

CFC kicks off September 25

A personal note

My message is about the CFC. There are a few things I'd like to ask you to think about.

Most of us are familiar with this drive, where once a year, Federal workers are asked to join together to pledge a contribution to support charitable organizations through designated or non-designated funds.

In recent years, a growing negative attitude seems to have pervaded the CFC. People have been put off by the "quotas," by the interdepartmental contests, by supervisory pressures--real or perceived--and by the designated funds distribution system. The harm that has been done to the Campaign is unfortunate and should never have happened. This year's campaign at Goddard hopes to bring into focus once again the real meaning of the CFC.

The film "A Message of Love" (being shown around Goddard) will remind you once again of the profound purpose behind this campaign. It is important that we don't make the tragic mistake of misplacing our protests about the 4.8 percent increase or about merit pay or about whatever else is bothering us on the job and registering those protests against the CFC. Those protests will not be injurious to "the establishment"; they will hurt young children, old people, and millions of hungry, hurting and crippled people in between. And, don't forget the thousands of people

who are provided wholesome sports, educational crafts, music, and other activities through such groups as the Boys' and Girls' Clubs and scouting organizations that are accessible to all.

There are many people at Goddard who are faithful givers to the CFC. And there are many people who simply cannot give under the weight of serious financial burdens and com-

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Delta to launch two science satellites Oct. 3

SOLAR MESOSPHERE EXPLORER

A two stage Delta 2310 launch vehicle will carry NASA's Solar Mesosphere Explorer spacecraft to a circular polar orbit 540 km. (336 miles) high from Vandenberg AFB, California, no earlier than October 3.

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UOSAT - RADIO AMATEURS'

FIRST SCIENTIFIC SATELLITE

Radio amateurs and the educational community are looking forward to October 3 for the launch of a first of a kind scientific satellite that will make study of the ionosphere accessible to any institution or person with the capabilities of a ham radio set.

The satellite, called UOSAT for its builder, the University of Surrey, England, will ride into space piggyback as a Delta 2310 carries NASA's Solar Mesospheric Explorer mission aloft from Vandenberg AFB, California. (See "Solar Mesospheric Explorer" article.)

With a scientific mission, a weight of 59.5 kg. (131.8 lbs.) and a projected polar orbit at 530 km. (330 mi.) altitude, UOSAT is a measure of how amateur and student radio science has progressed since

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GODDARD'S GOAL: \$205,000
for the national capital area

Facts about CFC

Why is there a CFC?

In 1964 the CFC was established by Executive Order to replace the multitude of charitable fundraising efforts in the federal workplace.

What's the reason for the Suggested Giving Guide?

The giving guide on the pledge card shows clearly that giving relatively small amounts each pay day adds up to support a very meaningful level of service and care for people who need help.

Why is pledging by payroll deduction encouraged so much?

For most Federal employees, it is only possible to give more by spreading the giving over a full year in relatively small amounts.

Whom does the CFC support?

There are five groups of agencies within the CFC: the National Health Agencies; the International Service Agencies; The United Way of the National Capital Area; the National Service Agencies; and the Local Non-Affiliated Agencies.

How is the money distributed?

You can decide whether to designate your contribution to those agencies of your choice or open it to all.

How do agencies join the CFC?

Every participating voluntary agency must prove it meets the CFC's eligibility requirements...to show that it is providing services with both effectiveness and efficiency.

What is the CFC position on coercion?

The campaign is based on building a constituency whose sole motivation for giving is voluntary, informed and positive.

How do I get answers to other questions?

Call CFC Headquarters any day between 7:30 a.m. to 5:30 p.m. at (202) 488-2087.

Goddard launches campaign

This year, Goddard's Combined Federal Campaign kicked off on September 25. The campaign is being managed this year by an employee committee consisting of the following volunteers:

Code 100	Kathy Bayer	ext. 5455
Code 150	MaryAnne Hartman	ext. 7947
Code 200	Mark Walther	ext. 8436
Code 300	Marietta Sturgell	ext. 6087
Code 400	Mary Adkins	ext. 6306
Code 500	Bob Luddy	ext. 5459
Code 600	Sharon Smith	ext. 8202
Code 700	Clay Magee	ext. 6566
Code 800	Kathy Felix	ext. 6458
Code 900	Naomi Hirose	ext. 8633

Center Coordinator: JoAnn Clark, ext. 6759

Mr. Beggs, NASA Administrator, is serving as Campaign Chairperson for the Agency, with Mr. Peter Hatt of Headquarters and Mr. A. Thomas Young serving as Vice Chairpersons.

The Committee has established what it considers to be a very reasonable goal for this year's National Capital Area campaign: \$205,000. This is only a few thousand more than our actuals were for last year. It is anticipated that additional contributions amounting to some \$15,000 will be pledged to the Central Maryland Campaign.

