July 28, 2000 Vol. 39, No. 15

Spaceport News

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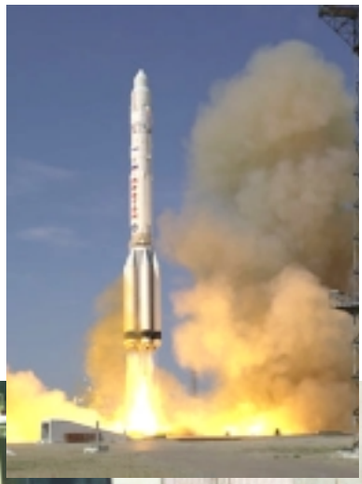
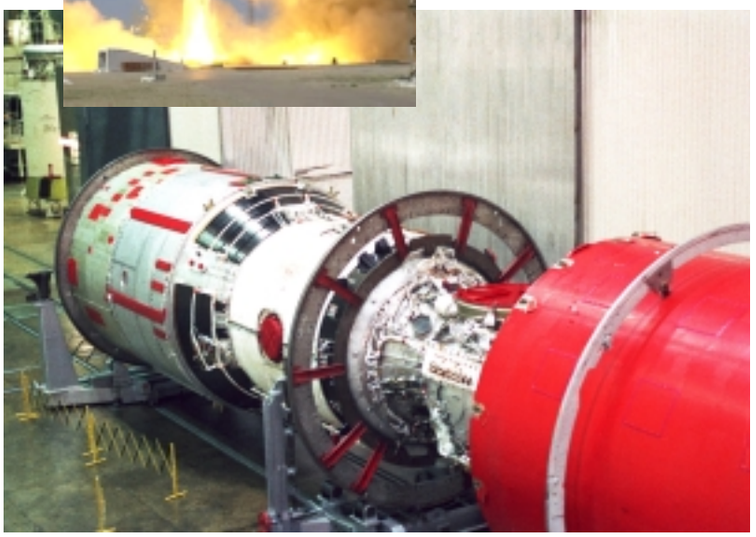
http://www-pao.ksc.nasa.gov/kscpao/snews/snewstoc.htm John F. Kennedy Space Center



Zvezda takes flight

Launch of key component heralds new phase of International Space Station



At top, a Proton rocket lifts the Zvezda module from the Baikonur Cosmodrome, Kazakhstan. Above, the module during processing.

Destined to transform the International Space Station into a new home in orbit, the Russian-built Zvezda living quarters module lifted off flawlessly from the Baikonur Cosmodrome, Kazakhstan, at 12:56 a.m. on July 15.

Only 15 minutes after its launch aboard a Russian Proton booster, the new module was safely in orbit, with its antennas, solar arrays and other exterior equipment perfectly extended.

In addition to serving as the early station living quarters, Zvezda will be the main docking port for Russian Progress cargo resupply vehicles. It also will provide early propulsive attitude control and reboost capabilities for the Station.

At press time, the module was operating well in an orbit with a high point of about 221 statute miles and a low point of 115 statute miles.

Flight controllers at the Russian Mission Control Center in Korolev, Russia, were continuing to activate and check out the module's systems, fire its engines periodically to adjust its orbit, and prepare for a docking with the Space Station.

The Station was set to begin a final rendezvous with Zvezda, culminating in a docking planned at about 8:45 p.m. July 25.

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Inside

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Page 8 – What's new at KSC: PASS badging, a new facility and KSC Web site.

50 years of launches commemorated

The 50th anniversary of the launch of Bumper 8, the first rocket launched from the Cape, was commemorated July 24. The ceremony, held at Pad 3 at Cape Canaveral Air Force Station, was hosted by the Air Force Space and Missile Museum Foundation.

About a dozen members of the original Bumper 8 team attended the ceremony and were introduced to the crowd of space industry leaders and members of the media.

