MACINTYRE IS NEW COMPUTING FACILITY MANAGER

On 1 April 1980, Walter Macintyre will actively assume full-time duties as the new manager of the Computing Facility. He is currently the director of the University Computing Services at the State University of New York (SUNY) at Buffalo, and has had a long and distinguished career in scientific computing.

Born in Wisconsin, he was educated primarily in the British Isles, where he received undergraduate and Ph.D. degrees in chemistry at the University of Glasgow. He served for 16 years on the faculty of the Department of Chemistry at the University of Colorado, where he created the Computing Center and was its first director. From 1973-76 he was head of the Computing Laboratory at the National Institute for Medical Research in London.

His research work has been largely in X-ray crystallography and quantum chemistry, with an emphasis on the influence of computers on these subjects. He is a member of the British Computer Society, the Association for Computing Machinery, the American Crystallographic Association, and the American Chemical Society, and a Fellow of the Chemical Society (London).

There will be a transitional period this spring beginning 19 February, when Walter will start phasing out his responsibilities at SUNY and will be managing the Computing Facility on a part-time basis. ● VH

PLEASE DON'T ABUSE THE ONE-HOUR PARKING!

Behind the Mesa Laboratory near the loading dock and maintenance area is a one-hour parking area. The 14 spaces there are reserved for visitors, vendors, and off-Mesa NCAR staff members on NCAR business. A number of other people also need the close-in parking. These include temporarily disabled and handicapped staff members, pregnant staff members who wish to park there on icy days, and service technicians for whom extra time is extra expense for NCAR.

"A number of staff members habitually use this parking area, despite notes from the security guards," says Richard Gray (Physical Plant Services manager). "Some of the same cars are there every day from 8:00 a.m. to 5:00 p.m. This has become a chronic problem--and on occasion even the specially marked use of this parking area jeopardizes the people in all of the above categories who really need the limited spaces here for health or business reasons. We strongly urge staff members to refrain from parking here, or if they are doing so because of a health problem, to please tell us."

Staff members may contact Lois Smythe or Dorothy Kokesh (ext. 341) to receive a close-in parking permit for temporary health disabilities, such as sprained ankles, chronic heart problems, and post-operative conditions. ● RG

PRICES GOING UP:

CAFETERIA INCREASES DUE AT MESA LAB

Beginning Monday, 11 February 1980, the Mesa Lab Cafeteria will raise its prices to cover increasing costs in food, labor, supplies, and services. There will also be some changes in the menu: no substitutions will be allowed for the specials, and all other food will be served a la carte.

These changes are necessary to keep the cafeteria operating at its current level of service, assuming that its sales volume remains the same. The cafeteria provides a pleasant and convenient eating-place for NCAR staff and visitors, and even with the current price increase its rates will continue to be lower than local market conditions because NCAR subsidizes its operating costs by 15%.

Rose Bridgewater, Phyllis Davish, and the entire cafeteria staff are continually working to improve service. They welcome any suggestions or recommendations from staff members. ● VH

NCARPOOL

Recently Francis Bretherton approved the purchase of two vans from corporate funds to support a pilot van pool program. The program is based on the NCAR Van Pool Committee's 11-month effort to create a convenient, energy-saving, and relatively inexpensive transportation system for NCAR employees.

Tentative plans call for a van pool to originate in Longmont, picking up passengers in Lafayette and Louisville and making stops at 30th Street and the Mesa Lab. Another van pool would be available to Boulder staff members willing to coordinate such an effort.

If you are interested in coordinating, driving, or riding in a van pool, please call Rose Bridgewater (ext. 509) or Lee Fortier (ext. 562). Ridership will be on a first-come, first-served basis, and the initial cost per person will be $50 per month. NCAR employees will have first preference in ridership; however, government employees from the National Oceanic and Atmospheric Administration and the National Bureau of Standards may also be included in order to fill up the vans.

The Hertz Rent-A-Car system has estimated an actual cost of 38¢ per mile to drive a car. Even if an NCAR employee lives in Boulder and drives only 4 mi to work, based on the Hertz estimate that would be approximately $3 per day round trip, or at least $60 per month for individual transportation. ●

ANNOUNCEMENTS

CORRECTION

The correct extension for Margareta Domecki is 581. Last week's *Staff Notes* listed her alternate extension, which is 666.
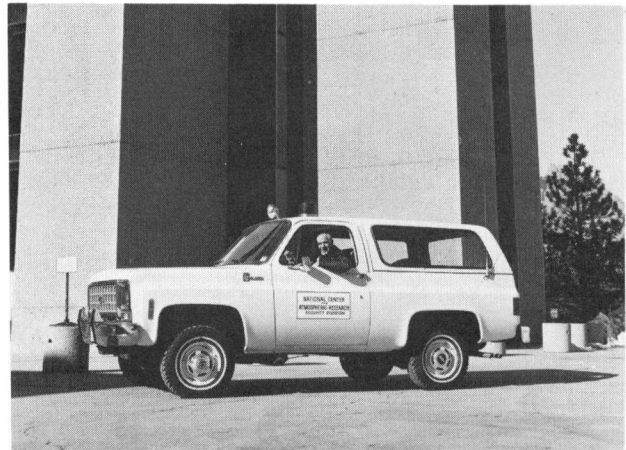

Security guard Carl Randall mans the new Chevy Blazer, which recently replaced one of NCAR's ailing patrol vehicles. The four-wheel-drive vehicle is used for many purposes, including helping employees to get to work in inclement weather. (Photo by Ginger Wadleigh.)

FEBRUARY'S ART EXHIBIT

Photographs by Roland LaForge will be February's exhibit in the second-floor gallery of the Mesa Laboratory. LaForge is a native of Connecticut, but now lives in Boulder. After graduating from Colorado College with a B.A. in geology, he traveled for a year in Mexico and Guatemala, where he feels his photographic eye matured. Some of his photographs on display portray the people and landscape of Latin America.

