#### JUNIOR DIVISION NEWS

The Junior Division, in the words of Mr. Robert McCracken, ex-NCA president, has been doing some of the most valuable work of the whole society. This past summer, Juniors have helped Father Heyden of the Georgetown University on an important variable star project. The Junior Division has also had the use of the 26" at the Navel Observatory for NCJA instigated "World Nights". (see July-August StarDust).

However, with all this fine work, the Juniors have had to bear unfounded accusations of doing damage to the NCA 5" refractor at the Naval Observatory and to the relations of the society there. These charges range from alleged "loud whispering" to "hot rodding" on the Observatory grounds. As we have been one of the members most often present at the 5" when "World Night" operations were being carried on, we can say unreservedly that these accusations are false. In fact, the only case of disciplinary expulsion from the grounds this summer was brought against a Senior, not a Junior.

There has been an omnipresent rumor that Juniors will be barred from all use of the 5". If this is true, unless this plan is discarded, the Junior Division, having been used as a convenient scapegoat, will be faced with a paradox, having access to the 25", while not to the 5".

---- Steve Klingelhofer Junior Editor

Note: The housing of the NGA five-inch refractor at the Naval Observatory is a rare priviledge. Access thereto is provided only to registered holders of SENIOR membership cards; juniors are admitted only as guests of seniors who assume responsibility. No person or group has access to ANY Naval Observatory facility by virtue of an NGA pass. Straying to the dome of the 26-inch telescope has been one of the complaints of the Observatory necessitating disciplinary action. Robert McCracken

#### VIRGINIA JUNIORS

Barry Sperling, our Chairman, was pleased with the number of drawings submitted in the Junior Division's World Night Program. Our membership has gained much experience as a result of this program. Our summer has been quite active and time well spent.

At one of our meetings, Fred Summer demonstrated his bowl sextant and described how it could be used in determining the height of the mountains on the moon.

During the summer, our meeting headquarters has been provided by the Westover Baptist Church, Arlington, Va. We thank them very much for their kindness. Also, thank you, Miss Betts, for making the arrangements and having been our group leader at all of our meetings.

Our club invites all Virginia juniors interested in astronomy to come to our meetings.

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---- June LoGuirato

☆ S TAR DUST

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.579 S ☆ S U B Т A XVI NO. Vol. SEPTEMBER, 1959

### DE KORT TO SPEAK ON SOLAR ECLIPSES



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Father Jules de Kort, S. J., a Professor of Astronomy at Georgetown University, will speak to the NCA on September 12th on MEASURING THE SUN'S ENERGY WITH A SOLAR ECLIPSE. This month's lecture deals with the use of eclipses of the sun as a tool for astronomical research. This subject is very timely owing to the forthcoming total eclipse of the sun in New England on the second of October.

Father de Kort received his Ph.D. in Holland at the University of Leyden. Before coming to Washington, he Was associated with the Vatican Observatory for several years. For the past year and a half he has been Working

Father de Kort year and a half he has been working Rui working With Father Heyden at Georgetown University as a faculty member teaching Celestial Mechanics and Practical Astronomy.

#### \* \* \* \* \*

#### SEPTEMBER SPECIALS

4,11,18,25 (Friday) - TELESCOPE MAKING CLASS - 7:30 PM, Fairfax High Scool, Grady Whitney, Instructor
11,25 (Friday) - VIRGINIA JUNIORS MEETING at the Westover Baptist Church, 1125 N. Patrick Henry Drive, Arl- ington, Va., 8 PM, Room 234
12 (Saturday) - JUNIOR CONVENTION - 2 PM, Chevy Chase Community Center. VA Jrs. see Leith Holloway for transportation
12 (Saturday) - "MEASURING THE SUN'S ENERGY WITH A SOLAR ECLIPSE" Father Jules de Kort followed by meeting. Department of Commerce Auditorium at 8:15
13 (Sunday) - EXPLORING THE SKY - 8 PM Ft. Reno Park, 40th & Che- sapeake Sts., NW. Bring friends and tele-
19 (Saturday) - DISCUSSION GROUP - 8 PM in foyer of Commerce Aud- itorium: "Eclipses" led by Leo Scott
21,28 (Monday) - TELESCOPE MAKING CLASS 7:30-10, Chevy Chase Re- creation Center, Hoy Walls, Instructor TELESCOPE MAKING CLASS AT BLADENSBURG-Call Bill Isherwood, AP7-9419 for starting date
25 (Friday) - OBSERVING AT THE 5" - 8 PM at the Naval Observatory Bring your membership card.
26 (Saturday) - NCA PICNIC - Manassas National Battlefield Park, 6:30 PM

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#### BOB DELLAR - ASTRONOMER AND FRIEND

The sudden death of Robert H. Dellar on July 26, saddened and deeply grieved everyone who knew him.