Kennedy Space Center Director Roy Bridges Jr. lauded the Bumper 8 team for laying the foundation for NASA's successes in space research and exploration.

The Florida Space Business Roundtable presented Florida State Sen. George Kirkpatrick, District 5, with the 2000 Bumper Award during the event.

In addition, he was recognized by KSC with a plaque presented by STS-101 Commander James Halsell Jr., who recently became KSC's manager of Space Shuttle Program Launch Integration. The plaque included a Florida Gator pennant carried aboard Atlantis during the STS-101 mission.

Bridges praised Kirkpatrick for his work in championing the space program in the State Legislature.

For more coverage on the 50th anniversary of Bumper 8, turn to pages 4 and 5.

Model Bumper 8 rocket launched at Bumper 8 ceremony on July 24.

Desktop Yoga: a cubicle curative

KSC workers learn simple Desktop Yoga techniques during a recent workshop held by the KSC Fitness Center. Stretching and hand rubs, pictured above, are just two in a series of exercises.

Simple Yoga Exercises

Wrist Rolls: Let arms rest at side and circle wrists and hands in one direction, and then in the opposite direction.
Hand Rub: Rub and massage one hand with the other, then repeat on the other side.
Neck Movements: Let right ear slowly touch right shoulder, then slowly and smoothly roll your head forward and to the left. Only make a semi circle, full circles create too much strain. Repeat in opposite direction.
Shoulder Stretch: Place feet flat on the floor about 12 inches apart. Put right hand on left knee and left hand on right knee. Slowly move your knees away from each other and as far apart as comfortable, slowly bending forward.
Seated Cobra: Sit on chair with both feet flat on the floor. Place hands on your knees and slowly bend forward until chest is resting on your lap, exhaling as you bend forward. Spread knees and feet so that your hands are under your shoulders. Keep head, neck and back in a straight line toward the floor. Slowly bring your chin forward, breathe in and begin lifting and curving head up. With your chest continuing to rest on your lap, elongate your spine and begin raising shoulders up.
Knee Presses: Firmly press knees and thighs together and hold for a few moments. Release knees and let legs separate.
Foot Rub: Rub ankles, the top and bottom of your feet, and each toe.
Leg Lifts: Stand beside a steady chair and place hand on chair back for balance. Lift leg forward (knee can be bent or straight), backward and to the side. Repeat several times with each leg.
NOTE: Each movement should be done while taking deep, diaphragmatic breaths. Stop movement if you feel any pain or unnecessary strain.

Would you like to build energy, reduce stress and tension, strengthen digestion and immune system function, and even improve liver cleansing and help weight loss?

What if you could do all this while sitting in your office?

That is the unique draw and the secret behind the Desktop Yoga program, a traditional yoga technique modified to fit into the modern office environment.

The program, which is taught by KSC Fitness Center staff, is offered to KSC employees who seek to enhance their work experience while also improving their health.

Everyone wants to lead a healthier life, yet in today's fast-paced workplace, health usually takes a back seat to performance. Unfortunately performance is lessened when the worker is uncomfortable or unhealthy. An unfocused mind usually leads to weakness and sickness, so controlling the mind helps to control the body, providing numerous benefits.

Many health crazes claim to offer a better way of living, but yoga is undoubtedly one of the oldest. In fact, there isn't one type of yoga; there are more than 40 different kinds from which to choose.

Yoga (meaning to yoke, bond, or join together) is a daily regimen of movement and breathing that provides relief to many of life's minor pains and ailments. The breathing and movements,when done mindfully by focusing on the bodily sensations, help to increase blood supply to joints, brain, heart, lungs and skin.

The increased blood supply helps to maintain and improve mobility and muscle tone while also increasing lung capacity.

Movement done mindfully is one of the main focuses of the Desktop Yoga program, but movement isn't the only focus.

The office environment often contributes to many of our aches and pains, so setting up a healthy work environment is one of the first lessons of the hour-long class.