After working for a year at the National Center for Earthquake Research in Menlo Park, California, he earned a master's degree in seismology at the Cooperative Institute for Research in the Environmental Sciences at the University of Colorado in 1977. He continued working there as a researcher until 1979.

"To me good photographs are basically harmonious interactions of form, texture, and color," says LaForge. "I have always felt a sense of awe and wonder over the beauty of our natural environment, and it is my aim to share this feeling with others." ●

EAC DISCOUNTS

The Employee Activities Committee (EAC) has the following discounts available:

- Discount tickets for the Boulder Dinner Theatre production of *Carousel*. The performance will be on Thursday, 20 March; doors open at 6:15 p.m., and the

show begins at 8:00 p.m. Ticket prices are $11.79 for adults and $10.07 for children under 12.

- Discount tickets for the Colorado Rockies/ Philadelphia Flyers game. The game is on Tuesday, 19 February, at 7:35 p.m. Ticket prices are $7 for adults and $4.25 for children (both are regularly $8.50). The deadline for reservations is 15 February.

The EAC also has coupons for a 20% discount on dinner at the Boulder Broker Inn. The coupons are valid Sundays through Thursdays until 28 February.

For tickets, reservations, or further information on the above discounts contact Bill Kohri (ext. 252).

SKI CLUB NEWS

Since spring skiing was so good last year, the NCAR Ski Club is planning a second trip to Aspen on 4-6 April this season. Rooms have been reserved at the Limelite Lodge (located in Aspen Center). Lodging rates will be $34.24 per person for Friday and Saturday evenings and are based on quadruple occupancy. Diane Eulian (ext. 392) and Robin Dennis (ext. 410) will be taking reservations until Friday, 29 February, on a first-come, first-served basis.

MAGNETIC TAPE CHARGE INCREASE

Charges for tapes sold through the Computing Facility tape library will be increased by $5 in order to recover the costs of magnetic tape preparation. This is effective immediately. The new charges are $20 for tapes taken out across the counter and $25 for tapes mailed by the Computing Facility. Users may still borrow tapes on a six-month return basis without charge.

ZOT! VSN PURGE ANNOUNCED

The next purge of VSNs from the TMS-4 will affect VSNs not read or written since 31 December 1979 and will occur on 4 April 1980.

Each VSN owner is responsible for maintaining all wanted VSNs by accessing them in either a read or write mode within the current three-month period. VSNs on dedicated tapes and PLIB VSNs will not be purged.

WAVE PROPAGATION LABORATORY SEMINAR

On Thursday, 14 February 1980, Belinda Lipa of SRI International (Menlo Park, California) will speak on "Extraction of Long Ocean Wave Directional Spectral Parameters from Narrow-Beam Second-Order HF Sea Echo: Theory and Experiments." The talk is scheduled for 2:00 p.m. in PSRB-3, room 620, and is sponsored by the National Oceanic and Atmospheric Administration's Environmental Research Laboratories. Any interested staff members or visitors are welcome to attend.

PHONE AND ROOM CHANGES

	Ext.	Room
Caroline Bass	295	ML 360
Walter Berg	242	ML 388
Alan Betts	77-533	PSRB-2 222

DEPARTURES

Eleanor Fresquez	24 January
Laura Greenfield	25 January
Joseph Martinez	25 January
Danny Masur	31 January
Audrey Mink	30 January
Kevin Shoemaker	25 January

VISITORS

SHORT-TERM

Wayman Baker, Goddard Space Flight Center, Greenbelt, Maryland. Field of interest: Diagnostic study of energetics of general circulation. 12-20 February. ML room 415, ext. 676.
--Warren Washington, Atmospheric Analysis and Prediction Division

Ivar Isaksen, University of Oslo, Norway. Field of interest: Atmospheric chemistry. 31 January-6 February. ML room 369, ext. 243.
--Paul Crutzen, Atmospheric Quality Division

Richard London, Smithsonian Astrophysics Observatory, Cambridge, Massachusetts. Field of interest: Non-LTE radiative transfer of X-rays in cosmic X-ray sources. 18 February-10 March. Computing carrels, dial "0" for paging service.
--Computing Facility

Josh Knight, Stanford University. Field of interest: Solar weather relationship studies. 30 January-1 February. Computing carrels, dial "0" for paging service.
--Computing Facility

Robert Malone, Los Alamos Scientific Laboratory. Field of interest: Climate modeling. 29 January-13 February. ML room 314B, ext. 347.
--Eric Pitcher, Atmospheric Analysis and Prediction Division

Philip Scherrer, Stanford University. Field of interest: Solar weather relationship studies. 30 January-1 February. Computing carrels, dial "0" for paging service.
--Computing Facility

P. Speth, Institute for Geophysics and Meteorology, West Germany. Field of interest: Meteorology. 13 February. ML room 428B, ext. 459.
--Roland Madden, Atmospheric Analysis and Prediction Division

LONG-TERM

James Koermer, University of Utah. Field of interest:
Stratospheric dynamics. 3 February-15 March.
ML room 420A, ext. 208.
--Akira Kasahara, Atmospheric Analysis and Prediction
  Division

COMPUTING FACILITY OPERATIONAL STATISTICS

DAILY AVERAGES FOR JANUARY 1980
(EXCLUDING DIAGNOSTICS)*

CRAY CPU HOURS:	12.0	TOTAL CRAY JOBS:	393.7	TAPE MOUNTS:	176.2
7600 CPU HOURS:	3.6	TOTAL 7600 JOBS:	1072.5	TLIB REQUESTS:	5928.1
7600 PPU HOURS:	10.6			TBM REQUESTS:	564.0
CRU (x10^3) :	19.6			TBM BITS (x 10^9) :	36.2

7600 UPTIME (in hours):	21.28
7600 DOWNTIME (in hours):	.73 preventive maintenance
	.77 hardware failure
	1.22 other downtime, various causes

CRAY UPTIME (in hours):	21.37
CRAY DOWNTIME (in hours):	1.06 preventive maintenance
	.22 hardware failure
	1.35 other downtime, various causes

*TOTALS EXCLUDE DIAGNOSTICS (IDLE TIME) BEGINNING JANUARY 1980.