We hope that Goddard people will be proud to stand together and join in this important annual event. Please support the campaign generously and easily through payroll deduction. Your dollars will help! Let's try to finalize our campaign within 4 weeks and go over the mark!

Why CFC ? - see the movie

The movie "A Message of Love" will be circulating around the offices on Center. In 10 minutes it expresses what perhaps some of us have forgotten along the way: the real meaning of the Combined Federal Campaign. The Committee urges Center employees not to miss the opportunity to view this film. If you are interested in a special viewing, call your Directorate Coordinator or call JoAnn Clark on ext. 6759. It is a very worthwhile film.

Please give your help generously!



**COMBINED
FEDERAL
CAMPAIGN**
OF THE NATIONAL CAPITAL AREA

All around Goddard



“People are giving to help those in need”

**PLEASE JOIN THEM IN SUPPORTING
THE COMBINED FEDERAL CAMPAIGN**

**YOUR DOLLARS WILL HELP
CONTRIBUTE THE EASIEST WAY: THROUGH PAYROLL DEDUCTION.**



A personal note

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mitments. But let's consider this: Practically all of us spend a dollar or more each week on potato chips, candy bars, gum, coke, beer or lunch out. Give that dollar or two each week through payroll deduction to the CFC, you'll never miss it. Just think about all the unnecessary things you spend idle dollars on. One person doing it doesn't mean much; but 3,000 people all around Goddard doing it means a lot--a lot of continuous support to help people in need.

We should also think carefully about what we accomplish when we denounce the entire campaign because we don't approve of one receiving group or the other. Personal freedom is a cherished institution in this country, and we should remember that there is usually someone else around the corner who will want to support the organization that you don't. If we each ask ourselves the question: "Do I care about people?" and get the answer "yes," then there will be at least one out of the 237 receiving agencies that we can support.

The bottom line is that the Combined Federal Campaign is exactly that: a campaign that gives Federal workers the chance to join together in a common cause--despite problems around us--to better our communities and to do something worthwhile and good for people who are less fortunate.

I thank each of you who considers my message.

JoAnn Clark

JoAnn Clark
Code 270
Campaign Coordinator

Total area goal: \$13,600,000 from agencies

Secretary of Commerce Malcolm Baldrige, Chairman of the 1982 Combined Federal Campaign of the National Capital Area, has announced a goal of \$13,600,000 for this fall's campaign.

The goal is a 9.5 percent increase over last year's achievement of \$12,420,000. Secretary Baldrige, who is an experienced fundraiser, has called on all Federal employees to accept this compelling challenge and exceed the goal.

The CFC of the National Capital Area, the largest employee group campaign in the world, will be asking for help in the weeks ahead from almost 400,000 Federal employees. They will be asked to help insure the maintenance of desperately needed health and welfare services here and around the world.

The CFC of the National Capital Area will be supporting 20 national health agencies, 15 international service agencies, 13 national service agencies, 186 United Way/United Black Fund agencies, and three local non-affiliated agencies.

Solar Mesospheric Explorer

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The Solar Mesosphere Explorer (SME), to be launched in tandem with Amsat's UOSAT, is an atmospheric-research satellite designed to study reactions between sunlight, ozone, and other chemicals in the atmosphere, and how concentrations of ozone are transported in the atmosphere in the region from 30 km. (9 miles) to 90 km. (55 miles) altitude. At least one year of orbital operation is planned.

The five scientific instruments aboard the satellite will simultaneously monitor ozone and minor atmospheric-constituent quantities, water-vapor abundance and temperature, and the amount of incoming solar radiation to determine the role each plays in ozone production and distribution within the mesosphere.

The SME project is managed at JPL, Pasadena, California, for NASA. The University of Colorado Laboratory for Atmospheric and Space Physics is responsible for the science instruments, mission operations, the Project Operations Control Center and science data evaluation and dissemination, under contract to J.P.L. Communications between the Control Center and the satellite will be handled via Goddard.

UOSAT

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the early days of bouncing crackly greetings off the ionosphere and around the world.

The satellite has been almost entirely built by students at the English university and is receiving launch support from a team of American radio amateurs who have already compiled almost 20 years' experience in building and operating amateur radio communications satellites. The American team, the non-profit Amsat Corporation, is well known to people at Goddard, where it maintains its technical facility next to the Visitor's Center. Following the NASA donated liftoff, the satellite will be entirely operated by educators and radio amateurs through Command Control at the University of Surrey throughout its scheduled two year life.

What will the educators and amateurs do with UOSAT? According to Jan King, Amsat V.P. for Engineering and head of the team manning Amsat's communications satellite building facility, UOSAT is flexible enough to satisfy almost anyone with a curiosity about radio science. "Not all amateur radio enthusiasts just want to hear the sounds of each others voices over the miles," he says, "many are just plain fascinated by the electromagnetics of space."

