

Marshall Star

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NASA George C. Marshall Space Flight Center — Huntsville, Alabama

November 1, 1961

SATURN FLIGHT 'NEAR PERFECT'

Marshall Giant Ignores 'Jinx' on Maiden Trip

The Marshall Center's Saturn rocket ignored the so-called "first flight jinx" Friday and flew a near-perfect trajectory down the Atlantic Missile Range.

At 9:06 a.m. (CST)—3.97 seconds after beginning of ignition—the white, 162-foot-tall rocket lifted off its Cape Canaveral launch pad before some 120 newsmen, plus hundreds of other local spectators and a national television audience. Only 3/10 of a second separated ignition of all eight engines.

During the eight-minute flight, the rocket reached a peak velocity of 3,607 miles an hour and an altitude of 84.813 miles, before impacting 214.727 miles out into the Atlantic. The four stationary inboard engines cutoff after 109.37 seconds, while the four gimbaling outboard engines burned for 115.15 seconds.

Not one technical "hold" interrupted the 600-minute countdown prior to launch. Two holds in the

count were called, however, due to drifting cloud layers, which would have interfered with visual tracking and observation of the in-flight vehicle.

The only apparent "disappointment" in the test was the noticeably low level of noise generated (See GIANT on Page 2)

ASSISTANTS TOLD FOR MICHLOUD OPS.

Dr. George N. Constan—acting manager of the Marshall Center's Michoud Operations in New Orleans—announced in New Orleans last week the names of two assistants who will help him manage the Saturn booster production plant.

Dr. Constan named M. Keith Wible as his executive assistant and James L. Stamy as his assistant for projects management.

Wible is currently chief of the Marshall Center's Security Branch, Management Services Office. Stamy is associate director of the Analysis and Requirements Office in MSFC's Light and Medium Vehicles Office.

Two More to Be Named

In his New Orleans announcement, Dr. Constan also noted that (See ASSISTANTS on Page 8)

Director Expresses His Appreciation

In a message issued Monday, Dr. Wernher von Braun, MSFC director, expressed appreciation to MSFC employees for their contributions to the Saturn program, saying:

"The faultless launching of the Saturn space vehicle last Friday was a momentous occasion for the entire Free World.

"We have received congratulatory messages and expressions of appreciation from many individuals, agencies, and institutions.

"I should like to express my deepest appreciation to each Marshall Center employee for his or her contribution to the Saturn (See DIRECTOR on Page 8)