LIBRARY NEWS

8 February 1980

SAMPLE JOURNALS FOR REVIEW

The following journals are available in the library for your review and evaluation.
We would appreciate your comments as to whether the library should subscribe to them:

IEEE TRANSACTIONS ON SOFTWARE ENGINEERING. Jul 1978. Bimonthly.
JOURNAL OF APPLIED PROBABILITY. Dec 1978. Quarterly.
COMPUTERS IN INDUSTRY. Jul 1979. Quarterly.
APPLIED SPECTROSCOPY. May/Jun 1979. Bimonthly.
JOURNAL OF CHEMICAL EDUCATION. Jul 1979. Monthly.

Following is a list of items received by the library this past week:

NEW BOOKS

Reference books do not circulate.
GC58 N34 1979. THE CONTINUING QUEST LARGE SCALE OCEAN SCIENCE FOR THE FUTURE. National Research Council.
   Post IDOE Planning Steering Committee.
QA377 P33 1975. IMPROPERLY POSED PROBLEMS IN PARTIAL DIFFERENTIAL EQUATIONS. Payne L. E.
QA252.3 C66 1972. CONFERENCE ON LIE ALGEBRAS: APPLICATIONS AND COMPUTATIONAL METHODS, DREXEL UNIVERSITY
   1972. Kolman B. ed.
QA374 T44 1977. NAVIER-STOKES EQUATIONS: THEORY AND NUMERICAL ANALYSIS. Temam R.
TP9 E685 1978 REFERENCE. ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY 3D ED. Kirk R. E. ed.
QA76.73 F25B73 1978. FORTRAN 77 PROGRAMMING. Brainerd W. S.
Q158.5 C48 1977 REFERENCE. SCIENTIFIC AND TECHNICAL INFORMATION SOURCES. Chen C.
QD75 K64 1978. TREATISE ON ANALYTICAL CHEMISTRY 2ND ED. Kolthoff I.M.
QA162 D67 1978. APPLIED MODERN ALGEBRA. Dornhoff L.
QA274.7 F73 1972. APPROXIMATING COUNTABLE MARKOV CHAINS. Freedman D.
QA402 L84 1979. INTRODUCTION TO DYNAMIC SYSTEMS: THEORY, MODELS, AND APPLICATIONS. Luenberger D. G.
QA372 R815 1974. INTRODUCTION TO ORDINARY DIFFERENTIAL EQUATIONS 2D ED. Ross S. L.
QA273.5 M37 1975. RANDOM SETS AND INTEGRAL GEOMETRY. Matheron G.
QA272 M84 1976. MULTICRITERIA DECISION MAKING AND DIFFERENTIAL GAMES. Leitmann G. ed.

NEW TECHNICAL REPORTS

ASTRONOMY AND ASTROPHYSICS
1-8995. PIONEER SATURN ENCOUNTER. U. S. National Aeronautics and Space Admin. Sep 1979.
1-9012. SPACE SCIENCES LABORATORY UNIVERSITY OF CALIFORNIA ANNUAL REPORT TO THE DEAN OF THE GRADUATE DIVISION
   FOR THE YEAR 1978-1979. California University of at Berkeley Space Sciences Laboratory. 1979.
ENGINEERING AND TECHNOLOGY
1-9009. WIND GENERATOR SITING SURVEY KANEOHE MARINE CORPS AIR STATION OAHU. Daniels P.A. Hawaii University
   of Department of Meteorology. May 1979.
1-9019. MICROPROGRAMMING: PRINCIPLES AND DEVELOPMENTS. Akonteh A.N. Brazil Pontificia Universidade
   Catolica do Rio de Janeiro. Mar 1979.
MATHEMATICS
1-8999. NUMERICAL AND DATA ANALYSIS TECHNIQUES APPLIED TO SCIENTIFIC RESEARCH III. Grossbard N.J., et.al.
   Boston College Trustees of. May 1979.
MISCELLANEOUS
1-9001. MANGROVE ECOSYSTEM HUMAN USES AND MANAGEMENT IMPLICATIONS REPORT OF A UNESCO REGIONAL SEMINAR
   HELD IN DACCA BANGLADESH DECEMBER 1978. United Nations Educational Scientific and Cultural Organization.
   1979
METEOROLOGY
1-8997. MODELS FOR VISIBILITY. Somerville P.N., et.al. Florida University of Central. Jun 1979.
1-8998. SOUNDING ROCKET AND BALLOON SYSTEMS SUPPORT. Bumgarner R.A., et.al. New Mexico State University
   Physical Science Laboratory. Jul 1979.
1-9000. INVESTIGATION OF MAGNETIC FIELD PHENOMENA IN THE IONOSPHERE. Devane J.F., et.al. Boston College
   Weston Observatory of. Jan 1979.
1-9002. RELATIONSHIP BETWEEN SURFACE AND GEOSTROPHIC WINDS AT BADEN SOELLINGEN WEST GERMANY. Purves M.A.
   Canada - Atmospheric Environment Service. May 1979.
1-9003. OZONE MEASUREMENT SYSTEM FOR NASA GLOBAL AIR SAMPLING PROGRAM. Tiefermann M.W. U.S. National
   Aeronautics and Space Admin. 1979.
1-9004. PARAMETER ESTIMATION APPLIED TO NIMBUS 6 WIDE ANGLE LONGWAVE RADIATION MEASUREMENTS. Green R.N., et.al.
   U.S. National Aeronautics and Space Admin. 1978.
1-9005. CONDENSATION NUCLEI (AITKEN PARTICLE) MEASUREMENT SYSTEM USED IN THE NASA GLOBAL ATMOSPHERIC
   SAMPLING PROGRAM. Nyland T.W. U.S. National Aeronautics and Space Admin. 1979.