UOSAT carries at least nine instruments that alone or in combination can keep students of space engaged in experiments for years. For one, the satellite carries two Geiger-Muller tubes which offer the possibility of joint investigations with Goddard's higher orbiting Dynamics Explorer satellites. At certain alignments, all three satellites can simultaneously observe the little known behavior of energetic particles that travel down the Earth's field lines to the poles. The phenomenon will be of further interest to some hams as a clue to predicting the occurrence of the aurora borealis and australis. The brilliant polar lights have intrigued radio amateurs for years with the prospect of using such a display as a backboard off which to bounce transmissions.

Another instrument aboard is a magnetometer contributed by Goddard's Dr. Mario Acuna, also a radio amateur. The instrument will provide a global survey of the shape and dynamics of the ionosphere and in this way offer another chance for studies complementing Dynamics Explorer investigations. By describing distortions in

the shape of the ionosphere due to solar flares, this instrument's data will also offer another chance for predicting polar lights.

For the visually minded, the UOSAT carries a television camera capable of viewing the Earth to 2 km. (1.2 mi.) resolution in images of 500 x 500 kms. (310.6 x 310.6 mi.). These pictures can be recovered by a digital slow scan technique by radio amateurs hooking up with a television set. A computergraphics system on board also permits conversion of some instrument data into charts and graphs, and these too can be recovered in video.

Those who still prefer the sound of the human voice also have a novelty aboard the satellite: a "digitalker" which will reproduce many instrument readings in a human voice. Perhaps a harbinger of talking cars and microwave ovens, the "digitalker" gives this scientific satellite a human dimension.

And there is more, For radio amateurs interested in taking their sets to the "state of the hobby", UOSAT provides transmissions in microwave: specifically, telemetry in the S-band, and a simple carrier signal in the X-band. At present, says Jan King, a radio amateur who has reached the higher frequencies of microwave has little to do but bounce his signals from home to the moon and back in a lonely form of conversation. "The satellite transmissions in these frequencies," he says, "should spur more people down the road to microwave, which is undoubtedly the way of the future."

UOSAT also is a test bed for advances in general-purpose computer technology for satellites. The spacecraft could be the first to carry a computer using a high level language permitting users to access the satellite directly through English and German command sentences rather than an intervening machine code. The satellite is also carrying an error counter to check how accurately a general-purpose computer memory functions in the face of encounters with highly energetic space particles altering storage content.

With its diverse possibilities for experiments, and a supporting network of radio amateurs and universities worldwide, the UOSAT program could become one of the largest "guest investigator" programs in space science to date, King predicts. And perhaps one of the least expensive. Total cost for the spacecraft is some \$315,000.

Can she shoot that thing?!

"Can you shoot that thing?" is a question asked by many who see soft walking, smooth talking Margo Sanders when she patrols the Center toting her .38 caliber pistol. Sanders is one of the few female security guards at Goddard but, moreover, she is one of the sharpshooters of the Goddard security force.

Sanders, who had virtually no previous experience with handguns before joining Goddard's security force, has a shooting score of 300. She never misses. Note that a person's score is tallied by multiplying the number of shots (rounds) hitting the target by 10, with a total of 30 shots allowed. The target is over 25 yards away.

Sharp-shooting Sanders claims that initially her aim was a bit off, but after coaching from a co-worker, she rarely misses. She says that closing one eye while aiming greatly increases her focus on the target, but that the aiming sights employed by most handguns were the key to accuracy.

Sanders said that she only had to use a gun on someone one time in her life, but she doesn't regret it. "My brother-in-law



You bet she can!

was chasing me around the house one day trying to shoot me. Eventually, after eluding him for some time, I managed to wrestle the gun from him. I didn't think I had the heart to shoot him at point blank range, but I did...one squirt with his own water pistol."



Station directors of the Spaceflight Tracking and Data Network (STDN) met from August 10-14 to be briefed on the status of the network tracking stations. The directors discussed the performance of STDN during STS-1 and reviewed the flight plans for STS-2. In addition, budg-