Miss. Selected for Static Test Site

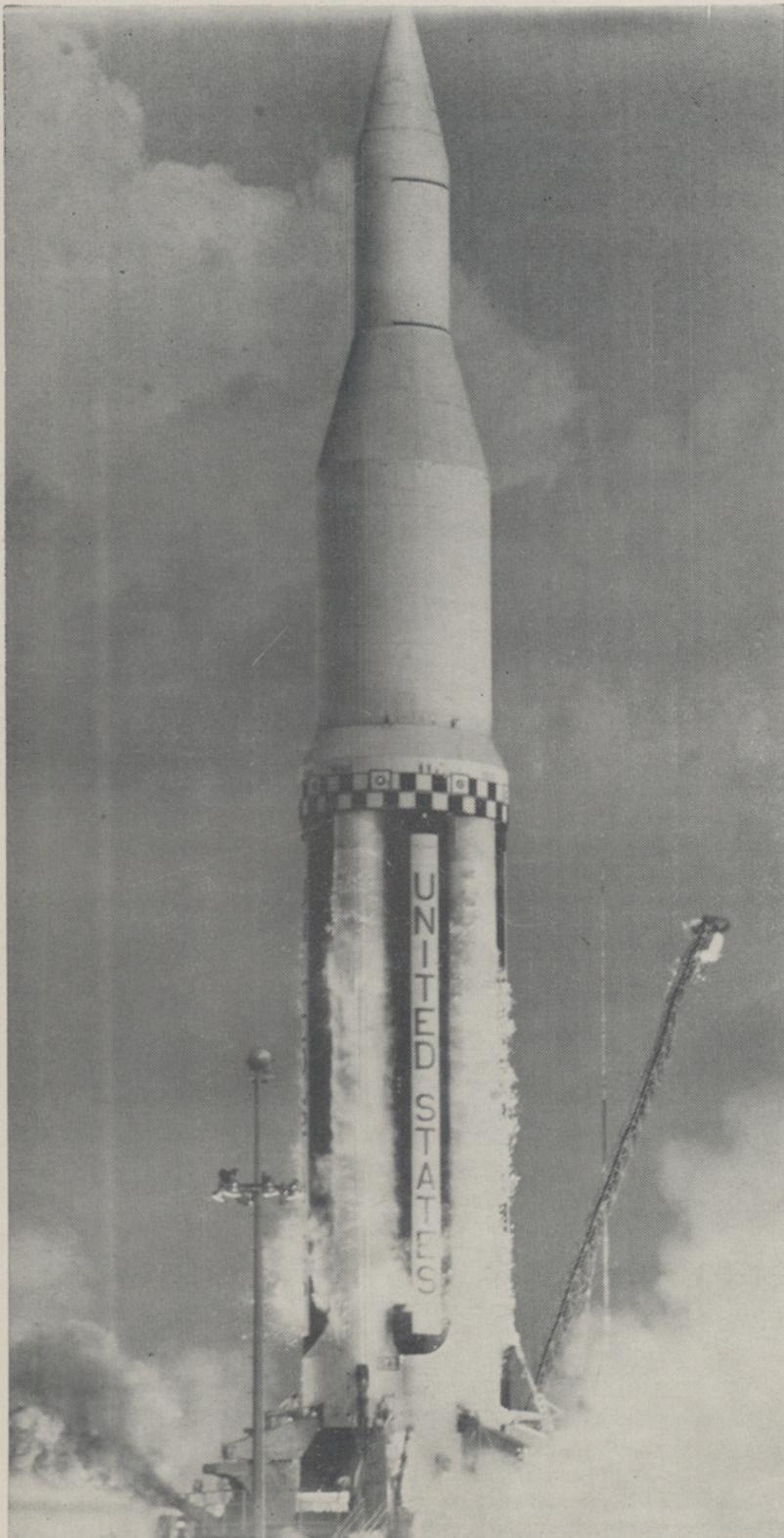
NASA last week moved to acquire some 13,500 acres in southwest Mississippi as the site of a static test facility for Saturn and Nova-class launch vehicles.

In addition, NASA will acquire easement rights to about 128,000 acres surrounding the test site, taking in 103,000 acres in Pearl River and Hancock Counties in Mississippi, and 25,000 acres in St. Tammany Parish in Louisiana. The area is largely flat pine timberland.

Under MSFC Direction

The site is located about 35 miles from NASA's Michoud Plant in New Orleans where large booster stages will be manufactured for use in the manned lunar Apollo program and other space projects. Operation of the site will be under the direction of the Marshall Center.

The Pearl River area was one of about 30 sites in the Gulf coast area that were considered. The (See TEST SITE on Page 7)



SATURN AT LAUNCH

ASTME Slates Meet For Tomorrow Night

The Huntsville Chapter of the American Society of Tool and Manufacturing Engineers will meet tomorrow night at the Holiday Inn Motel in Huntsville.

Lee Hammond, technical service representative with the Chem-Mill and Castings Division of Turco Products Inc., will discuss "Chemical Milling" during the dinner meeting, which will begin at 6 p.m.

All members and prospective members are urged to attend. Reservations can be made by calling 539-0781 (before 3 p.m.) or 536-3263 (after 5 p.m.).

Giant

(Continued From Page 1)

by the Saturn's 1.3 million-pound thrust power plant. Few newsmen, and other spectators who witnessed the launching from a press site located 11,100 feet from the pad, found it necessary to use the ear plugs offered for their comfort during launch.

NASA Administrator James E. Webb, in a statement released immediately following the test, said:

"The flight today was a splendid demonstration of the strength of our national space program and an important milestone in the buildup of our national capacity to launch heavy payloads necessary to carry out the program projected by President Kennedy on May 25.

"We in NASA deeply appreciate the contributions by the military services and American industry in achieving this important milestone. I have already expressed my appreciation to Dr. Wernher von Braun and Dr. Kurt Debus for the work of their two great teams."

Dr. Robert C. Seamans, Jr., associate administrator of NASA, said during the post-launch press conference: "Today we've made a very significant step forward in the development of the vehicle that we need for space exploration, particularly for manned space exploration.