An easy way to begin transforming your office from a cubicle to a curative is to fill your office with plants, which will improve air quality. Another easy way is to choose a comfortable chair with a waterfall edge that is sloped away to help with leg circulation.

Computer screens should be kept clean (to avoid glare) and at arm length from your eyes to reduce neck and eye strain. Regularly taking breaks and walking around also helps.

Computers can cause serious problems to your health if they are improperly located in respect to the user.

At the desk, keyboards should be kept at elbow level. Chair arms can help to reduce

(See YOGA, Page 3)

Part IV: Covey's 7 Habits empower us

The following is the final installment of the refresher on Stephen Covey's popular self-help book *The 7 Habits of Highly Effective People.*

Stephen Covey calls Habit 6 a "Public Victory," because before you can move into the optimum "interdependence'' you must build a foundation of true independence.

Habit 6 - Synergize

Covey defines synergy as "one plus one equals three or more."

- Synergy involves a discovery of things that, when shared, may result in an even better idea or a third alternative that allows all parties to win.
- Synergy is the by-product of an atmosphere that fosters the Win-Win attitude and the "seeks first to understand" philosophy, while keeping the faith that a decision can be reached.
- We must condition ourselves to think of differences as opportunities.

If we choose to see them as threats, then they will be threats.

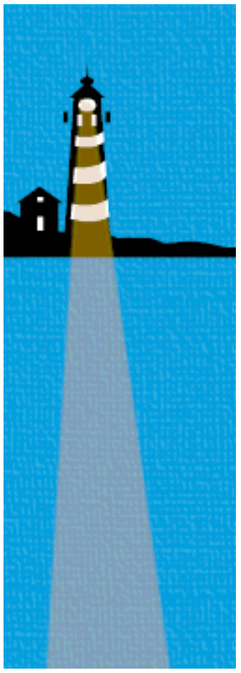
If we can share our differences and celebrate them as benefits that will lead to greater knowledge, we enhance the quality of our lives.

- Be aware of stereotyping as it can affect whole cultures and limit our discovery of true worth.

Overcoming our prejudices and keeping an open mind moves us toward a third alternative in negotiations and problem solving.

Habit 7 - Sharpening the Saw

Covey calls this "The Habit of Self-Renewal," as it is necessary to transform our behavior and renew ourselves so that the other six habits become natural and spontaneous.



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Overcoming our prejudices and keeping an open mind moves us toward healthier negotiations and problem solving.

He refers to Aesop's fable, "The Goose and the Golden Egg" once again to illustrate that we must protect our ability to perform, that is, our Production Capability.

The key to self-directed change involves making incremental, positive efforts toward self-mastery or achievements that build confidence and encompass four dimensions of our life: (1) Physical, (2) Mental, (3) Spiritual and (4) Social-Emotional.

A brief description of each is:

Physical – Through nutrition, exercise, and rest, we strengthen our bodies.

Mental – Through learning, reading, and writing, we sharpen our mental capabilities.

Spiritual – Through inspirational literature, meditation, prayer, and communing with nature, we develop our spiritual self.

Social-Emotional – Through courtesy, kindness, honesty and keeping commitments, we make deposits into the Emotional Bank Accounts of our key relationships.

Covey gives us these 7 Habits in order to empower us to move in an upward spiral of growth and change — of continuous improvement.

As we all learn by repetition, he directs us to LEARN, COMMIT, and DO — LEARN, COMMIT, and DO — LEARN, COMMIT, and DO...

YOGA ...

(Continued from Page 2)

fatigue in wrists and arms. Keep your work at arms reach and directly face your work.

Posture is something most people take for granted, yet it is usually the main culprit behind most aches and pains. When sitting, the back should be in a "S" shape, not a "C."

Thighs should be parallel to the floor, and feet should be flat on the ground. Keep your wrists straight, and arms close to your side. Arms should also be parallel to the floor with the upper and lower arm at 90-degree right angle.

