Item 2: Eastern Region's Pilot Program, "Maintenance of Substation Network Test"

Discussion: Eastern Region's Pilot Program, "Maintenance of Substation Network Test," coordinated at WSFO, Pittsburgh, PA, came to a close on December 1983. The test program used a Cooperative Program Manager (CPM), a Hydrologist and a Hydrologic Technician to install and provide second-order maintenance of the electro-mechanical and mechanical equipment, at approximately 205 cooperative weather stations.

The results of this pilot program appear to have promise. A second pilot program at WSFO, Pittsburgh, PA, began on January 1, 1984. In addition, future expansion of this program is scheduled for RFC, Harrisburg, PA; WSFO, Albany, NY; WSFO, Philadelphia, PA; and WSFO, Washington, DC.

Recommendation: The group agreed that further testing of the pilot program should continue. A report on its progress should be submitted to W/OTS21x4 on a semiannual basis.

Item 3: Cross-Appalachian Tracer Experiment (CAPTEX)

Discussion: The Canadian contingent was extremely interested in the CAPTEX experiment held in the Northeast by the Air Resources Laboratory (ARL) and Eastern Region's cooperative weather observers. The use of perfluorocarbon tracer gas and samples used by cooperative observers was of particular interest to the Canadians.

Recommendation: Provide a full report of the fall 1983 CAPTEX experiment to Roy Bourke, Paul Shalapata, and Dave Law of the AES, Canada.

Item 5: Hazardous River Gage Sites

Discussion: Dave Smith, Regional Hydrologist - SR, discussed the problems of taking river gage observations at hazardous sites. This has been a continuing problem for many years. Dave suggested that hazardous sites be identified and steps taken to either move the river gage to a less hazardous area or provide proper clothing/identification to the cooperative observer taking the reading, e.g., portable light on car, red or orange jackets, staff gage, etc. Also, suggested was an increase in observer pay for those taking observations in hazardous areas.

Recommendation: It was unanimously agreed upon that hazardous sites should either be moved to safer areas or new equipment provided to eliminate accidents, e.g., staff gages. In addition, clothing and equipment which would identify the observer and his auto to traffic should be purchased immediately.

Item 7: Utah State Pilot Climate Program

Discussion: Tom Adler, Chief, Cooperative Program Mgt. Branch, Western Region, briefed the group on a proposed climate pilot program for
the state of Utah. Dr. Gail Bingham, Utah State Climatologist, Utah State University, Logan, Utah, plans to use about 20 stations in a program in which the sensors are automated to a computer system. The state will purchase the equipment and the Western Region, Cooperative Program Mgt. Branch, will provide the maintenance service. The equipment will consist of maximum/minimum thermometers, precipitation, solar radiation and wind sensors. The plan includes recording the data on PROM type chips and mailing them on a monthly schedule to the Utah State Climatology Office for archiving and publication. The NCDC will have access to this data base.

Recommendation: The group agreed that the Utah State Pilot Climate Program should be supported by the National Weather Service. The results of this pilot program could have an important impact on the future automation plans for the Cooperative Station Program.

Item 15: EPROM CHIPS & NCDC

Discussion: With the development of PROM chips and its planned use in the Reference Climate Station Pilot Program, the actions needed by NCDC to extract the data from the chip becomes an immediate concern. A plan should be developed to show the actions needed from the time the PROM chip is taken by the cooperative observer from his equipment, through the mailing process, and finally to NCDC for processing.

Recommendation: The Cooperative Data Branch, NCDC, Asheville, N.C., in coordination with the Cooperative Program Management Office should develop a plan which includes all the actions necessary to archive and publish the data from PROM chips.

Item 16: Climatological Station Maps

Discussion: Alan McNab, Chief, Cooperative Data Branch - E/CC12, advised the group that the procedures for procuring the various state maps were being changed. Climatological State Maps will no longer be given to the NWS on a gratis basis. The size and color of the map will also be changed.

Recommendation: The group was unanimous that NCDC should retain the present policy of providing Climatological State Maps to NWS users without charge. If this is found to be impractical, NCDC should provide the negatives so that the NWS could print their own maps. Maps should be 17" x 22" and in color.

Item 17: National Cooperative Observer Newsletter (NCON)

Discussion: Alan McNab, Chief, Cooperative Data Branch - E/CC12, discussed the possibility of NCDC not publishing and printing the NCON. Due to the contracting of the printing functions at NCDC, the NWS may have to find other ways of printing the NCON. The NWS pays NCDC 16.0K for this service.
Recommendation: Through the years the NCDC has printed and distributed the cooperative observer newsletters for the NWS. This service has always been excellent; with fine printing and good distribution to our cooperative observers and other users. The group unanimously urged the NCDC to make every effort to continue this outstanding service.