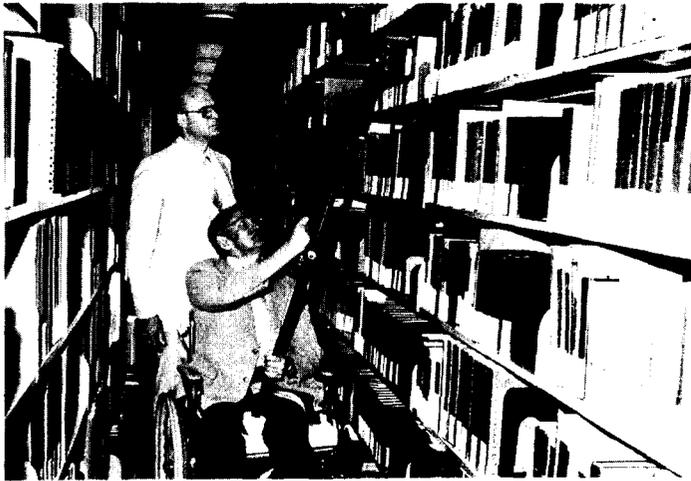
etary plans and station phase-down plans for STDN in preparation for TDRSS were reviewed. Pictured l-r are: Nina Desmond, administrative secretary, (code 850); George Karras, station director (STADIR), Guam; Eugene R. Zink, STADIR, Ascension; Steven W. Stumpf, STADIR, Bermuda; Dale Call, assistant chief, Network Operations Division (NOD); Eduardo Diaz, STADIR, Santiago; John F. South, Goddard representative, Santiago; James C. Jackson, STADIR, Quito; George T. Jenkins, Jr., STADIR, Merritt Island; Virgil True, STADIR, White Sands; Daniel Spintman, chief, NOD; Robert Nuttall, associate chief, NOD; Edward J. Eisele, STADIR, Alaska; Fidel R. Rul Jr., STADIR, Hawaii; Luis R. Gopegui, STADIR, Madrid; Chester H. Shaddeau, Jr., STADIR, Greenbelt; Ian Grant, prospective STADIR, Orroral; Lynn F. Woddard, STADIR, Buckhorn Lake; Morton Berndt, NOD.

SHARP hosts second annual VIP night



The second annual "VIP" night for the NASA SHARP Program was held August 5 at the Goddard Rec Center. Center Deputy Director Dr. John H. McElroy (middle row left) welcomed the group. Keynote speaker was Ms. Bonnie F. Johns (top left), P.G. Board of Education. Other speakers included Dr. Allan I. Chotiner (middle row center) Deputy Superintendent, P.G. County Schools, and Dr. Guines, (top right) Associate Superintendent for Instruction, DC Public Schools.

Goddard engineer develops Book Retriever for disabled persons



In this sequence of pictures, Gabriel Toth, code 812.3, demonstrates use of the Book Retriever, invented by Tony Walch, Head, Machining Branch.

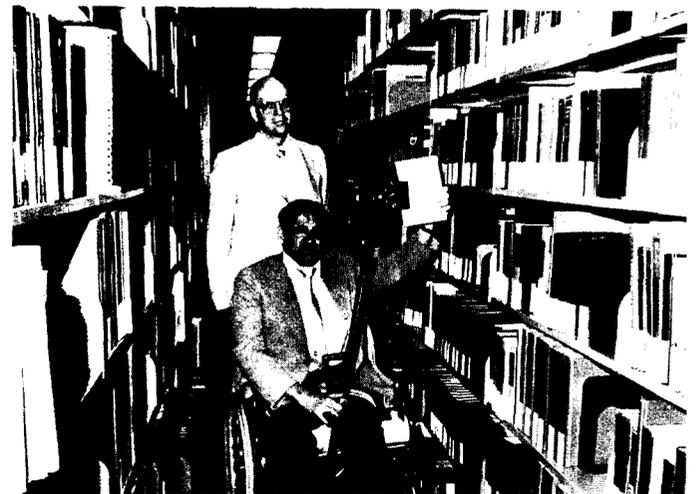
In order to further accommodate disabled persons in wheelchairs, a Goddard engineer has developed a new device which will aid them in retrieving books from high shelves.

Tony Walch, Head, Machining Branch, (code 751) has invented a Book Retriever, that works much like a fishing rod and employs clamps at the end of an extendable pole to reach books in high places.

The Book Retriever took about a month to fabricate and costs approximately \$1,200 according to Walch. A successful demonstration was given recently in the Goddard library by Gabriel Toth, an Aerospace Technologist in code 812.3. Toth was very pleased with the results.

"The Book Retriever will enable me to independently utilize our library," said Toth. "I believe that other disabled employees can also use the device."

The Book Retriever will be available upon request at the reception desk of the



library and will enable disabled persons to perform tasks that they ordinarily would be unable to do. This asset could possibly increase the quantity, quality, and efficiency of their work.

The invention came as a result of a meeting between Kent Potter, chairman of the Employee Advisory Committee for the Handicapped, and Center Deputy Director Dr. John H. McElroy.

Dr. McElroy said that this was not a humanitarian act but simply "an act to make all of our employees as productive as we can." He added that more inventions are encouraged to help utilize the brains of employees to the best of their ability.

The demonstration was videotaped and will be shown during Handicapped Week sometime in October.

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