To make the most of the Desktop Yoga routine, place a "Do Not Disturb" sign on your door. Calls should be forwarded to voicemail or to someone else.

Remove restrictive clothing such as ties, scarves or shoes, and make sure you have plenty of room to stretch out.

Soft music and dim lights help to provide a relaxing atmosphere as well. All of these tips are only suggestions. Do whatever you need to do to become relaxed.

Although strict yoga regimens often attempt to "unify the individual consciousness or inner self with the Universal Consciousness," Desktop Yoga is an informal and easy way to improve your work experience while simultaneously benefiting your health.

The class is taught by personnel from the KSC Fitness Center, and anyone who is interested in the class should call 867-7829 to find out the time and place.

For more information on yoga, check out these helpful Web sites: **www.yogainfo.com**, **www.yogadirectory.com**, **www.yogaplace.com**, **www.wailana.com** and **www.yogaclass.com**.

Countdown editor Anita Barrett tries relaxing Desktop Yoga exercises at a recent class given by the KSC Fitness Center.

50 years of launches at our sp

Bumper 8 launched from what is now Launch Complex 3 at Cape Canaveral Air Force Station at 9:28 a.m. on July 24, 1950.

Since that time, there have been 3,245 launches from the Cape.

As we celebrate the 50th anniversary of the first rocket launch at the Cape Canaveral Spaceport, it's fitting we take a look at what led to the launch.

The Bumper program was conceived to combine very advanced German technology captured during the war (V-2 rocket) with a smaller and less sophisticated domestic vehicle (WAC Corporal rocket).

The goals for the two-stage rocket program were to achieve high altitudes, test radio communications from the other side of the ionosphere, verify that one liquid fuel rocket could be launched from another in flight, and gather information on aerodynamic heating during speeds faster than the speed of sound.

The German V-2

The German V-2, also called the A-4 within the program, was a behemoth for its time. The V-2 was 46 feet long, 5.4 feet in diameter (11.7 feet for the large tail fins), and had a liftoff weight of 28,000 pounds including a one-ton warhead.

The range of the V-2 was 150 to 230 miles. The accuracy was not high. About 65 percent of the V-2s launched against Antwerp fell within 6 miles of the center of the city, the aim point.

However with major advances in propulsion, propellants, structures, guidance and field operations, the V-2 was extremely sophisticated for its time.

The first V-2 was launched on Oct. 3, 1942. About 3,200 would be launched by war's end.

Some 5,000 allies were killed by V-2 bombardment and another estimated 18,000 slave laborers died in their manufacture.

After the war the German V-2 was imported to the United States. About 120 rocket engineers, including Werner von Braun, documentation and missile parts were brought to El Paso, Texas, and the nearby White Sands Proving Ground. Seventy-three V-2 would be launched there by General Electric Corp. and the First Guided Missile Battalion.

Early U.S. rockets

When news of Germany's development of a large rocket reached American intelligence during the war, Theodore von Karmen's rocket group at the California Institute of Technology was asked to start a similar project. The group had been successfully developing smaller rockets to help a heavily laden Army Air Force bomber take off.

The Jet Propulsion Laboratory began a series of increasingly sophisticated rockets to be called "Private" and "Corporal." Private was a very small solid fuel rocket that gave JPL basic experience with aerodynamics.

When the magnitude of the challenges required to build a fully self-guided rocket (such as the V-2) was realized, an intermediate model was introduced called WAC Corporal.

The WAC was an unguided scale model of the envisioned Corporal. The WAC would be used only as a sounding rocket and gather data on the atmosphere through which the later ballistic missiles would need to traverse. Some say WAC stood for Without Attitude Control but could have related to the Women's Army Corps.

The WAC was launched out of a 100-foot tower built at the new White Sands Proving Grounds. The first launch of a WAC occurred on October 11, 1945, and reached an altitude of 43 miles.