Bob Dellar has been a member of the NCA for a number of years and has contributed freely of his time and many capabilities to the advancement of the society and its projects.

For several years he has been the custodian of the public address system for the NCA and has kept it in repair in order that we might have a sound system for our lectures.

Bob, his wife, Trudy, and his son, Bobby, have been active members of our society and have shared our lectures, discussion groups and conventions with us, always partaking in a helpful and congenial way which made us like and appreciate them as friends as well as fellow astronomers.

Bob's work with Moonwatch is well known to most of us. He participated in the planning of Moonwatch with Bob Wright and others and helped with the design of the prototype station. He was appointed chairman and organized the NCA Moonwatch team in late 1956 and in the spring of 1957 constructed the station with the help of the team on his property in Springfield, Virginia. He was instrumental in procuring material for this station from local merchants. He had donated much himself.

In conducting the Moonwatch team and its activities, Bob proved an able leader from the early days of the "fly-bys" for the training of the team throughout the active observing during the IGY, including the Beta search this past spring. He successfully carried out the observing missions for Moonwatch. The observational data sent from the station to the Smithsonian Astrophysical Laboratory were used in the determination of the satellite orbits - a significant contribution to scientific knowledge. Bob also diligently continued to improve the equipment and observational techniques throughout the Moonwatch Program.

Bob was an amateur radio operator as well as an astronomer. He was an active "Ham" and has written several articles for radio magazines over the years. Recently he had been working on a citizen's band radio transmitter - receiver and had intended to publish an article on the equipment.

Bob Dellar, Engineer, Scientist and emateur Astronomer will be missed by all of us. The loss will be felt keenly by those who knew him and also by many who only knew his work. We, in the NCA, have been priviledged to have known and associated with Bob over the years and we will not soon find another to take his place in our affection and esteem.

Everette Neville

TREASURER'S ANNUAL REPORT

#### INCOME

Membership Dues Telescope Class Sale of Handbooks, etc.	\$1102.05 456.10 <u>65.25</u> \$1623.40	\$1623 <b>.4</b> 0
EXPENDITURES		
Sky Publishing Co. Bates Duplicating Co. Editing and Distribution President Treasurer Refund on Dues Dinner for Lecturers Bethesda Printing Photo Equipment Franklin Institute Rand McNally Royal Astronomical Society Maryland Academy of Science Space Science Bank Service Charges	<pre>\$ 513.88 119.04 182.61 40.34 21.12 16.80 13.20 7.22 19.14 17.79 26.25 31.45 31.52 34.55 <u>6.80</u> \$1081.71 Balance July 1958 Balance July 1958</pre>	\$1081.71 541.69 <u>344.81</u> \$ 886.50

Audited and confirmed on July 22, 1959 by Dana Law and David Rotbart.

Outgoing Treasurer Lillian R. Gregor Incoming Treasurer Wm. G. Lipscomb, Jr.

NCA membership is now 263: Regular, 180; Junior, 83.

#### \* \* \* \* \*

#### CELESTIAL SCANDAL

Whoever hangs the stars at night And takes them in by day Must need a million filing clerks To get them put away.

Sometimes a clerk must lose his job And know the reason why, If a star has not been properly Fastened to the sky;

For what a scandal there would be If one of them should dare To place Orion's belt and sword In Cassiopeia's chair.

Elva R. Ray.

Seldom heard, J. M. Kendall has our thanks for his continual preparedness to speak as a stand-by lecturer. We feel that some time we should feature his talk.