"The important thing, of course," Dr. Seamans continued, "is that the Saturn C-1 in its first flight worked, worked as expected. The launch went off without a hitch and the basic data we could all interpret very easily. The vehicle



DISCUSS PROGRAMS—Thomas F. Dixon (right), as of today NASA's deputy associate administrator, visited MSFC last week discussing MSFC programs with, left to right, H. H. Gorman, MSFC acting deputy director for administration; Eberhard Rees, MSFC deputy director for research and development, and Dr. Wernher von Braun, MSFC director.

took off and went downrange as planned."

Dr. Seamans added that "the flight today demonstrates the capability that this country has for large scale operations of this sort. We have a wonderful capability because of the competence within the government and the competence within industry and in our universities."

He ended by saying: "I would like to mention just one other group that deserves a tremendous vote of thanks from all of us for what has been accomplished. This group is physically located at Huntsville, Ala., and goes under the heading of the George C. Marshall Space Flight Center, and they are very ably directed by Dr. Wernher von Braun."

Dr. von Braun, in turn, acknowledging that "... projects such as the Saturn rocket are the results of teamwork," introduced Dr. Eberhard Rees and Marshall division directors present at the conference.

Richard B. Canright, Saturn program manager for NASA, noted that "... this was a very successful culmination to almost three and one-half years of work," and that "the first phase at least of the Saturn C-1 can now be considered complete."

In answer to a question as to whether the Soviet Union has lifted this much weight from the earth, Dr. Seamans replied:

"As far as we know the Soviets

have a booster which gives a total thrust at liftoff of around 750,000 to 800,000 pounds. Our vehicle weighed 920,000 pounds. So obviously their booster would not have taken the C-1 off the pad."

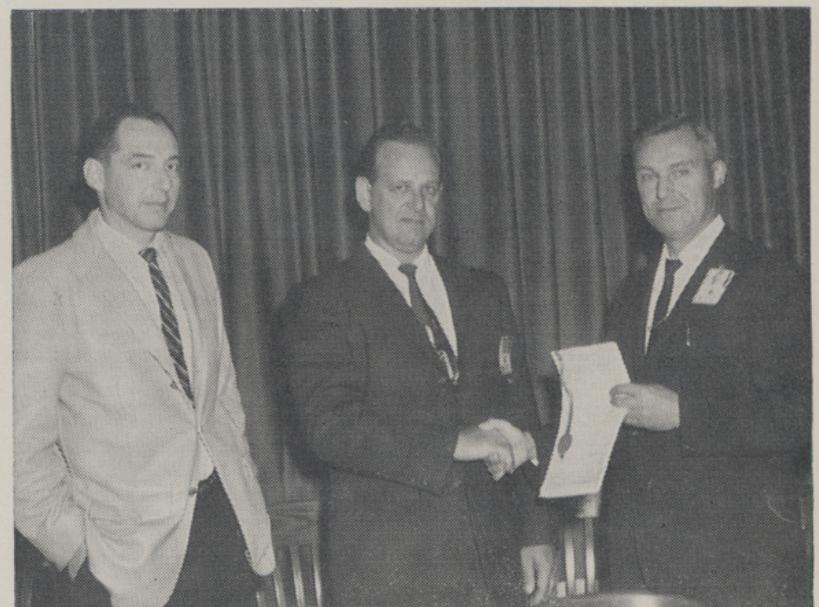
Also participating in the press conference were Milton Rosen, deputy director of Launch Vehicle Programs for NASA; Dr. Kurt Debus, director of Marshall's Launch Operations Directorate; Dr. Oswald Lange, director of the Saturn Systems Office; Maj. Gen. Leighton I. Davis, commander, Air Force Missile Test Center at Cape Canaveral, and moderator Bart J. Slattery, chief of the Public Information Office.

3 NASA Officials Schedule MSFC Visit

Three officials from NASA Headquarters in Washington, D. C. are scheduled to visit the Marshall Center Nov. 9.

Thomas F. Dixon, deputy associate administrator, who was here last week, will return with Albert F. Siepert, director, Office of Business Administration; and DeMarquis D. Wyatt, assistant director, Program and Planning and Coordination Office.

They plan to arrive in Huntsville Nov. 8 and confer with Marshall officials on Nov. 9.



PATENT AWARD—Herman T. Blaise (center) receives patent no. 2,996,936 from W. R. Kuers, director of MSFC's Fabrication and Assembly Engineering Division, as Jack Trott, Chief of the division's Technical Liaison Office looks on. Blaise, a program specialist in the Technical Liaison Office, received the patent for a drill jig device.