The WAC was 12.5 feet long, 12 inches in diameter and weighed 660 lbs. at liftoff. It carried a payload of 25 to 60 lbs., simple instruments and a transmitter.

The WAC was boosted out of the tower by a modified Tiny Tim solid fuel rocket so that it was traveling 400 feet per second when its own rocket ignited.

Fifteen WACs were launched at White Sands, including the last one on June 12, 1947.

Six Bumper flights were carried out at White Sands. The last two Bumper shots required the new Joint Long Range Proving Ground being planned in Florida.

Bumper program begins

The Bumper program was conceived during a meeting of JPL, General Electric and the Army on June 13, 1946.

These groups plus the German engineers at Fort Bliss performed studies on how the WAC could be integrated into the V-2 and launched from it in flight.

The Army dedicated eight V-2 missiles to the Bumper program which were modified by General Electric to change the missile nose to accommodate the WAC.

The V-2 instrumentation compartment was made shorter and the nose modified with rails, opening blast doors and four slots for the WAC fins. The WAC was also modified to make the fins larger and spin motors were added to provide stability by spinning the small rocket after its launch.

Six Bumper flights were carried out at White Sands, one of which, Bumper 5 was completely successful. The WAC second stage reached an altitude of 244 miles (to be compared with 110-mile record of a V-2 to that date).

The remaining two launches were to test aerodynamic heating at high Mach numbers, a significant problem for ballistic missiles re-entering the atmosphere as they fell toward their target.

The trajectories required several hundred miles of open range not available at White Sands.

Bumper 8 becomes the first rocket to be laun
awaits the historic liftoff. At far right, Bumper 8

The year-long celebration of "50 Years
with a series of special events at the Ca

Members of the Bumper 8 launch tea
number of the events. Also participating
Kennedy Space Center Director Roy Brid
Rep. Dave Weldon, Palm Bay, and Florid

Events included the 50th Anniversary
launch team reunion on July 23 and a ce
anniversary of the Bumper 8 launch on J

Bumper 8 team members who were a
events included Liz Bain of Indialantic; H
Belcher, Indialantic; Konrad Dannenberg
Calif.; Norris Gray, Melbourne; Hiroyuki H
of Melbourne; and Dr. William Pickering,

aceport started with Bumper 8

nched from Cape Canaveral. At right, Bumper
8 is raised to vertical.

s of Launches from the Cape" culminated
pe Canaveral Spaceport.
m, several pictured above, attended a
were space program leaders including
lges Jr. and Brig. Gen. Donald Pettit. U.S.
a Sen. George Kirkpatrick, District 5.
Gala held on July 15, the Bumper 8
eremony commemorating the 50th
uly 24.
able to attend some of the celebratory
erman Banks, Altadena, Calif.; Ed
, Madison, Ala.; Robert Droz, Mendocino,
Hashimoto, West Hills, Calif.; Dick Jones
Flintridge, Calif.

Program moves to Cape

The last two Bumper shots required the new Joint Long Range Proving Ground being planned in Florida.

In 1946, the Guided Missile Committee of the Joint Chiefs of Staff recommended a joint long range proving ground that all of the military branches could use.

Eventually the remote eastern coast of Florida was chosen for its low population density, the existence of a mothballed air base (the Banana River Naval Air Station), and government-owned property around the Cape Canaveral lighthouse, suitable for secret and hazardous operations.

In 1948, the old naval base was transferred to the newly created Air Force and modifications began to create a suitable test facility.

The Bumper kick-off meeting was held at the Joint Long Range Proving Ground Offices in August 1949.

After funding delays, contracts were let in April for the construction of roads and a launch facility near the lighthouse. These were completed just days before the Bumper hardware arrived at Banana River in June.