NEW MICROFICHE

JOB OPENINGS

February 6, 1980

Applications Programmer II - #2390

AQD
Exempt range 61
Anticipated hire-in salary: $18,660 - 23,340/year
DUTIES: Will provide general programming support to the division scientists with major responsibilities in field data analysis and data base management.
REQUIRES:
- --M.S. in computing science, math, engineering or physical science and two years in scientific programming in FORTRAN with progressively increasing responsibility, OR equivalent
- --Demonstrated skill in general data processing techniques, file management, Fourier filtering

ALSO DESIRED, BUT NOT REQUIRED:
- --Experience in numerical modeling and/or assembly language programming of minicomputers

Marsha Hanson, X517

Computer Operator Trainee - #2445

ATD - Computing Facility
Non-exempt range 25
Anticipated hire-in salary: $869 - 1,002/mo
DUTIES: Will receive on-the-job training in the operation and maintenance of all computer and computer subsystems consoles, all peripheral equipment and related devices, and unit record equipment. Trainee will work with close supervision, and after becoming familiar with procedures, will be expected to work with relative independence.
REQUIRES:
- --Substantial interest in and committment to skills in computer systems operations/data processing
- --Ability to learn the practices, principles and techniques of computer systems operation and of data processing
- --Ability to learn basic job control language
- --Ability to understand and follow written and oral instructions of a technical nature
- --Ability to establish and maintain effective working relationships with others
- --Physical strength to lift up to 35 lb. boxes
- --Skill in communications, both face-to-face and by telephone   (continued)

- --Six months experience at the computer aid level, or on data entry or minicomputer system, or equivalent
- --Ability/willingness to work day and evening shifts, and overtime on holidays and weekends

Margareta Domecki, X581

Electronics Engineer II - #2432

CSD - Microphysics
Exempt range 57
Anticipated hire-in salary: $19,992 - 25,020/yr
DUTIES: Will design digital and analog circuits and systems, the majority of which will involve applications of minicomputers to projects. Will interact with scientists and technicians, participate in field programs (about 2 months/year), operate systems and direct a small technical staff.
REQUIRES:
- --B.S. or equivalent in electrical engineering
- --About two years applicable industrial engineering experience, at least 1 year of which must be actual "hands-on" minicomputer hardware and software
- --Good working knowledge of basic electronic components and test equipment
- --Strong logic design background/skills
- --Skill in formulation and delegating appropriate work projects to small technical staff
- --Some actual experience in assembly language programming
- --Basic understanding of small computer operating systems
- --Ability to obtain a GSA drivers license (fewer than 3 moving violations in last three years)
- --Ability/willingness to participate in field programs away from Boulder about two months per year
- --Ability to lift and move equipment weighing about 50 pounds

Marsha Hanson, X517

Electronics Engineer IV - #2369

ATD - National Scientific Balloon Facility
        (located in Palestine, Texas)
Exempt range 59
Anticipated hire-in salary: $29,508 - 37,632/yr
DUTIES: This position will provide technical
electronic leadership for the NSBF. Will perform
hands on design efforts for electronics devices
and systems used in high altitude scientific
ballooning. Will be responsible for managing and
directing electronics research and development.
Will coordinate, schedule and monitor work of
engineers in several concurrent programs.
REQUIRES:
        --Thorough knowledge and skill in applying
           the principles of solid state devices, RF
           systems, and systems integration
        --Strong theoretical and practical knowledge
           of telecommand and data retrieval through
           use of communications satellites
        --Skill in the management of electronics
           oriented projects
        --Skill in the management of multidis-
           ciplinary teams
        --Willingness to travel occasionally
        --Willingness to relocate to Palestine, Texas
ALSO DESIRED, BUT NOT REQUIRED:
        --MSEE
        --Practical experience in electronic systems
           used in high altitude scientific ballooning
Marsha Hanson, X517

Employment Assistant - #2430

ADM - Personnel Office
Non-exempt range 26
Anticipated hire-in salary: $956 - 1,102/mo
DUTIES: To perform a variety of clerical, secre-
tarial and other employment-related duties for the
Employment Unit staff. Conducts intitial screening
interviews with applicants, handles heavy volume
of phone calls, controls telephone and in-person
traffic flow for Employment Unit, determines if
applicants qualify for current/future openings,
processes heavy volume of applications and requests
for staff, following numerous, complex procedures.
REQUIRES:
        --Skill in effective communication, particu-
           larily in sensitive and difficult situations
        --Skill in maintaining effective working re-
           lationships with others
        --Solid secretarial experience (personnel
           experience preferred), providing a know-
           ledge of standard office procedures and
           methods
        --Skill in using good judgment and making
           decisions within specific guidelines
        --Skill in tedious detail work and setting
           priorities
        --Skill in accomplishing a heavy volume of
           work, under time deadlines and with many
           interruptions
        --Ability to use initiative and work on own
        --Substantial interest in personnel work
        --Typing skills at about 60 WPM
Margareta Domecki, X581

Engineer I - II - #2354

ADM
Exempt range 56 or 57
Anticipated hire-in salary:
        56: $16,368 - 20,472/yr
        57: $19,992 - 25,020/yr
DUTIES: Will perform load calculations, design,
sizing, conceptual and working drawings, selection
of equipment, specifications, and inspection/
installation of new and remodelled mechanical and
electrical systems for buildings and other facili-
ties as well as conceptual, unit and detailed
estimates for these systems.
REQUIRES:
        --B.S. in engineering (mechanical or electrical)
           or architecture
        --Substantial skills in performing load cal-
           culations, doing design, sizing, conceptual
           and working drawings, selecting equipment,
           writing/figuring specifications of and
           estimates for mechanical and electrical
           systems for buildings
        --Skill in producing an organized and legible
           finished project
ALSO DESIRED, BUT NOT REQUIRED:
        --Professional Engineer License
        --Familiarity with environment/service require-
           ments for data processing equipment and
           research labs
        --Some exposure to/general knowledge of new
           and retrofit solar active/passive/hybrid
           energy systems
        --Some demonstrated interest in energy
           conservation
Some samples of previous work may be requested of
final candidates.
Marsha Hanson, X517