Mr. Hoy Walls has been a mainsupport of the NCA. Chairman of the Technical Advisory Committee, and a very competent engineer, he has done the designing, or the planning, or the making, or the devising, for some phase of almost every activity of the NCA. Also Chairman of the Telescope Making activity, he has not only managed the overall program, instructing the Chevy Chase class himself, but has also provided the materials, castings, and machining for all three classes. The class at Bladenaburg, MH., is instructed by William Isherwood, and that at Fairfax, Va., by Grady Whitney. Everette Neville, M. R. Jones, and Fred Jones have assisted regularly with the Chevy Chase Class. This is a demanding activity, for which our thanks simply cannot be sufficient.

Tove Neville was responsible for the excellent planning and work that has made our social events so thoroughly enjoyed. These included a beautiful night at North Bethesda, and another at Fort Hunt Park, after the disappointment of rain on an englier occasion there, which she had, nonetheless, planned so carefully. Thelma Cressy, Mabel Sterns, Mr. and Mrs. William Lipscomb, and Mr. William Cronin have also contributed much to our social enjoyment.

As we thank each of them, we should remember that those who work so diligently for the pleasure of others frequently macrifice much of their own, unnoticed, in the burden of the operation.

And it is thus with the entire staff, each member of which has demonstrated the deeper satisfaction that derives from sharing, and from serving others. In this they have supported my contention that a hobby should not be regarded merely as a way to wake spare time, but that there is a far nobler objective -- an objective which the NCA has striven to serve -- an objective which I hope, and believe, is shared by the entire membership: self -expression through public service. For it is in this that the National Capital Astronomers has earned its enjoyed place in the community of our Nation's Capital.

Thanks -- to each of you.

I greet you of the incoming staff with my very best wishes for your ever-increasing success.

Sincerely.

Robert H. McCracken, Retiring President

### NCA PICNIC \*\*\* SATURDAY \*\* SEPTEMBER 26

September 26 has been set as the new date for the NCA picnic which will be held at Manassas as previously planned. For the benefit of those who no longer have their last issue of StarDust, we want to remind you to come prepared to some extent for "Outdoor Living". There will be no water at the picnic grounds but there will be fire grates and wood. There will be excellent starlight, but that's the only light, so you might need to bring some of your own. Bring your picnic supper, clear weather and we'll share a glorious evening under the stars.

We will leave the Commerce Building at 5:30 and expect to be out there about 6:30. Will the members, who can possibly take passengers, please stop and give rides to others who do not drive. Directions: Take Constitution Avenue to Memorial Bridge. Follow Route 50 across bridge and on to Fairfax. Proceed on Rts. 29-211 through Centreville to Stonehouse Inn (about 2 mi. beyond end of divided highway). Turn left at Inn on Route 234 Manassas National Battlefield Park signs. Go about 9/10 of a mile on Route 234 and turn right at NCA Picnic sign and follow picnic area signs past ruins of Chin House to the end of road and you are there. Do not hesitate to ford the tiny creek -- we have already tried it.

There will be no moon this night, and we may stay as long as we wish so lots of interesting observing should be possible. Last time we saw many meteors and countless nebulae in the Sagitarius region. If you have any new and/or interesting equipment, besides your telescope, which the members haven't seen, please bring it. The sun sets at about 6:50, and at this time Jupiter and Saturn will be observable for the rest of the evening.

\* \* \* \*

---- Tove Neville

BILL LIPSCOME, our Treasurer, and his wife, Betty, one of our Trustees, are on their way to a glorious vacation in the West. They are leaving the third week in August and plan to head for the Convention in Denver, August 28-31, and then to travel around the country until their return the middle of September. For this reason membership cards will be a little late this time.

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LUNAR OCCULATIONS FOR SEPTEMBER

DATE	STAR	MAG	PHASE	<u>AGE</u>	TIME(E.S.T.	)_ <u>P</u> _	
Sept 10 10 22 22 22-23 23 23 24-25	64 B. Sgr. BD-18 4988 275 B. Tau Alpha Tau Alpha Tau 111 Tau 292 B. (Ori)	6.1 6.6 6.5 1.1 1.1 5.1 6.5	D D R D R R R R	8.0 8.1 20.1 20.2 20.2 21.2 22.3	10:04.9 PM 11:02.5 PM 10:52.0 PM 11:14.2 PM 12:12.8 AM 11:40.0 PM 3:25.9 AM	37 87 212 104 230 246 288	
* * * *							

From a local paper, July 1, 1954;

Local residents were disappointed not to be able to see the solar eclipse which occurred yesterday. Mr. F. G. White, an amateur astronomer, believes that this was because the sky was overcast while the eclipse was in progress.