The launch pad, Complex 3, was built as a general purpose launch facility with a roughly 100-foot-square concrete pad, set to drain to the east. It was equipped with a row of small water nozzles along the west side to flood the pad with a thin film of water prior to a rocket's ignition. This was to avoid costly repair work seen at White Sands after launches. The pad also included cabling galleries with manhole access covers to allow launch cables to be routed under the protective concrete and out a firing house.

The cabling for Bumper was routed from these impressive and permanent facilities through an open cable tray constructed of wood to a small wood frame firing house called the first blockhouse on the Cape. Protection was provided by a berm of sand between the pad and blockhouse. A periscope with a large mirror and polished piece of stainless steel sheet provided the launch operator with a view of the rocket.

Radio, radar, and optical tracking systems were set up at remote sites around the Cape and on two Navy ships sent to support the launches.

The vehicle was to be launched using the German launch support equipment, which was brought out from White Sands. This included the launch stand, meilerwagon to erect the missile on the stand, and various chemical containers including a liquid oxygen trailer.

Painter's scaffolding on wheels was erected to provide a mobile service tower required to install batteries, change out components, connect umbilicals, and install the WAC nose cone.

Bumper 7 was ready for launch on the morning of July 19, but a series of delays resulted in the V-2 being filled with liquid oxygen for 9 hours longer than planned.

Moisture condensation caused the failure of a main propellant valve to open so that when the ignition switch was pushed there was only a loud pop. The missile was removed and Bumper 8 took its place. Minor delays resulted in the originally scheduled launch time of Bumper 8 on July 24.

First launch from Cape

The V-2 flight was successful although the missile, which was supposed to heel over to a low trajectory of 22 degrees above horizontal, went over to only 10 degrees. The WAC properly separated but failed to ignite. The WAC may have failed due to the enormous aerodynamic pressures experienced in the low flight.

Bumper 7 returned to the pad and was launched on the morning of July 29. The flight was completely successful with the WAC reaching the enormous speed of Mach 9 and impacting 150 miles downrange.

The Bumper program ended having met all of its goals. Complex 3 went on to support launches of the Lark and Bomarc missiles. The German engineers moved to Huntsville, Ala., in 1950 to the Redstone Arsenal and returned in 1953 to launch the Redstone missile.

JPL successfully developed the Corporal and eventually became the premier builder of space probes. The Redstone and JPL engineers collaborated in the building of the Juno 1, which combined a Redstone-derived first stage with JPL-produced upper stages and satellite.

The Juno 1 launched Explorer 1, America's first satellite into orbit on Jan. 31, 1958. The Redstone group and JPL were brought into the new agency called the National Aeronautics and Space Agency and played a major role in NASA's accomplishments.

Stan Starr, deputy program manager for Dynacs Engineering Co. Inc. at KSC, researched and wrote this report.

Early U.S.-Russian partnership remembered

Two key players on the International Space Station team of 16 nations — the United States and Russia — cooperated on the groundbreaking Apollo-Soyuz Test Project (ASTP).

The project led to the first human spaceflight mission managed jointly by two nations.

July marks the 25th anniversary of Apollo-Soyuz.

The mission was designed to test the compatibility of rendezvous and docking systems for American and Soviet spacecraft in order to open the way for future joint human flights.

Both nations had to resolve a number of difficulties in the mission design before they could assure a safe docking of both spacecraft and an on-orbit meeting of crewmembers.

The technical challenges included different measuring systems, the different spacecraft and thus mating adapter designs, and different air pressures and mixtures.

After rendezvous of Apollo and Soyuz in July 1975, the two respective commanders, Thomas Stafford and Cosmosnaut Leonov, hammed it up for a photograph. At top from left: Apollo on orbit, Soyuz orbiting Earth and a closer view of Soyuz on orbit.

The Apollo spacecraft was the same design as those used on lunar exploration missions.

Several modifications were made for the Apollo-Soyuz mission, however, including the addition of propellants for the reaction control system, heaters for temperature control, and extra equipment needed to operate the Docking Module.