Item 18: Areal Edit Program

Discussion: The cooperative data areal edit program is used to detect erroneous data. There was a great deal of criticism that many anomalies did occur and that valuable data were edited out of the data base. Alan McNab agreed that there may be cases where good data were deleted by the areal edit program. Alan suggested that when a CPM believed that the edited data were correct at a particular cooperative station the NCDC should be advised with documented facts. At least five examples must be given to NCDC during the last two years of the date of occurrence.

Recommendation: Alan McNab's suggestion was approved and all CPM's will be advised of these new procedures.

Item 19: HPD Late Data

Discussion: HPD tapes/charts which do not meet the NCDC cutoff dates are not published in the HPD bulletins. In the past, late data were published in the annual HPD summaries. Due to budgetary problems at NCDC, the late data will no longer be published in the annual HPD edition. Late data will continue to be archived and made available to users at a cost.

Recommendation: The NWS should state the requirements, if any, to have late data published by NCDC. The cost/manpower needed for this program should be reported to the NWS.

Item 20: Climatological Reference Stations

Discussion: Dr. John Griffiths, President-Elect, ASSC, College Station, Texas A&M University, gave a briefing on the importance of the Climatological Reference Station program. Dr. Griffiths selected a group of cooperative stations in the NWS whose records indicate having the most accurate long term climatological data. A list of those stations was given to Cooperative Program Mgt. - W/OTS21x4 for distribution to regions.

Recommendation: Climatological Reference Stations identified by Dr. Griffiths should be maintained as official stations as long as possible. Station histories of these stations should be kept current and all changes to the siting be recorded immediately. All data from Climatological Reference Stations should also be published. A list of the Climatological Reference Stations should be given to regions for distribution to CPM's.

Item 21: Requirement for Temperature Comparisons
Dr. Griffiths, AASC, discussed the need to have temperature comparisons made when there is a significant change in the station siting, e.g., change in observation site from roof to ground; an urban to rural environment; change in equipment (liquid-in-glass to MMTS).

The feasibility of taking temperature comparisons at stations where there are significant changes in the siting/instrument, was recommended as an action item. The State Climatologist should be given the task of making the evaluation of the comparison data. Comparisons should be made using the instructions in WSOM B-11, Section 5.3, 5.3.1.

**Item 24:**

Documentation of Unofficial Cooperative Weather Stations

**Discussion:**

Sol Sommer, Asst. Regional Hydrologist, Eastern Region, discussed the need to document unofficial stations which report data to the NWS, e.g., IFLOWS, ALERT, GOES, GDDS, SNOWTEL, etc. Also, the data from stations reported by other agencies which are used by NWS offices, should be documented.

**Recommendation:**

The need to document data sites from unofficial networks and other agencies was unanimously agreed upon by the conference group, if definite requirements for the data exists. Such requirements must be fully documented before plans are made to implement the program. Questions which have to be answered before a documentation program is implemented are:

1. Will WS Form B-44a be adequate for documenting unofficial stations?

2. Who will have responsibility for the update and maintenance of the files?

3. Cost/resources needed to run program?

4. The feasibility of other agencies participating in this program?

5. Do we need a new computer data base or will the CSSA or HIRSNI or Communications Handbook #5 be adequate?

**Item 25:**

NWSTC Training Course, "Operation of Hydrologic & Climatological Networks"

**Discussion:**

The "Operation of Hydrologic & Climatological Networks" course, held at NWSTC, Kansas City, MO, was declared an outstanding success by the participants of the Conference. However, a few of the participants believed the course could be further improved by adding new areas of instruction on new equipment/programs being implemented in the Cooperative Station Program, e.g., MMTS, CSSA, etc.
Minutes: Business Meeting
August 9, 1984
Chicago, Illinois

The 1984 business meeting was called to order by President Robert Muller (IA). President Muller expressed his appreciation to President-Elect John Griffiths (TX), who helped organize the meeting. President Muller then gave a brief review of his AASC activities for the year. He reviewed his efforts to strengthen the relationships between the Federal Agencies and the States. He said it is important for SC's and AASC representatives to explore the existing opportunities to cooperate with Federal Agencies. President Muller applauded the development at NCDC of a near-real time access system.

President Muller then called on Ken Hubbard (NE) for the Secretary-Treasurer's Report. Secretary Hubbard asked if there were any corrections or additions to the minutes of the previous meeting. There were no comments on the minutes. Hubbard then gave the treasurer's report, stating that AASC currently (8-9-84) has on deposit $3,932.61. This total did not reflect the income at the meeting from dues and registration or bills for the meeting room and banquet. This report was discussed and then approved by the SC's present.

President Muller then asked the committee chairmen for reports. Myron Molnau (ID), chairman of the Computer Committee reported that there were no additions to or requests for the software that he had collected from SC's in previous years.

