Rapid growth impels SOC

Market explosion warrants larger, permanent base

By KELLEY J. CYR -

The potential for "explosive growth" in the communication satellite market may provide the driving force for a new Space Operating Center concept according to Gordon Woodcock of the Boeing Aerospace Company.

Mr. Woodcock was at the center during a description Boeing's proposal for a 12-month study to analyze the SOC concept.

"The strategy for space technology depends on the market to be supported."

Comparing the potential for space-based communications to the historical growth of motorcar registrations and domestic airline traffic, Mr. Woodcock concluded that communications payloads may grow at a rate of 50 to 80% for the next two or three decades.

In contrast to conventional forecasts that assume a 10% growth rate, the explosive growth forecast reaches traffic levels that differ by orders of magnitude from the usual projections.

Mr. Woodcock pointed out that, "the appropriate strategy for space operations technology development depends on the market to be supported." The Boeing study will look at what space operating capabilities are needed if explosive growth occurs and what growth will affect the SOC facility requirements and definitions, he said. "You've got to understand how the programmatic drive the design," Mr. Woodcock said.

The SOC concept to be studied by Boeing is a modular structure to be launched and assembled by elements created in other stars are in other galaxies. (STS-12). which the particles approach.

A metal square with seven collectors spread among four trays will soon orbit the Earth for a one-year period, capturing particles from the interstellar wind. Science for the experiment, one of many that will be onboard the Long Duration Exposure Facility, is the work of Astronaut Don Lind, working with collaborator Johannes Geiss of the University of Bern in Switzerland.

Ernie Weeks as Project Manager, oversaw production of the device in the Experiment Systems Division.

"The experiment will tell us if elements created in other stars are created in the same way as in our sun," Dr. Lind said. The experiment will give "unique and valuable information" as to the dynamics of interstellar particles when they come in contact with solar winds from our sun, and it will add much data to theories regarding the creation of elements in other galaxies.

"We have only studied the solar wind from our own sun," Dr. Lind said. "This will be the first time we have been able to trap particles we know come from outside the solar system and run them through a mass spectrometer.

Most of the hardware for the Interstellar Gas Experiment was constructed at JSC by ESPO personnel. The box has been on the shake table and through the vacuum chambers, and it is now in storage, ready to be shipped to the Cape for flight and orbit on the first LDEF."

"The LDEF will leave scientific experiments to be exposed to the space environment for long periods of time. Astronauts will deploy the LDEF, place it in orbit for around 10 days to "outgas," move the LDEF into experiment position, then return to Earth. Another Space Shuttle crew will come up a year later to retrieve the payload.

On the Interstellar Gas LDEF module, copper beryllium foil and collectors act as film, and the entire housing acts as a camera. The experiment will measure the change in velocity of the interstellar wind during different Earth seasons and the directions from which the particles approach.

Please turn to Page 2

Flight test extensions slip operational status

NASA has extended the date for completion of the first four Space Shuttle orbital flight tests to April 1982. The extension of the flight test program has made it necessary to reschedule the first operational flight of the Columbia, STS-6, from March 1982 to September 1982.

The first operational flight will launch the Tracking and Data Relay Satellite System mission currently being revised.

Changes in the operations manifest have been coordinated with the Department of Defense, a major user of the Space Shuttle.

During the transition to full Space Shuttle operations, NASA will employ the Delta 3910 and the upgraded Delta 3920 launch vehicles. In addition to NASA, other organizations expected to use these launch vehicles include Telesat of Canada, Indonesia, and Hughes Aircraft.

To provide timely launches and to accommodate 3900-series Deltas for these and other Delta users, modifications made to the Space Transportation System and its mechanical integrity remain the prime technical concern of the Shuttle development program.

Engine retest schedule

Retesting of the Space Shuttle Columbia's main engines, announced early this month, will consist of a single, 520-second, static firing for each engine.

The test stands at the National Space Technology Laboratories, Bay St. Louis, Mississippi, will be used for the tests. Engine 2007 has been mounted in test stand A-2 and at Roundup press time was scheduled for static firing in late May.

Engine 2006, to be mounted on stand A-1, will be tested in mid-June and Engine 2005 is to be tested on stand A-2 in late June.

NASA has scheduled reacceptance tests for the main engines because time for first launch of the engines since the original acceptance tests were conducted in April and July 1979.
Winners

Women's Week attendees learn to set goals, try harder, compete

"Losers are looking for pleasing experiences; winners are looking for pleasing results," was the maxim Venus Van Caspel used to sum up her keynote speech at the Federal Women's Program luncheon two weeks ago. She got a standing ovation.