Mail Room Clerk - #2428

ADM - Office Services Department
Non-exempt range 24
Anticipated hire-in salary: $790 - 911/mo
DUTIES: Will receive, distribute and dispatch all
classes of incoming and outgoing mail between Mesa
Laboratories, NCAR satellites and Post Office faci-
lities; will receive and distribute interoffice
mail, Staff Notes, staff memos, phone books and
other internal communications.
Will assist in special mailing and will assist with
mail room paper work and documentation. Will operate
all mail room equipment, i.e. postage meter, scales,
tying machine and mailing machine. Occasionally,
will provide transportation both in Boulder and to
Denver airport for meeting attendees.
REQUIRES:
        --Familiarity with U.S. Postal service rules,
           regulations and domestic and international
           rates
        --Familiarity with classes of mail (first class,
           bulk permits, library rates, United Parcel
           Service, Express mail, etc.)
        --Skill in learning and remembering procedures
        --Physical stamina to stand or walk for ex-
           tended periods of time, including outdoors
           in adverse weather conditions

--Skill in understanding and following verbal
  and written instructions
--Physical ability to lift up to 70-pound mail
  bags daily
--Possession of a current valid driver's license
  and ability to qualify for a GSA driver's
  license (to qualify, one cannot have more than
  2 moving violations in the last three years)
DESIRED, BUT NOT REQUIRED:
--One year experience in mail handling
Margareta Domecki, X581

Ph.D. Scientist - #2442

HAO - Solar Atmospheric and Magnetic Fields Section
Exempt range 82 or 83
Anticipated hire-in salary:
    82: 1st 3-year term or Staff I:
        $21,588 - 27,516/year
    83: 2nd 3-year term or Staff II:
        $26,064 - 33,240/year
DUTIES: To carry out, in cooperation with other
scientists at HAO, theoretical and interpretive
research in solar physics with primary emphasis
on macroscopic descriptions of the magnetized
plasma in the solar atmosphere. Attention will
be directed particularly towards development of
theories and physical models of hydrodynamic and
hydromagnetic phenomena of the photosphere, chro-
mosphere and corona, including time-dependent
phenomena of solar activity.
REQUIRES:
--An ability to work effectively with other
  solar scientists in collaborative projects
--Ph.D. or equivalent
--At least one year post-Ph.D. experience in
  carrying out independent research at a high
  level of creativity as demonstrated by pub-
  lished papers in the areas of MHD and fluid
  mechanics applied to astrophysical problems
--Willingness to use a variety of techniques,
  both analytical and computer modelling, as
  needed in solving specific problems
ALSO DESIRED, BUT NOT REQUIRED:
--2 or 3 years post-Ph.D. experience
--Demonstrated broad experience in theoretical
  solar physics, particularly in MHD phenomena
  of the solar atmosphere

This position is available on about 1 October 1980.
Marsha Hanson, X517

Support Scientist II - #2440

HAO - Solar Variability Section
Exempt range 81
Anticipated hire-in salary: $17,820 - 22,296/yr

DUTIES: Provide research assistance to staff
scientists at the High Altitude Observatory in the
analysis of solar observations and problems of
solar variability. Typical duties will cover: the
ordering and analysis of two-dimensional solar
velocity maps from magnetic data tapes, including
the design, maintenance and execution of computer
programs for these functions; the sorting and
handling of tabular, historical data on solar
phenomena and the design and execution of optimum
data display formats for these data; the modifica-
tion and adaption of data handling programs from
other observatories; the design and execution of
FORTRAN programs to test the statistical signifi-
cance of observational or historical data.
REQUIRES:
--B.S. or equivalent in the physical sciences
  or related field and one or more years ex-
  perience in above areas
--High proficiency in FORTRAN programming in-
  cluding the handling of large data sets
--Familiarity with modern numerical and
  statistical analysis
ALSO DESIRED, BUT NOT REQUIRED:
--Familiarity with astronomical or related
  instrumentation, preferably operating
  under computer control
--Ability to translate from German, French,
  and/or Latin at a rudimentary level
--Interest in recovering historical data from
  library sources
Marsha Hanson, X517

Systems Programmer II - #2350

ATD - Computing Facility
Exempt range 61
Anticipated hire-in salary: $18,660 - 23,340/yr
DUTIES: Perform software maintenance of NCAR's
Modcomp II, RJE (remote job entry) system. A de-
velopment effort will include improved host job
status display capabilities and the final imple-
mentation of a network driver connecting the re-
mote job entry system to the local network as well
as connecting the proposed RJE replacement system
to the network.
REQUIRES:
--M.S. or equivalent in computer science,
  EE or mathematics
--2 - 4 years of systems programming with
  demonstrated skill in maintenance of
  operating system software and writing/
  modifying peripheral equipment drivers
--Skill in assembly language programming
  and FORTRAN; with minicomputer, RJE
  protocols, terminals and modems, pre-
  ferably the Modcomp II
Marsha Hanson, X517

Systems Programmer II - #2359

ATD - Computing Facility
Exempt range 61
Anticipated hire-in salary: $18,660 - 23,340/yr

DUTIES: Will perform software maintenance on CRAY 1 operating system. Will be involved in identifying sections of the operating system code that do not function according to specifications, providing problem by-pass suggestions to users awaiting fixes, generating new versions of the system following vendor releases, providing and updating modifications relating to NCAR's accounting needs and consulting with users of system behavior.

REQUIRES:
- --M.S. or equivalent in computer science or related field
- --2 - 4 years of systems programming where duties included maintenance of operating system software on medium or large scale system environment and participation in file backup procedures
- --Substantial skill in assembly language programming and FORTRAN

Marsha Hanson, X517

Systems Programmer II - #2434

ATD - Computing Facility
Exempt range 61
Anticipated hire-in salary: $18,660 - 23,340/yr
DUTIES: Will perform software maintenance and development on NCAR's terabit memory (TBM) mass storage system. Development will include new command processors for system control and status displays as well as participation in the connection of this system to NCAR's CRAY 1 computer. User consulting will be an important activity.