Paul Waite (IA), Chairman of the Publications Committee, reported that little activity had taken place since the review of Storm Data. Several comments from the floor indicated approval of the collection procedures for and the publication of Storm Data under the direction of Ted Fujita. John Purvis (SC) indicated that he would like to see SC's given the responsibility and
budget to operate Storm Data in-state. Comments followed from both those in favor and those against this proposal. Doug Clark (WI) indicated that his research program would prevent him from taking a very active role in Storm Data. Pat Michaels (VA) expressed an opinion that SC's have a responsibility to see that accurate information is available. Jim Wise (AK) stated that Alaska is so large that one SC could not undertake Storm Data for the state.

President Muller called for a motion to accept the committee reports. The State Climatologists present voted to accept all committee reports.

No other old business was raised from the floor so President Muller then called for new business. Jim Goodridge (CA), speaking as Chairman of the Nominations Committee (other committee members: John Purvis (SC) and Charles Bach (IN)) nominated Ken Hubbard (NE) for President-Elect. No other nominations were presented from the floor. A motion that nominations cease was passed thereby electing Ken Hubbard to President-Elect.

President Muller then called for nominations for Secretary-Treasurer. Jim Goodridge presented two names selected by the Nomination Committee: Doug Clark (WI) and Myron Molnau (ID). There were no additional nominations from the floor. Ballotting resulted in the election of Myron Molnau (ID) to the office of Secretary-Treasurer.

President Muller appointed a nominating committee for 1985. John (Russ) Mather (DE) was appointed as Chairman. Other appointments included Pat Michaels (VA) and Ken Kunkel (NM). There were no other suggested members for this committee and the appointments were approved by a voice vote.

President Muller then called for a discussion of possible locations for the 1985 meeting. Myron Molnau (ID) suggested that the AASC meet in the Spokane, WA area possibly in Coeur d'Alene, ID. John James (NV) then proposed the Reno, Nevada area (possibly Lake Tahoe). President Muller underscored the need to
alternate meeting sites among regions stating that it would be appropriate to hold the next meeting somewhere in the west. He then called for a show of hands to determine the favored meeting place. There was nearly an equal number favoring each area so he deferred the decision to the Executive Committee. Professor Landsberg, who earlier in the day had received life-time honorary membership in AASC, put forth a tongue-in-cheek suggestion enjoyed by all. Namely, that the group meet one day in Reno and one day in Spokane.

The president then called for nominations for new associate members in AASC. Nominations that were approved by the State Climatologists included:

Gaylen Ashcroft  
Gene Carter  
Michael S. Flynn  
James Goodridge  
Howard Hill  
David H. Miller  
Mark Shulman  
Steve Steinke  
Philip Stenger  
Al Weiss  
John Westbrook  
James Zandlo

Tentative appointments to Committees for 1984-85 included the following:

Goals:  
James Wise (AK), Margaret Courain (NESDIS), William Lytle (SD), Robert Muller (IA), Glen Conners (KY) and John Griffiths (TX).

Education:  
Patrick Michaels (VA), Wayne Wendland (IL), Kenneth Haydeen (NCDC) and John Griffiths (TX).

Regional Opportunities:  
Peter Robinson (NC), John Purvis (SC), Nolan Doesken (CO) and Robert Muller (IA).

Computers:  
Myron Molnau (ID), Ernie Atkins (LA) and Gail Bingham (UT).

Instrumentation & Data Standards:  
Gail Bingham (UT), Kenneth Hubbard (NE), John Vogel (IL), Kenneth Kunkel (NM), Douglas Clark (WI), Fred Nurnberger (MI) and Myron Molnau (ID).

Publications:  
Paul Waite (IA), Larry Schall (IN), Earl Kuehnast (MN), John Purvis (SC) and Joseph Moyer (MD).

Other new business included an announcement by Fred Nurnberger (MI) that there will be three sessions dealing with weather subjects at the next meeting of the American Society of Agricultural Engineers. Climatologists were urged
to watch for the call for papers for the meetings to be held in East Lansing, MI in June 1985.

Nolan Doesken (CO) asked for comments on how the AASC might interact with the newly formed American Association of Weather Observers (AAWO). It was suggested that a representative of AAWO be invited to next year's meeting.

Bill Lytle (SD) informed the group of a meeting being held in Kansas City on October 10, 11 and 12, 1984. The meeting subject is Weather and Agriculture in the 1990s. The meeting is being sponsored by Research Stations of the Land Grant Universities and Regional Research Committees will be represented.

Wayne Wendland (IL) directed everyone's attention to the recent AMS Bulletin that contained a call for papers to the next conference on Applied Climatology to be held in Phoenix, AZ in May of 1985.

John Griffiths (TX) made a brief closing statement that included his appreciation for the fine job Wayne Wendland (IL) had done in making local arrangements.

Submitted by Kenneth G. Hubbard, Secretary-Treasurer
Photographs of the 1984 AASC Meeting in Chicago, Illinois.

Presentation of Honorary AASC Membership to Professor Helmut E. Landsberg.