"Winning" was the theme of many sessions, and with topics such as "How to do a job interview," and "Turning On Your Own Key," most of the women and men who attended the program walked away as potential winners.

Competition and its end--winning, was the topic of Dale Hill's talk Thursday, May 15. Dr. Hill is a psychotherapist in Houston.

"Is the competitive person psychologically normal?" she posed the question to the crowd.

Be dominant, aggressive

"Competition is unfair if it's not everyone's equal chance at the right time," Dr. Hill said. "Exaggerated competition--competing all the time, everywhere, all the time--is neurotic, author, rancher, stockbroker, commentator, and luncheon crowd, mostly women, who attended the program walked who can play or a boss who agrees somewhat to include all types of severe weather conditions. Included in these plans are provisions to close the center to permit readiness and to release all non-essential personnel.

During duty hours, hurricane threat information and other extremely severe weather information will be available to recorded messages. Any decisions to close the center will be relayed through normal supervisory channels as well as on the telephone recording system.

During non-duty hours, employees should call 483-3351 rather than the Security Dispatcher for advisory information on the operational status of the center. Recorded messages will be updated as required.

In the event of the center being closed due to severe weather conditions, all non-essential personnel are to leave the center. A ride-out crew will begin facility protection while security personnel will check and secure all buildings.

Employees should unplug electrical appliances and office equipment, secure important documents, and close blinds and doors.

Employees are expected to return to work at the beginning of the next workday unless advised to the contrary through the news media or the recorded messages.

Golfer shots up to par

Executive Country Club has a layout that most JSCGA members appreciate. Those really enjoying it were our winners from the championship flight, Jim Sanders (net 69), Gil Bonsie (71) and Bill Shropshire (72); and the first flight, Larry Hall (69), Reuben Taylor (68), and Tom Chambers (72).

Tomorrow, May 31, the first and second flights play at the Lake Houston Golf Club.

JSC's oldest carpool wax philosophic save gas

"Carpooling is the only way to go," what five JSC scientists/engineers say and they should. "You've been riding together since early 1971," Bob Cohen, Al Feiveson, Steve Jacobs, Mel Kapell, and Bob Patterson all commute to JSC from Southwest Houston (35 miles) but each drives only once a week.

"Our philosophy," says Mr. Feiveson, "is that we can take advantage of all that Houston has to offer, but still work at JSC. If we lived in the NASA area and went into town even twice a week, we'd do more driving than we do now.

"Out of town, no parking, Seafood Palace, and 7.45 from two pickup points in Tuesday: Spilt Pea Soup; Smokey Chicken Noodle (Special); Chicken Noodle (Special); Mixed Vegetables; Beets, Whole Grilled Potatoes.

Wednesday: Clam Chowder; Fresh Catch with W/Chips, Braised Beef with BBQ Plate, Shrimp Salad, Stuffed Bell Pepper (Special), Tamale (O'Con), Rice, Italian Green Beans.

Thursday: Chicken Needle Soup; Beef Stroganoff, Turkey & Dressing; BBQ Smoked Link (Special), Lima Beans, Buttermilk Soup, Spanish Rice, Tuesday: Seafood Gumbo; Broiled Tuna with Onion, Seafood Platter; Fried Shrimp, Meat Sauce & Spaghetti Sauce (Special), Green Beans, Buttered Broccoli, Whole Grilled Potatoes.

Cookin' in the cafeteria

Week of June 2 - 6

Monday: French Onion Soup; Beef Chop Suey; Polish Sausage w/ German Potato Salad; Breaded Veal Cutlet (Special), Okra & Tomatolos; Green Beans, Standard Daily Items: Roast Beef, Baked Ham; Fried Chicken, Fish; Glass Salad, Selection of Salads, Sandwiches and Pies.

Tuesday: Spilt Pea Soup; Smokey Chicken Noodle (Special); Chicken Noodle (Special); Mixed Vegetables; Beets, Whole Grilled Potatoes.

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Phone 483-3351

Hurricane season returns

The hurricane season for the upper Texas coast begins June 1 and extends through November 30. The last major hurricane to affect our area was Carla in 1961 which caused a great deal of local damage. However, last summer's flooding graphically reflected the Bay Area's vulnerability to severe weather.