The Soyuz had been the Soviet's primary spacecraft since 1967. It consisted of three basic modules: orbital, descent and instrument. No major modifications were needed for the new mission.

The mission began with the Soyuz launch on July 15, 1975, followed by the Apollo launch seven hours later.

The docking in space of the two spacecraft took place at 3:17 p.m. on July 17.

Two days worth of joint operations followed. After separation, the Soyuz remained in space for almost two days before landing in the U.S.S.R. on July 21. The Apollo spacecraft remained in space for another three days before splashing down near Hawaii on July 24.

The mission was a resounding success for both Americans and Soviets. They achieved their goal of obtaining flight experience for rendezvous and docking of human spacecraft.

In addition, they also demonstrated in-flight intervehicular crew transfer, as well as accomplished a series of scientific experiments.

The ASTP mission was not only successful as a space effort, but the mutual confidence and trust it engendered made it a huge step in international cooperation during the Cold War.

Without such successes, it is doubtful that 16 nations would be cooperating to create the International Space Station.

Apollo-Soyuz Test Project Chronology

24 October 1970
American delegation met with Soviet officials in Moscow for the first talks of a cooperative international human mission.

16 January 1971
George Low, NASA Deputy Administrator, and his party arrived in Moscow to turn talks into specific proposals.

24 May 1972
Agreement signed; work on project began.

30 June 1972
Apollo-Soyuz Test Project became official name of mission.

6 July 1972
Soviet officials arrived in Houston for talks.

1 February 1973
Glynn Lunney, NASA's project manager, announced the American crewmembers.

24 May 1973
Soviet crew was announced.

12 June 1975
Flight Readiness Review for Americans at Kennedy Space Center.

15 July 1975
U.S. and Soviet launches of Apollo and Soyuz.

16 July
Soyuz crew broadcasted their first pictures through a color TV camera and Apollo crew conducted various experiments.

17 July
The two spacecraft joined. Astronaut Commander Tom Stafford opened hatch leading into the Soyuz orbital module. Greetings and gifts were exchanged between the two crews.

18 July
Crewmembers of both spacecraft took turns moving back and forth between the two spacecraft.

19 July
Docking exercises performed. Two spacecraft undocked.

21 July
Soviet Soyuz module landed in Kazakhstan. The American crew continued to conduct experiments July 21-23.

24 July
Apollo splashdown.

KSC workers thrilled by Zvezda launch

"Because of this launch, we're now ready to enter a new frontier in this new millenium. I'm proud to be a part of it."

JAMES DAVIS
BOEING SECURITY

"Now we get to step up the pace. We'll be working on many more launches. It's gotten the ball rolling again on the Space Station."

RON WOODS
NASA ENGINEER

"It was exciting to watch the launch on television. I work on the U.S. Lab, so it's good to know it will be going up soon."

DAN HOOVER
BOEING TECHNICIAN

"This is what we've all been waiting for. Now we can really get down to work. We're going to be challenged to do our best."

DAN JOHNSON
UNITED SPACE ALLIANCE ENGINEER

"I've been working on the U.S Lab for five years. I transferred down here from Marshall to work on it. So I'm thrilled."

NANCY GRAHAM
BOEING TECHNICIAN

Melanie Gurnavage, lead photographer for Boeing Imagery, said she was "ecstatic" about the Russian launch. Gurnavage documents various stages of International Space Station processing, so the recent launch will directly affect her job. She is pictured at work in the Space Station Processing Facility.

LAUNCH ...

(Continued from Page 1)

The launch of Zvezda begins a rapid series of flights to the Station, and a rapid expansion of the orbital outpost.

KSC Director Roy Bridges represented KSC at the launch in Russia.