The MARSHALL ★ STAR

The Marshall Star is published every Wednesday by the Public Information Office at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration.

Contributions should be submitted not later than Friday noon to the MSFC Public Information Office (M-PIO), Bldg. 4488, ext. 876-1959 and include originator's name, connection with the center and telephone number.

The Marshall Star does not publish commercial advertising.

MSFC Scene Tense Friday During Saturn Launching

Four seconds seemed like an eternity to employees at the Marshall Center Friday morning.

That's how long their precious Saturn rocket—the largest known in the world—was held on its launch pedestal before the big bird gathered full power for its spectacular and successful flight from Cape Canaveral.

You could have heard a pin drop as the countdown narrowed as the "backhome" folks narrowed around television sets and radios to pull for their Saturn.

Marshall encouraged personnel to bring television sets and radios for the big event. Sets were put in the halls, in the labs and in jammed conference rooms.

Secretaries and administrative workers joined engineers and scientists at launch time.

All of the NASA Marshall people would liked to have been at the Cape for the big event.

But they couldn't and they stayed home to mind the shop and pull for their Saturn. They had built it for America.

F&AE ANNOUNCES LIAISON OFFICE AT DALLAS, TEX.

W. R. Kuers, acting director of MSFC's Fabrication and Assembly Engineering Division, recently announced establishment of a technical liaison field office at Vought Astronautics Division of Ling-Vought-Temco Corp., Dallas, Texas.

Chance Vought is producing 70 inch and 105 inch diameter propellant tanks for Saturn under MSFC contract.

Currently manning the liaison office from F&AE are B. E. Kite and J. W. McKee.



RCAF VISITORS—Three members of the instructional staff of the RCAF Guided Missile and Space Technology Indoctrination School, Clinton, Ontario, Canada, view a model of the Saturn blockhouse during a visit at MSFC last Wednesday and Thursday. Left to right are: Flight Lieutenant W. F. McRae; Flying Officer C. W. McGillicuddy, and Flying Officer J. Raine.

GYRO & STABILIZER BOWLING LEAGUE October 26, 1961

| Team | Won | Lost |
|-------------|-----|------|
| Research | 27 | 5 |
| AB-5 | 20 | 12 |
| Brownies | 20 | 12 |
| Pinnuts | 20 | 12 |
| Calibrators | 18 | 14 |
| Networks | 18 | 14 |
| ABMA | 15 | 17 |
| Bendix | 14 | 18 |
| Navigation | 11 | 21 |
| Astro-Space | 10 | 22 |
| Demods | 10 | 22 |
| Chrysler | 9 | 23 |

200 Games: Cornutt—240; King—218; Rowe—208; Dugal—202.
High Series (scratch): Rowe—574.

NASA MEN'S BOWLING LEAGUE October 26, 1961

| Team | Won | Lost |
|------------------------|-----|------|
| Tom Pogue | 20½ | 11½ |
| Ensor & Dunn Realty | 20 | 12 |
| Alley Cats | 20 | 12 |
| SPACO | 19 | 13 |
| Penhall National Homes | 18 | 14 |
| Maulers | 16½ | 15½ |
| The Murry Company | 15 | 17 |
| Hayes Corporation | 14 | 18 |
| Eclipse Pioneers | 14 | 18 |
| FEB | 12 | 20 |
| AASLI | 12 | 20 |
| B. E. Jones Garage | 11 | 21 |

High Series: Don DeSlover, 593.
High Game: Don DeSlover, 258.
200 Games: Bob Bush, 205; Al Stiles, 202; E. Burruss, 202.

S&M MEN'S BOWLING LEAGUE October 24, 1961

| Team | Won | Lost |
|----------------------------|-----|------|
| General Precision Inc. | 19 | 5 |
| Catha's Toy & Hobby Center | 17 | 7 |
| Southerland Blue Print | 15 | 9 |
| Lab Keglers | 14½ | 9½ |
| Team No. 4 | 14½ | 9½ |
| Sandbaggers | 12 | 12 |
| Team No. 8 | 11 | 13 |
| Friden Furies | 11 | 13 |
| Automatic Gas Co. | 10 | 14 |
| Howard Associates | 8½ | 15½ |
| Batts Apothecary | 6½ | 17½ |
| Team No. 1 | 5 | 19 |

200 Games: Showers, 200.

Employees, Families Invited to Join in Skating Activities

Marshall Space Flight Center employees and members of their families have been invited to participate in the activities of the Huntsville Figure Skating Club by the group's president, H. F. Beduerftig of MSFC's Structures and Mechanics Division.