REQUIRES:
- --M.S. or equivalent in computer science or related field
- --2 - 4 years system programming and maintenance preferably on DEC minicomputers
- --Demonstrated skill in machine language programming, I/O control and interface software
- --Effective communication skills

ALSO DESIRED, BUT NOT REQUIRED:
- --Some knowledge of RSX 11

Marsha Hanson, X517

Systems Programmer III - #2443

ATD - Research Systems Facility
Exempt range 62
Anticipated hire-in salary: $22,584 - 28,800/yr
DUTIES: Will be system manager for a medium-size minicomputer system, a PDP 11/60, with very large disks. Will write programs for advanced mini-computer-based data acquisition and data display systems. Will work with engineers to develop hardware/software tradeoffs and interfaces in new systems. Will be responsible for the system software for the Research Data Support System, used as a preprocessing center for radar data, display technique development and as a minicomputer software development center.

REQUIRES:
- --M.S. in math, physics or electrical engineering and 1 - 2 years experience programming minicomputer systems OR equivalent

--Skill/experience in system software, assembly language and FORTRAN
--Basic understanding of digital logic hardware
--Ability/willingness to do occasional travel

ALSO DESIRED, BUT NOT REQUIRED:
- --Familiarity with DEC RSX-11 and PDP-11 assembly languages

Marsha Hanson, X517

Technical Typist - #2448

HAO - Administration and Support Services Section
Non-exempt range 26
Anticipated hire-in salary: $956 - 1,102/mo
DUTIES: Will type scientific, technical and administrative manuscripts. Will maintain HAO preprint and reprint files and a current bibliographic file. Will sometimes be required to fill in for other secretaries in emergency situations.

REQUIRES:
- --Superior skill in technical typing including equations, symbols, formulations and tabulations. Straight typing should be accurate and at about 70 - 80 WPM
- --Thorough knowledge and accurate application of English composition, grammar, spelling and punctuation
- --Skill in organization to maintain record and progress of manuscript from initial draft stage through final ordering and distributing of reprints
- --Skill in effective communication with a wide range of people
- --Modest skill in performing general secretarial duties
- --Skill in transcribing from a dictating machine
- --Strong interest in developing skills in area of word processing

ALSO DESIRED, BUT NOT REQUIRED:
- --Skill in use of Mag Card A
- --Technical typing experience in Physical Sciences area
- --Knowledge of format requirements of various scientific journals

Margareta Domecki, X581

Wage and Salary Administrator - #2392

ADM - Office of Compensation and Benefits
Exempt range 72
Anticipated hire-in salary: $16,520 - 21,072/yr
DUTIES: Will be responsible for most salary actions such as establishing beginning rates for new staff and reviewing and taking appropriate action on requests for reclassification, promotion and salary adjustments. Assists in providing direction and monitoring annual employee performance appraisals. Will also assist in conducting wage and salary surveys.

REQUIRES:
- --Demonstrated knowledge of wage and salary administration
- --High level of skill in mathematical problem solving and computations to include a working knowledge of graphs
- --Skill in using a calculator

--Skill in learning, applying and interpreting organizational policy
--Skill in effective written and verbal communication with all levels of staff, including managers, supervisors, and Division Directors
--Skill in using good judgment
--Skill in establishing and maintaining good working relationships
--Skill in accomplishing detail work accurately and remembering procedures
--Skill in handling confidential information

Final applicants will be given a test in basic mathematics necessary for daily functioning in a wage and salary setting.
Marsha Hanson, X517

REGULAR, PART-TIME

Employment Coordinator - #2393

Half-time
ADM - Personnel and Employment Office
Exempt range 75
Anticipated hire-in salary: $10,993.50 - 14,015/yr
half-time, 20 hrs/wk
DUTIES: Responsible for design, development, implementation and administration of employment program which meets the need of NCAR management and complies with equal opportunity, affirmative action and other legal requirements. Supervises employees who recruit, test, interview, reject or refer qualified applicants to hiring supervisors for further consideration. Minimizes NCAR's potential liability in area of fair employment practices.
REQUIRES A MAJORITY OF THE FOLLOWING:
--Comprehensive and broad knowledge of principles and methods of modern personnel administration, including extensive knowledge of recruiting, AA/EEO regulations and employment functions
--Skill in managing others effectively and establishing and maintaining effective relationships with employees, supervisors and the general public
--Skill in evaluation, development, implementation and administration of personnel policies and procedures
--Skill in using good judgment in problem-solving and decision-making
--Skill in effective communication about sensitive issues and through report preparation and presentation
--Ability to establish and maintain a close working relationship and open communication with a partner; this is a shared position.
Valerie Friesen, X508

Secretary - #2431

Half-time
ADM- Physical Plant Services
Non-exempt range 25
Anticipated hire-in salary: $434.50-501/mo (.50)

DUTIES: Will type (and edit, as appropriate) correspondence, architectural and engineering drawing notes, contract actions; will maintain all files, review and maintain records for accounting reports; maintain group's calendar; handle travel arrangements, authorizations and vouchers; order supplies and engineering/architectural books or manuals.
REQUIRES:
--Knowledge of modern office procedures and letter formats
--Skill in use of English composition, grammar, spelling and punctuation
--Skill in arithmetic
--Accurate typing skill at 55 WPM (test may be given to final applicants)
--Skill at establishing and maintaining good working relationships
--Knowledge of Architectural/Engineering terminology
--Knowledge of engineering filing
--Skill in understanding written procedures and using initiative, when appropriate
DESIRED, BUT NOT REQUIRED:
--Skill in use of dictaphone
--Familiarity with CSI and/or AIA Indexing Format Systems
Margareta Domecki, X581