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# KNOW YOUR OFFICERS



Lillian Gregor President Our new president finds in astronomy a source of relief from her full time job as gift buyer for Becker's Leather Goods.Born in Allentown, Pa., Lillian Gregor later moved to D. C. and graduated from Central H.S. Upon graduation she went to work at Becker's as a stock clerk in the basement and worked her way up. The same interest which seemed to assure her success at Beckers seems to have been responsible, to a large extent, for her interest in astronomy, and that is mathematics. In 1950, she heard her two brothers discussing flying saucers and she became interested. Flying Saucers led her to astronomy and such a consuming interest that she read books on the subject shile riding back and forth to work. Astronomy, she feels, is a great way of forgetting her BEAT YESTERDAY BOOK which seems to be foremost in the mind of every buyer. Her main interest is in the immensity of the Universe. Once again, it is the size and the numbers that fascinate her the most. She joined the NCA in 1954, has been treasurer for two years and now finds herself president. Her outside interests are primarily her lovely daughter who has studied modeling and her

parakeet and pet squirrel.

Bill Lipscomb is a native Washingtonian and was brought to the NCA and his interest in astronomy through the courtesy of his wife, Betty who is a long time member of the NCA and was formerly secretary of the Astronomical League. Bill's qualifications as treasurer are obvious when you realize that he has been with Riggs National Bank for twenty years and is now assistant cashier. He was educated at Central H.S. and business college. He is primarily interested in photography and is a member of Bob Dellar's Moonwatch Team.



Bill Lipscomb Treasurer

Mrs. Paul Griffith, who has been assisted with the copy work by Mrs. Worthington Talcott. Larry White has been the Astronomy Editor, Mr. and Mrs. Morton Schiff wrote the publicity. Stephen Klingelhofer has done an excellent job as Junior Editor. Distribution was done by Salome Betts and Else Dimick until recently, when it was mechanized by Addressograph plates, a gift to the NCA for which we thank Paul Griffith.

We are grateful for the efforts of our publishers, whose diversified talents have provided us with improved, more attractive publications, with pictures, at costs actually reduced considerably from those of former methods.

The early days of the International Geophysical Year were marked by a shock when, on October 4, 1957, the Soviet Union launched the first artificial earth satellite. Operation Moonwatch, having been established in the NCA by the previous administration, was under way in earnest. The subsequent successes of Moonwatch stand as a tribute to the dependability of those many observers who braved the pre-dawn cold of those October mornings --and continued to observe long after the novelty had gone.

During the closing phase of the period another shock saddened the NCA: the passing, on July 26, 1959, of our friend and fellow member, Robert H. Dellar, who, as Chairman of our Springfield satellite-tracking activity, had given so much for its splendid success: land, labor, and the privacy of his home, that the team might be warmed and refreshed by Mrs. Dellar's abundant coffee pot at the most inopportune hours. Our deep gratitude is offered to Mrs. Dellar for all they underwent for Moonwatch and the NCA. Bob also provided custody and operation of our sound system for the lecture series.

At the Silver Spring satellite station, G. Robert Wright, formerly Chairman of the Smithsonian's National Advisory Committee on Visual Satellite Tracking, has pursued a progressive experimental program, developing improved techniques and methods of tracking satellites. He has included radio methods, and a complete optical station on a turntable which is adjustable to any orbit inclination. Bob shares our large measure of thanks with Mrs. Wright, for she, too, quite beyond her enthusiam, has known the intrusion of Moonwatch and NCA, which she has tolerated with undiminished hospitality.

Supporting the satellite-tracking activity, Hugh Fitzpatrick and Leith Holloway have regularly performed the orbital calculations for the Silver Spring and Springfield stations, respectively. We thank them both for this important service and for the many hours of lost sleep it has entailed.

Lyle Johnson, too, has contributed many calculations and predictions. He has regularly served as projectionist for our lectures, and has donated a fine, seven-foct oak pointer for the use of our speakers. Lyle provided one of his own impressive photographs of the moon for the cover of our directory. We thank you, Lyle, for many services.