Regular skating sessions are held every Monday from 6:30 p.m. to 7:30 p.m. at the Ice Arena, 406 Governors Drive, S. W., Huntsville, and additional skating sessions are planned.

Beduerftig points out that the Figure Skating Club offers instructions on a voluntary basis to develop skating skill and including correct basic skating, figure skating, couple skating and rhythmic skating.

"President Kennedy has request-

ed that physical fitness be given urgent attention," declares Beduerftig, pointing out that in skating. All muscles from head to toe are in action.

For further information concerning the club, call Beduerftig, 534-0764 or 876-3424.

Test Site

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site selected will have deep-water access for booster transport to the Michoud Plant via the Pearl River and the Intra-coastal Waterway.

Six or More Stands

The number of stands capable of testing complete booster stages in the 1.5 to 20 million pound thrust range to be built at the Pearl River site may reach as many as six or more.

Land acquisition and easements will cost an estimated \$13.5 million. Construction—to begin within six months—will require two to three years. The Mobile District of the U. S. Army Corps of Engineers will act as NASA's agent for land acquisition, in cooperation with the Lands Division of the Department of Justice.

Court Actions Filed

Court actions filed last Wednesday in U. S. District Courts in Jackson, Miss., and New Orleans, La., described the perimeters of the land involved.

Approximately 85 families reside in the 13,500-acre area where construction is to begin next Spring. Another 575 families dwell in the 128,000-acre buffer area. Those people will have up to two and one half years to relocate. Restrictions on land use would rule out residences in the easement zone but would not interfere with farming, lumbering,

Thomason Named To G&C Position

Herman E. Thomason was named last week as deputy to the chief of the Gyro and Stabilizer Branch in MSFC's Guidance and Control Division.

In announcing the appointment, Dr. Walter Haeussermann, division director, stated that Thomason will continue to serve as chief, Servo Systems, R&D Section of the Gyro and Stabilizer Branch, with J. G. Rowell as his deputy.

Thomason received his BS degree from Virginia Polytechnic Institute and his MS degree in engineering from UCLA. He has been at Huntsville for four years and with the Guidance and Control Division since December 1957.

He is an associate professor at the University of Alabama Huntsville Center, where he taught electrical engineering during the 1959-60 school term.

He and his wife, Jo, have two children, a daughter, Christie, who is six years old and a son, Pat, who is four.

grazing or mineral operations there.

When in operation the facility would employ 500 to 1,000 engineers, technicians and support workers. Operation of the site will be under the direction of NASA's Marshall Space Flight Center, Huntsville, Ala.

MSFC Employees Pledge 101% of 1961 UGF Goal

C. W. Huth Urges Pledge Fulfillment

The Marshall Center entered the final week of its UGF drive Monday with 101 per cent of its goal pledged.

"MSFC employees through their pledges have demonstrated outstanding support to the 1961 UGF campaign," declares C. W. Huth, UGF executive chairman.

"It is now up to these employees," Huth points out, "to fulfill their pledges by the end of this week so that MSFC can report 101 per cent of the goal collected at the close of the campaign."

89% Collected

At the end of last week, \$66,961.21, or 89 per cent of MSFC's goal, had been collected. Of this amount, \$57,769.08 was collected for the Madison County-Huntsville UGF and \$9,192.13 for other agencies.

L. G. Jackson, UGF finance and reports chairman, reported 92 per cent of MSFC employees had participated in the drive and of these, 45 per cent were fair share givers.

Percentages for MSFC offices and divisions, based on established quotas, are as follows:

| | Per Cent Pledged | Per Cent Collected |
|--------------------|------------------|--------------------|
| Future Projects | 161 | 69 |
| Ops. Analysis | 158 | 144 |
| P&C | 145 | 134 |
| Tech. Prog. Coord. | 140 | 89 |

| | | |
|-------------------|-----|-----|
| Director's Ofc. | 133 | 114 |
| Fin. Management | 128 | 118 |
| L&M Vehicles | 126 | 91 |
| F&AE | 116 | 108 |
| Public Info. | 115 | 106 |
| Management Ser. | 115 | 93 |
| Ind. Relations | 113 | 106 |
| Test | 111 | 97 |
| Reliability | 109 | 92 |
| Patent | 105 | 105 |
| NASA Auditors | 100 | 100 |
| LOD | 99 | 92 |
| S&M | 99 | 89 |
| Tech. Services | 97 | 79 |
| Qual. | 93 | 81 |
| Legal | 85 | 85 |
| Aeroballistics | 84 | 70 |
| G&C | 82 | 77 |
| Research Projects | 82 | 75 |
| Weapons Systems | 69 | 69 |
| Computation | 69 | 68 |
| Saturn Systems | 79 | 60 |