Secretary - #2436

One-quarter time

AAP - Oceanography Section
Non-exempt range 25
Anticipated hire-in salary: $217.25 - 275.50
(=25% of full-time rate)
DUTIES: Will provide secretarial support to the Chairman of the Oceanographic Journal in the smooth processing of all articles submitted for publication. Will compose and type routine correspondence, set-up and maintain a filing system, catalogue publications and contact articles' reviewers; may be required to do English editing of scientific articles.
REQUIRES:
--Skill in use of English composition, grammar, spelling and punctuation
--Knowledge of standard office procedures and letter formats
--Skill in effective communication with a wide range of people
--Ability to use initiative in dealing with phone or mail inquiries
--Accurate typing skill at about 60 WPM
--Demonstrated skill in general office organizational tasks
ALSO DESIRED, BUT NOT REQUIRED:
--Editing experience
Margareta Domecki, X581

SPECIAL PROJECT

Special Project Scientist I - #2405

HAO - Rocket Coronograph Experiment
Exempt range 82
Anticipated hire-in salary: $21,588 - 27,516/yr
DUTIES: The primary objective of the experiment
is the measurement of coronal temperatures, den-
sities and flow velocities throughout the inner
solar corona. Scientist will participate in the
experiment in a) modifications, refurbishment, cal-
ibration and launch of the instrument, and b) the
concurrent and subsequent reduction, analysis and
interpretation of the data. Will involve communi-
cation and negotiation within the group at HAO,
with Harvard College Observatory and other organi-
zations.
REQUIRES:
  --Ph.D. or equivalent in solar physics,
    astronomy or physics
  --Participation in either observational or
    laboratory instrumental programs
  --Demonstrated skills in analysis and inter-
    pretation of observational data
  --Skills in communication for negotiation
    and interface with other scientific
    personnel
  --Ability/willingness to travel away from
    Boulder for about 6 weeks per year
ALSO DESIRED, BUT NOT REQUIRED:
  --In-depth knowledge of solar physics as
    demonstrated by quality publications of
    research
  --Experience with rocket or spacecraft
    hardware
  --Demonstrated skills in programming on
    large computers involving large data sets
  --Demonstrated skill in programming using
    minicomputers on an interactive basis
This position is funded through October 1980 with
a high probability of extension past that (probably
through September 1982).
Marsha Hanson, X517

Support Scientist II - #2441

(Term = through 30 September 1980 with probable
renewal)
HAO - Solar Atmospheres and Magnetic Fields Section
Exempt range 81
Anticipated hire-in salary: $17,820 - 22,296/yr
DUTIES: Provides research support to Observatory
scientists (Solar Maximum Mission and OSO-8) in
data analysis and solar physics relative to ultra-
violet solar space experiments. Programming in
FORTRAN to develop theoretical models and provide
analysis techniques will be the major activity.
REQUIRES:
  --B.S. or equivalent in astronomy, physics,
    or closely related field and one or more
    years experience in above areas
  --High proficiency in FORTRAN programming or
    equivalent
  --Familiarity and experience with numerical
    and statistical analysis, differential
    equations, Fourier series, and related
    mathematical techniques (preferably using
    computers such as PDP 11/70 under UNIX)
Marsha Hanson, X517

Support Scientist II-III/Special Project Scientist I- #2426
(Part or full-time)
AQD - LIMS
Anticipated hire-in salary:
  81: $17,820 - 22,296/yr
      (Support II)
  82: $21,588-27,516/yr
  (Support III or Special Project Scientist I)

DUTIES: Will assist in the validation and applica-
tion of the data from the LIMS experiment which flew
on the Nimbus 7 spacecraft. Will oversee reduction,
collection and dissemination of LIMS data; will work
on improving algorithms to objectively analyze LIMS
data and assess quality of results and will take part
in formulation of problems, develop and apply soft-
ware to use LIMS data to answer questions about
middle atmospheric chemistry, dynamics and radiation;
will assist in interpreting and publishing results.
REQUIRES:
  --M.S. or Ph.D. in atmospheric sciences or
    closely related physical science
  --Substantial knowledge of the stratosphere
    and mesosphere
  --Skill in handling data sets on a computer,
    including use of tapes
  --Skills in organization and documentation of
    work
  --Skill in working effectively as part of a team
  --Pleasant and effective written and verbal
    communication skills
  --Flexibility to shift task focus when necessary
ALSO DESIRED, BUT NOT REQUIRED:
  --Previous experience with NCAR Mass Storage
    System

TERM: Appointment will initially be for one year,
but an extension of one more year is highly likely;
position is available immediately.
Marsha Hanson, X517

CASUAL

(on call)

Custodian - #2376

ADM - Physical Plant Services
Non-exempt range 24
Anticipated hire-in salary: $4.56 - 5.26/hr
DUTIES: General cleaning such as washing (walls,
furniture, ash trays, windows/doors, trash
receptacles), dusting, removing trash, mopping,
washing, waxing and buffing floors.
REQUIRES:
  --Skill in comprehending basic work
    instructions (verbal and written)
  --Skill in learning and remembering procedures
  --Physical coordination and shoulder strength
  --Skill in working independently
  --Physical strength to lift 5 gallon bucket
    of wax or water
  --Availability/willingness to work 6:00 p.m.
    to 2:00 a.m. as needed
ALSO DESIRED, BUT NOT REQUIRED:
  --Previous custodial experience
  --Valid Colorado drivers license
  --Skill in operating floor cleaning machine
    and buffing machine
Margareta Domecki, X581

Security Guard - #2425

ADM - Safety and Security
Non-exempt range 18
Anticipated hire-in salary: $4.50/hr (1979 rate)
DUTIES: To protect buildings and contents against
loss by fire, theft and illegal entry. Make in-
spection trips by foot and vehicle; serve on fire
brigade and render first aid when necessary; operate
two-way radio and paging system; receive NCAR tele-
phone calls during non-business hours.
REQUIRES:
--Demonstrated strength and stamina to make
required rounds, move fire equipment, and
work alone in isolated areas
--Demonstrated skill in communicating ef-
fectively with a wide range of people
and using good judgment
--Skill in remembering and following procedures
--Possession of a valid driver's license and
ability to qualify for and obtain GSA driver's
license (to qualify, one cannot have more
than 2 moving violations in last three years)
--Ability to qualify for and obtain American
Red Cross Standard First Aid certificate
--Flexibility/willingness to work on call as
needed
ALSO DESIRED, BUT NOT REQUIRED:
--Experience as a security guard, law enforce-
ment officer or military person
Margareta Domecki, X581