We thank John Lohman, also, for serving as projectionist for some of our lectures. Leith Holloway, Director of the Junior Division, has performed an invaluable service in his clever and effective direction and sublimation of the youthful energies and talents of our highly active junior members. Under his leadership they have developed an interesting and useful observing program affording excellent experience in scientific technique.

Mr. Holloway has been aided by Robert Brown and Salome Betts, who, successively, have headed the Virginia group. We thank all for their generous investment in tomorrow's leadership.

Mr. U. S. Lyons organized and taught a public class in astronomy for adults in cooperation with the District of Columbia Department of Recreation. We are grateful for his having made this valuable service available. Mr. Lyons has also served as Chairman of the Membership Committee, in which capacity he has been aided by Elsa Dimick, Fhyllis Seips, Mrs. Lillian Gregor, and Mrs. David Rotbart. We thank these people for their services.

Mr. William Isherwood has led the observing program of the NCA, including the nova patrol, IGY meteor counts, and other observations. His conduct of the monthly group observing sessions with the five-inch refractor at the Naval Observatory has been a source of enjoyment and education for many. On occasions one could go there at the appointed time and find him waiting alone in the rain, because, "it might clear up, and someone may come and be disappointed." This spirit cannot be appreciated...aufficiently. We thank also Patrick Moretti for substituting on ope occasion when Mr. Isherwood's Business took him from Washington.

Leo Scott, our Parliamentarian, has served to preserve not only our parliamentary order, but also our legality, through his knowledge, understanding, and study of our problems. We thank him for his services.

Mr. Nelson Griggs has served as Chairman of the Program Committee, which has been responsible for the excellent range and caliber of subjects and speakers for our public lecture series, One of our most widely known public services, this series has been ably produced by Benjamin Adelman, Dr. James Q. Gant, William Isherwood, Lyle Johnson, Mrs. William Lipscomb, Everette Neville, Robert Rhynsburger, Leo Scott, Roger Smith, Mrs. Armand Spitz, Mabel Sterns, Hoy Walls, Larry White, and Robert Wright. We thank these people for the many educational and entertaining hours they have provided for us all.

There are few who can appreciate the amount of effort expended by our Publications Staff in maintaining, improving, and extending our printed contacts with both our members and the public. When the work became too heavy for Jewell Boling's devoted effort alone, Mabel Sterns, who was STAR DUST's original editor, undertook to continue it, with the help of Lt. Col. Russell White, who prepared the copy, and Sam Feild, who photographed the pages and made the half-tone negatives that made pictures possible in STAR DUST.

During the past year, both Mabel Sterns and Col. White moved from Washington. Since that time, the Editor-in-Chief has been

## PRESENT AND ----



Leith Holloway hailed from Hickory. N. C., came to the D. C. area when he was nine. The astronomy bug bit him when he observed his first lunar eclipse on July 15,1935 and he noted it on a piece of cardboard which he still has. Consequently, he joined the NCA juniors in 1936 and has been active in the NCA since then. Following graduation from Woodrow Wil-son High School and two years in the Navy, Leith attended M.I.T. for five years and majored in meteorology. which he became interested in as a result of the frustrations weather often presented during his observations. He is a bachelor, addicted to serious music and, in turn, Hi-Fi (his now has 18 control knobs), is wild about his new English Ford. finds TV degrading, and loved "The Shaggy Dog".

Leith Holloway Vice-President

Faye Rotbart is beginning her second year as secretary for the NCA. She is an accountant by profession and gets her interest in astronomy from her husband, David, whom she credits as being her only claim to fame. He has been a member for years and achieved world recognition in 1946 when he discovered a comet. Through his 20x80 binoculars he noted and charted an object in Cygnus which he noticed did not move like a star. He reported this to the Naval Observatory and when the report was checked it was discovered that simultaneously, a Czechoslovakian astronomer had reported sighting the object, which was named the Pajusakova - Rotbart Comet. Faye's interests outside of her husband, are those of most women, interior decorating, sewing, gardening, and gemology.



Faye Rotbart Secretáry Page 6



Robert McCracken, Retiring President

"Good Evening, Fellow Astronomers ...."