Assistants

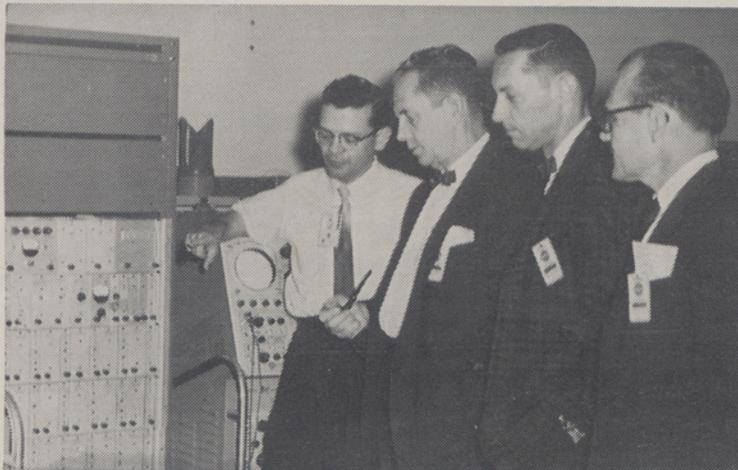
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an assistant for quality and inspection and an assistant for administration for the Michoud Operations would be named within the next few days.

Private contractors, under direction of NASA's Marshall Center, will carry out production of Saturn boosters at the Michoud plant. Bids for the role of prime contractor for the Saturn S-I booster system were received at MSFC on October 16. Bids for a similar role in the S-IB advanced Saturn booster program are to



HOW ABOUT YOURS?—These pretty Marshall misses pose a reminder to all those who still need to get their UGF pledges paid. Records show 101 per cent of the Marshall goal has been pledged—but only 89 per cent collected. "How about your pledge?" ask these UGF helpers, who are, left to right, Martha Bush, Carolyn Hartselle and Ann Wilson.



GROUP EYES SS-FM EQUIPMENT—Telemetry Working Group (TWG) representatives watch a demonstration of the operation of a ground station SS-FM telemetry system for Saturn during the TWG meeting at MSFC last week. Left to right are: Walter Frost of MSFC's Guidance and Control Division, demonstrating the equipment; Bob Merriam, Naval Ordnance Test Station, China Lake, Calif.; Paul Sehnert, TWG chairman, Edwards Air Force Base, Calif.; and Bill Williams, NASA Headquarters. During the TWG meeting, Capt. Donald Koritz, Air Force Missile Test Center, Patrick Air Force Base, Fla., was elected chairman for the coming year and Robert C. Barto, White Sands Missile Range, N.M., was elected vice chairman.

be received at MSFC on November 8.

Prior to becoming chief of MSFC's Security Branch, Wible was chief of the Intelligence and Security Division at Redstone Arsenal, Ala. He received a BS degree in business education from Ball State College, Muncie, Ind., in 1951 and has done post graduate work at Indiana University.

Stamy was employed as a guided missile design engineer and aeronautical research engineer at the Army Ballistic Missile Agency, Redstone Arsenal, prior to employment with the Marshall Center. He received a BS degree in mechanical engineering from Iowa State College in 1946.

Director

(Continued From Page 1)

development program. Our phenomenal success indicates the efficiency and dedication with which you have carried out your assignments.

"The development of this powerful vehicle and the supporting equipment and instrumentation is probably the most complex scientific program ever undertaken. It has required the utmost from all of you in teamwork, cooperation, alertness, and proficiency. All of you have performed your duties exceedingly well, and once again we have come through with flying colors.

"It is with great pleasure and pride that I express my personal and official thanks to each of you for the contributions you have made to this great achievement."

PLASMA JET. A device for producing a stream of very hot or ionized gas.

MARSHALL ☆ STAR