When JSC becomes operational, advance planning, and emergency procedures were set up to meet future hurricane threats. This has been expanded somewhat to include other types of severe weather conditions. Included in these plans are provisions to close the center to permit readiness and to release all non-essential personnel.

During duty hours, hurricane threat information and other extremely severe weather information will be available to recorded messages at 3351 and on the on-site closed-circuit television system. Any decisions to close the center will be relayed through normal supervisory channels as well as on the telephone recording system.

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Cookin' in the cafeteria

Week of June 9 - 13

Monday: Beef & Barley Soup; Beef Chop Suey; Breaded Veal Cutlet w/Cream Gravy; Grilled Ham Steak; Weiners w/Breaded Veal (Special); Buttered Potatoes, Broccoli, Buttered Rice, Baked Ham; Fried Chicken; Cooked Chicken, Chicken & Dumplings w/Apple sauce, Chinese Pepper Steak (Special), Au Gratin Potatoes, Breaded Broccoli, Buttered Spinach.

Tuesday: Celery Soup; Fried Catfish; Roasted Turkey on a Stick w/Applesauce, Chinese Pepper Steak (Special), Au Gratin Potatoes, Breaded Broccoli, Buttered Spinach.

Wednesday: Clam Chowder; Fresh Catch with W/Chips, Braised Beef with BBQ Plate, Shrimp Salad, Stuffed Bell Pepper (Special), Tamale (O'Con), Rice, Italian Green Beans.

Thursday: Green Split Pea Soup; Corned Beef w/Cabbage & New Potatoes, Turkey & Dressing, Tamales w/Chili, Hamburger Steak w/Onion Gravy (Special), Navy Beans; Buttered Cabbage, Green Peppers. Seafood Gumbo; Deived Crab, Broiled Halibut, Liver & Onions, BBQ Link (Special); Buttered Corn, Green Beans, New Potatoes.

Commander

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Play it all out at the Rec Center

Registration is being taken in the following classes at the Gilruth Recreation Center:

Basketball: Learn the fundamentals of basketball. Classes meet Tuesdays and Thursdays, 6:30-7:30 p.m. for six weeks starting July 21. Cost is $50 for the eight-week course.

Aerobic Dance: Part dance, part exercise, all fun. This class meets on Monday and Wednesday mornings for six weeks beginning July 21. This 9:30 a.m. to 10:30 a.m. class.

Photogenesis: An exciting course that will cover the basics as well as advanced photography techniques. Class begins July 21 and meets every Thursday from 8 p.m. to 10 p.m. Cost: $25 per person.

NARFE Dinner Meeting
Set for June 6
AARP/NASA Area Chapter 132 of the NATIONAL ASSOCIATION OF RETIRED FEDERAL EMPLOYEES will host an appreciation dinner, Friday, June 6, at 6 p.m. for covered-dish dinner. Program speakers will present a group from The Family Service Center in a ski that deals with a multigeneration family. The chapter meets each month at the Clear Lake Park Building, NASA Rd. All are welcome.

Is your badge tattered & torn?
Many JSC employees are wearing badges that are in dire need of replacement. These ads are torn or separating, or are otherwise defaced to the point that it is difficult for an observer to verify the identity of the wearer. If you know of someone who must check their badge and, if it needs to be replaced, take it to the Visitor Reception Center at Building 100 at the Main Entrance to JSC.

Neighborhood News

Many JSC employees are wearing badges that are in dire need of replacement. These ads are torn or separating, or are otherwise defaced to the point that it is difficult for an observer to verify the identity of the wearer. If you know of someone who must check their badge and, if it needs to be replaced, take it to the Visitor Reception Center at Building 100 at the Main Entrance to JSC.

Guts & Glory

Gilruth Center announces a Summer Basketball League to be held starting June 6. More information will be available on Wednesday nights and is limited to the first eight teams to sign up. The league fee is $500 and $140 for NAA teams. League play begins on June 11.

Tennis players needed: In its battle to retain supremacy playing with U of H at the Gilruth Center, is now recruiting tennis players to represent JSC in both the men’s and women’s leagues and the U of H course. If you’re interested, call Carl McMillan at 487-8221.

Softball Tournaments: May 30 is the last day to register your team for the JSC Men’s Softball Tournament. JSC is offering a $500 team entry fee. A Mixed Tournamnet is also available on June 11, 12, and 13. Cost is also $500.