"You cannot keep both feet on the ground and take a single step forward." The way of life of our retiring President is well stated in his often-heard expression. this. Born in Greensboro, N. C., Bob has followed interests ranging from his own dance band to his ham radio, W4EFT, photography, choral training, astronomy, and learning to fly. He has been Chief Engineer of WAIR in Winston-Salem, North Carolina, taught electronics for the Signal Corps, was a radar development engineer on Long Island, and, mid war, developed radio navigation equipment for lendlease. He joined the staff of the National Bureau of Standards early in 1945, where he later was responsible for the electronic development of the cesium-beam atomic clock. He designed and built his own home for his wife, Helen, and their two daughters, Jean, 12, and Nancy, 6. In 1954 he moved into missile electronics via the Diamond Ordnance Fuze Laboratories. Traveling to Canaveral

and Huntsville, he joined the Rocket City Astronomical Association, of which Dr. Wernher Von Braun is President. He occasionally attended meetings of the NCA for several years until someone handed him an application blank one night in 1955. A year later he became Vice President, then President for two terms, until now.

Born in Poughkeepsie, N. Y., Nelson was a radio announcer for 28 years. In 1957 he finally made the switch to writing scientific and technical matter when he went with Nems-Clark which produces 95% of the radio receivers used for tracking rockets and satellites. He also fulfilled a long time ambition and became publisher of The Amateur Scientist. During his many years in radio he was always intensely interested in science and joined the NCA after he met Bob Wright when he interviewed him on a radio show in 1950. As vice-president of the NCA, Nelson has been responsible for the fine group of speakers which the NCA has enjoyed this year. He and his wife stay busy rejuvenating the farm they bought in Boyds, Md. and, this summer plan to break ground on their very own observatory.



Nelson Griggs

#### GREETINGS, FELLOW ASTRONOMERS:

As the time approaches when another hand will take the helm, I sincerely invoke the grateful attention of the entire membership to those whose efforts have generated the successes of this unique chapter of the NCA's history. During the International Geophysical year the NCA has encountered on every hand challenges demanding proof of the civic value of such an organization. The staff has met them amply; it has continued, amplified, and secured the esteemed place of the NCA in the community by serving with commendable effectiveness the organization's chief objective: the promotion of interest, knowledge, and education in astronomy and the related sciences.

Too few, indeed, know of the total efforts of these people. Certainly their works cannot be detailed here. But they have well earned the praise and gratitude not only of the membership, but also of the community they have served.

For their splendid cooperation, I personally thank each, to wit:

The Officers, who for the past two years have been: Vice Presidents Roger Smith and Nelson Griggs, Secretaries Phyllis Seips and Mrs. David Rotbart, Treasurer Mrs. Lillian Gregor, and the Trustees: William Isherwood, Mrs. William Lipscomb, Everette Neville, Mrs. Grace Scholz Spitz, and Alexander L. White.

Benjamin Adelman, under whose Chairmanship the Education and Schools Advisory Committee was established, has conducted an active and elaborate educational program with the school systems Throughout the metropolitan Washington area. He has been assisted by Mrs. John Biess, Mabel Duvall, Ida Hill, Leith Holloway, U.S. Lyons, Everette Neville, Margaret Noble, Mrs. John Stolarik.

During this period, membership awards were established for high school science fair winners in astronomy. Judging the projects for NCA were, in addition to Mr. Adelman: Robert Brown, Mrs. Paul Griffith, Nelson Griggs, William Isherwood, Mr. and Mrs. William Lipscomb, John Lohman, U. S. Lyons, Everette Neville, Robert Rhynsburger, David Rotbart, Mrs. Worthington Talcott, and Robert Wright.

Mr. Adelman was also responsible for programming the Prince Georges County School System planetarium at Bladensburg.

Other school aids included an orientation course in the teaching of astronomy, for Science Supervisors in the District of Columbia Public School System, aad many programs of talks, slides, and sessions under the stars for schools, churches, scouts, civic groups, and others. So many members have participated in these outings thatit is not possible to list equitably the contributions of each. This in no sense diminishes our thanks to them, for theirs has been one of the most fruitful works of the NCA, having served thousands. Several on record are, Benjamin Adelman, Robert Brown, Leith Holloway, William Isherwood, Dana Law, John leonard, U. S. Lyons, Everette Neville, David Rotbart, Morton Schiff, Leo Scott, Hoy Walls, Robert Wright.