"Having the opportunity to witness the Zvezda Launch as a member of the official NASA delegation was a career highlight for me," Bridges said. "Seeing the Proton lift off after an uneventful countdown and cheering it all the way to a safe orbit certainly 'made my day'! Now we all eagerly await a successful docking before we have a real celebration. A docking will clear the way for a relatively rapid completion of the Phase II Station and the beginning of continual crew operations."

A Russian Progress cargo spacecraft is next targeted for a launch to the Station on Aug. 6 with a docking on Aug. 8; the Shuttle Atlantis is targeted for launch on Sept. 8 to open the doors to the new living quarters for the first time; and the Shuttle Discovery is targeted for a launch Oct. 5 on a mission that will begin the heart of Station construction, carrying aloft an exterior framework and third mating adapter.

The first three-person resident crew is targeted to begin a four-month stay aboard the Station a month later, bringing the new outpost to life.

Those flights, among the most complex and difficult missions NASA has ever attempted, and the ones that will quickly follow in 2001 — U.S. solar arrays, the U.S. Laboratory, a new generation of space robotics built by Canada, logistical modules built by Italy, and a Station airlock from the U.S. — will turn the Station into the largest, most powerful and most sophisticated spacecraft ever built by the end of next year.

New PASS badging system introduced

Employees and well-wishers filled the VCR room at Headquarters at the official ribbon-cutting July 18 for the new Personnel Access Security System (PASS).

Mark Geschke, division manager, Information Management, SGS, welcomed guests and introduced KSC's Deputy Director Jim Jennings, who said it was "a momentous occasion replacing a system in operation for 16 years."

The new streamlined badging process not only produces permanent and temporary badges and authorizations on PVC card stock, but also places all badges under J-BOSC in one system.

"This is a good system we can be proud of," stated Jennings.

Bill Hickman, program director, SGS, commented on the accomplishments of the team that put the new system together. "We're here to celebrate not an ending of a project but the beginning of a new one-step system consolidating Kennedy Space Center and Cape Canaveral."

Jennings, Geschke, Hickman and Detachment 1 45th Space Group Commander Lt. Col. Randall Horn joined to cut the ribbon, representing the coordination of KSC and Cape Canaveral Air Force Station.

Geschke and Hickman awarded plaques to project team members for their efforts in "staying focused" and whose teamwork "made it possible."

A reception followed.

The new PASS badges are currently being given for new hires and temporary authorizations.

All badges are expected to be replaced, on a company-wide basis, within the next 12 months.

Team effort

A facility housing equipment critical to testing and servicing operations for International Space Station flight hardware officially opened July 18. Ammonia servicing equipment that is used to perform pre-flight tests and servicing of ISS flight hardware is now housed at the 1,500-square-foot, one-story Vapor Containment Facility that is located in the KSC industrial area adjacent to the Space Station Processing Facility. Pure anhydrous ammonia plays an integral role in preparing the Space Station hardware for flight and proper on-orbit operations. Ammonia is used in the Station's thermal control system. The facility contract team, represented by those pictured, included NASA, The Boeing Co., Speegle Construction, Harper Mechanical, Mil Con Construction, Chemco, United Space Alliance, Precision Fabrication and Cleaning, and Jones, Edmonds and Associates.

KSC web site has new look

The new and improved KSC Web site is up and running.

The site was given a face-lift and placed on-line on July 14 by the JBOSC Web Development Team.

The refurbished portal, labeled "Launching a Vision," will facilitate access to KSC information via any computer with Internet access.

Employees and visitors will find the new site easy to use and full of links to live webcams and video feeds, as well as news, weather and special interest topics.

All of the links from the old page are available on the new site, but the new site makes it easier to view launch update information.

If you have trouble finding any information, check out the new site's link called "Searching for Information," which is just below the top banner. This link allows access to six different methods for finding the information. The methods range from a typical search engine to "Contact Us," where questions are personally answered by Center personnel.

The new site can be found at www.ksc.nasa.gov.

John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by the Public Affairs Office in the interest of KSC civil service and contractor employees.

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