STUDENT ASSISTANT

Student Assistant - #2438

AAP - Large Scale Dynamics Section
Anticipated hire-in salary: $5.30/hr
DUTIES: To provide assistance in the operation
and maintenance of a library of computer programs.
Will assist in providing convenient I/O, display,
and data processing necessary during operation of
all programs. Will assemble, debug, and document
new additions to the library. Will assist scientist
by performing a variety of odd-job programming
tasks. Will provide technical programming assis-
tance to scientists.
REQUIRES:
--Full-time student status (excluding summer)
--Strong interest in physical sciences
--Skill in learning and remembering procedures
--Skill in understanding written and verbal
instructions
--Knowledge of FORTRAN programming
--Skill in accuracy and attention to detail
--Ability to work 20 hours/week and full-
time during summer
Margareta Domecki, X581

Switchboard Operator - #2421

ADM - Plant Maintenance and Operations
Non-exempt range 23
Anticipated hire-in salary: $4.142 - 4.776/hr
DUTIES: Will handle all incoming and outgoing
calls for NCAR/UCAR to include commercial calls,
FTS calls, CU calls, attendant lines and intercept
lines. Will maintain call report slips, check and
maintain roster of staff and visitors. Will handle
paging system for the Computing Facility.
REQUIRES:
--Skill in operating cord board switchboard
(preferably in large organization)
--Skill in remembering procedures and infor-
mation about an organization
--Eye/hand coordination
--Skill in effective communication and in
the use of English grammar
--Skill in typing about 35 WPM (typing test
may be given to final candidates)
--Availability/willingness to work on call as
needed
Margareta Domecki, X581

Student Assistant - #2446

ATD - Research Aviation Facility
Anticipated hire-in salary: $5.30/hr
DUTIES: Will assist in scientific data analysis
including computer job submission, data plotting
and inventory; will also assist in the preparation
of graphical displays of aircraft data.
REQUIRES:
--Current full-time student status, excluding
summer (Electronics Engineering, Computer
Science, physicals sciences)
--Skill in large computer FORTRAN programming
--Availability to work 15 - 20 hours per week
--Willingness to work at Research Aviation
Facility, JEFFCO
--Skill in accuracy and attention to details
--Skill in submitting program to computer
and making modifications to program
Margareta Domecki, X581

Student Assistant - #2447

ATD - Research Aviation Facility
Anticipated hire-in salary: $7.05/hr
DUTIES: Will perform analysis of aircraft data,
apply aerodynamic engineering to instrumentation
problems, and work on special engineering/data
analysis projects as needed.
REQUIRES:
    --Current full-time student status (senior or
      junior in Aeronautical Engineering or equi-
      valent preferred)
    --Skill in FORTRAN programming
    --Knowledge of aeronautical engineering/fluid
      mechanics theory
    --Skill in accuracy and attention to detail
    --Ability to work 10 - 15 hours/week

NOTE: If student desires to participate in RAF
test flights, he or she will be required to pass
FAA high altitude chamber test. Position
will last through May 1980 only.
Margareta Domecki, X581

Student Assistant - #2450

AAP - Climate Section
Anticipated hire-in salary: $5.30/hr
DUTIES: Will perform scientific drafting and data
analysis for scientists. Will interact with Print-
shop to ensure efficient production of data for
scientific journals and presentations.
REQUIRES:
    --Skill in drafting
    --Current full-time student status, excluding
      summer
    --Availability to work 20 hours/week and full-
      time during summer
    --Skill in executing work with neatness and
      accuracy
    --Skill in communicating effectively with
      people
    --Skill in understanding and following
      directions
ALSO DESIRED BUT NOT REQUIRED:
    --Demonstrated interest in physical sciences
Margareta Domecki, X581

Student Assistant I - #2452

CSD
Anticipated hire-in salary: $4.35/hr
DUTIES: To establish and maintain data inventory
and archiving of division scientific data to include
magnetic tapes, microfilm, photographs, original
film, etc. To develop and control logging system
for checkout of data.
REQUIRES:
    --Full-time student status, preferably in
      atmospheric science or related scientific
      discipline
    --Skill at paying attention to details
    --Skill at working with neatness and accuracy
    --Skill at establishing and maintaining
      effective working relationships with a
      variety of people
    --Willingness/ability to work 20 hours/week
      during school year and full-time during
      summer
    --Ability to obtain GSA drivers license
      (requires current valid license and 2
      or less moving violations in last 3 years)
ALSO DESIRED, BUT NOT REQUIRED:
    --Some knowledge of atmospheric science
    --Skill in filing/cataloguing material
    --Skill in typing approximately 30 - 40 WPM

CALENDAR NOTES

February 11 through February 18, 1980

MONDAY, February 11

    Open

TUESDAY, February 12

● AAP Seminar -- <u>Some New Results in the Theory of Scalar Turbulence</u>, Jackson Herring, AAP

    3:30 p.m.
    NCAR Mesa Lab, Main Seminar Room

WEDNESDAY, February 13

● AQD Seminar -- <u>Charcoal - Past and Present Atmospheric Fluxes</u>, James Herring, U.S. Geological Survey, Denver

    11:00 a.m.
    Fleischmann Building, Roberts Seminar Room

THURSDAY, February 14

● HAO Colloquium -- <u>Power Spectral Analysis</u>, Rainer Illing, LASP

    11:00 a.m.
    HAO Classroom 134

FRIDAY, February 15

    Open

MONDAY, February 18

    Holiday