Lockheed Employees Break Blood Donor Records

Employees of Lockheed Engineering and Management Services Company, Inc. contributed to set new blood donor records in a cooperative program with St. Luke’s Episcopal Hospital and JSC. A special group of employees belonging to the “Gallion Club,” meaning they have contributed at least eight pints. More than 110 volunteers have attended membership in this elite group. Each member receives an attractive pin and has his or her name inscribed on a plaque displayed in the foyer of a Company Office building.

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Property & Rentals

Roommate wanted for nice home in Friendswood, 15 minutes from JSC. $250 per month. For more information, call Nell Rosehull 418-1151.

Three bedroom, 2 bath, in 1961, Texas Campgrounds, Galveston, all utilities available, access to swimming pool and beach 467-7042 after 5.

Sale Country Club lot at Laugo Vista Estates on Lake Travis near Austin, class A resort; golf, tennis, marina, etc. Secrecy person. $85,000.

Tenant: Male or female to share 3-2 in Seabrook on 1st, other $600, $250 deposit. 474-2319.

Rent: 3 bedroom, 2 bath, 2 car garage, pool, appliance. $675 deposit. 487-9615.

Lead: Kirkmont, 3-2-2, fenced yard $450 month plus deposit. 487-6289.

Sales 2160 sq ft, 3-2-2 in Saginaw, fenced and landscaped, fireplace, low assumption. Low price. 490-7412.

Sale: Nice 3-2-1 rental property in Clear Lake. $250 month plus deposit. 474-4814.

Carpools

Wanted: 4 to 5 passenger van. Good condition. $500. 487-8221.

Boats & Planes

Boat: 12 ft aluminum aluminum extender outboard. Adams x3213 or 337-3973.

Musical Instruments

For sale: 12-string guitar and case. Top cond. $150. 487-3329 or 480-1076 after 5.

Carpools

Wanted: 2-4 passenger van. Good condition. $600. 487-8221.

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They wear all different kinds of shoes at the Rec Center

‘New approach’ to recreation produces results for everyone

Recently the Rec Center has gone from a weed-infested, near-forgotten corner of the NASA lot to a center of activity with a crammed parking lot nearly any time of day. Many new projects have gotten underway since the staff “changed its philosophy and its approach to recreation programming,” says Carl McCollum, who has run the Rec Center since last September.

There’s more sports, more classes, more variety, and more ideas to come.

“I like to compare the Recreation Center to a sampler box of candy,” Mr. McCollum says. “There’s a wide choice of assorted chocolates, and the Rec Center gives you a chance to sample, devour, or reject any of the activities.

“The Rec Center hopes to offer something to everybody.”

In “Organized Sports” there’s volleyball, basketball, softball — “This year we have 76 softball teams ready to begin playing,” Mr. McCollum says.

And running is becoming an organized sport at the Rec Center. “Last December we decided to offer a race a month for our patrons,” Mr. McCollum says. “That program has steadily increased— for April we had 700 people turn out for the 9th NASA Intercenter Run.”

Leisure Time Classes have recently taken on new priority, as “the primary purpose of the Rec Center is human development,” Mr. McCollum says.

A cursory glance at any Roundup will give a sample of new courses always forming and old courses being offered again. “We’ve had tremendous success in this area,” Mr. McCollum says. Classes run in aerobics, dance and auto mechanics to Scuba, karate, and photography, and “look for a noon-time exercise class for the near future,” Mr. McCollum says.

“The future is very much on his mind with projects such as a天鹅 theater, talent shows, and a series of feature length films in the works. And Mr. McCollum gets credit for expediting the “Anything Goes” competition that started at the Rec Center and culminated at this year’s EAA picnic.

Anything goes at Anything Goes, and the competition will probably become one of NASA employee’s most popular diversions.

“A new area we are just now exploring is Community Programs through the Rec Center,” Mr. McCollum says. “Area schools committed in our April run, and we are starting an annual sports competition against UHCL with seven events.

“Weave a perpetual trophy to be kept on display by the winner of each event.” Mr. McCollum describes his staff as “imaginative and inven-

Our objectives are six-fold;” he says. “We want to incorporate new trends and interest, provide a change of pace from the day’s stimulation, stimulate maximum participation, contribute to the personal health of participants, improve the social well-being of individuals in the community, and then to all these words is the word ‘quality’.”

“Our long and short range goals are to improve the quality of the Rec Center program.”