's Highland, Ill., Biathlon. With Mrotek's fifth-place run and Murray's first-place finish in the cycle race, the two had the fastest time in the relay event.

"Last year I was in Wisconsin, so we couldn't participate," Steve said. "We had thought we could win this event, and this year we did. It was neat." Mrotek completed the 5-mile run in 27:45, while Murray finished the 15-mile cycle race in 36:24.

DMAAC Softball Standings

as of June 27

RECREATIONAL LEAGUE

GOOBER				WIMP		
Photo Flashers	5	3	1	G.A. Bluecollars	7	2
Whiz Kids	4	5		Who's on First	6	3
Deacon Blues	1	8		Fat Boys A Club	5	4

MONSTER				PEEWEE		
Bottle Caps	7	1	1	Twins	5	4
Refugees	4	5		Wonies	4	5
Zeroids	4	5		Cougars	1	8

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