VOLUME 20, ISSUE 1



ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF STATE CLIMATOLOGISTS

Thursday, August 3, 1995

President's Address

President David J. Smith opened the meeting by thanking NCDC for hosting the meeting at their new facility. President Smith then as part of his President's Address, summarized the results of a survey sent to all State Climatologists. Forty states responded to the survey. The survey responses indicated that State Climatologists are doing a lot with limited resources. The average length of service for current state climatologists is 9.3 years. (Copies of the full survey results were available at the meeting and can be obtained upon request from the AASC Secretary.) Smith highlighted the most important issues as: (1) quality of observations (especially coop observations); (2) public perception of services provided by the SCs; and (3) better integration of state, regional and federal programs. The greatest challenge was finding time to meet the increasing demand for climate services. while attempting to improve programs.

<u>Welcome</u>

John Hughes welcomed the group on behalf of NCDC. John also discussed the GLOBE (GLobal Observations to Benefit the Environment) Program that Don Jensen and Wayne Faas are working on. The project has K-12 students collecting climate data and submitting it to NCDC via the Internet. These data should be available on the WWW

and will be compared with nearby coop data.

Federal Programs-NCDC

Next on the agenda were reports from various federal programs. Ken Hadeen started with an NCDC update. Hadeen noted that NCDC's move to their new facilities went smoothly and that there was no disruption of operations. The Climate Services Division now also has the responsibility for servicing requests for satellite data. NCDC now receives NMC charts via a T1 line and can make laser prints of these charts for customers. NCDC is ingesting ASOS hi-resolution data from approximately 500 sites. NEXRAD data are being archived for 157 stations. A year of NEXRAD data for a single station occupies 3/4 terabyte. A Xerox Docutech printing system has streamlined the production of publications. A hierarchical data storage system has allowed NCDC to keep more data on-line. The OASIS system allows users to access 25 on-line data sets. The system hosts about 15,000 users/month and 16 gigabytes of data are downloaded per month. State Climatologists from Pennsylvania, Georgia, and Colorado participated in the 1995 SC Exchange Program.

Climate Prediction Center

Bob Bermowitz reported on activities at the Climate Prediction Center (CPC). CPC is now one of seven National Centers for Environmental Prediction. Bermowitz

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Dr. Kenneth Hadeen Director, NCDC

Dr. Myron Molnau President, AASC

John P. Hughes Editor, The State Climatologist



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...180 DAPMs and HMTs will replace 14 CPMs during 1996 reported on CLIPS (CLimate Information and Prediction Services). This is designed to strengthen a global network of centers, demonstrate the value of climate information and encourage the development of operational climate predictions. CPC is working on rewriting a statement involving public/private sector relationships to include climate services. Bermowitz informed us that the Weekly Climate Bulletin will no longer be published, but will be moved on-line by the end of the year.

Natural Resources Conservation Service

Phil Pasteris gave a presentation on the work of the Water and Climate Center of the NRCS (Natural Resources Conservation Service). Their climate database is migrating to netCDF. Other interesting projects included PRISM, production of a serially complete set of daily data, and work on a climate generator. Pasteris also discussed work on the UCAN (Unified Climate Access Network) project, which is ongoing with the Regional Climate Centers.

U.S. Forest Service

Roger Tucker brought us up-todate on the Forest Service's work in the area of weather and climate. Tucker discussed the WIMS (Weather Information Management System) computer system. He expressed concern over the abolishment of agricultural weather services by the NWS, fire weather support and the future of the Regional Climate Centers. Tucker also noted the Forest Service's need for lightning data and is looking into the best way to obtain it.

The remainder of the morning was spent on tours of the new NCDC Facility graciously hosted by NCDC employees.

Cooperative Program Forum

Tom Blackburn (National CPM) began a Coop Program Forum on Thursday afternoon. Blackburn showed some comparisons between ASOS and standard rain gauges. He reported that the NWS is testing a prototype replacement for the MMTS. He also had comparisons of different temperature sensors and shielding types.

Robert Manning (Southern Region CPM) informed the group that 180 DAPMs and HMTs will replace 14 CPMs during 1996. They will have responsibility for 2650 coop stations. The key ingredients for success are to gain confidence in the new DAPMs and teamwork between the MICs, meteorologists, hydrologists, DAPMs and HMTs. A concern is the the DAPMs will have other duties placed on them.

Bill Bland (University of Wisconsin) discussed the work of the NRC-NWS Modernization Committee. A "Climate Records Panel" has been formed. The process is underway to form a committee to look at the coop program.

Norm Canfield (University of Maryland/CPC) was the last speaker in the forum. He expressed concern over the cost of coop data. He noted that a lesser number of stations with more reliable data (per-

The process is underway to form a committee to look at the coop program.



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A new allweather gauge is being worked on. haps one station per county) might be a better alternative. It was noted that Grant Goodge (NCDC) may start weeding out stations with persistent problems due to the amount of time spent cleaning up these data.

A time for open discussion followed these presentations.

<u>Hierarchical Station Naming</u> System

NCDC's Anne Lazar gave a very informative presentation on station identity in the NWS modernization-"What's in a Name." She described a variety of problems NCDC has to deal with concerning station names. At each WFO, there can be an RFC, an upper air station, a coop station, a NEXRAD, and an ASOS station. These may or may not be co-located. Lazar outlined a plan to deal with this using a hierarchical naming system.

ASOS Continuity

The next set of speakers dealt with ASOS continuity and other issues with Tom McKee (Colorado SC) serving as Session Leader.

Andy Horvitz (NWS ASOS Program Office) addressed the issue of measurement of snowfall, snow depth and water equivalent at spin-down NWS sites. At 133 ASOS-only sites the options are 1) do nothing; 2) use data from nearby coop sites; 3) pay observers to take these observations on site. A number of SC's expressed concern over the possible loss of these data.

Norm Canfield (University of Maryland/CPC) said the NWS recog-

nizes the inadequacies of the ASOS heated tipping bucket rain gauge. A new all-weather gauge is being worked on. ASOS stations are now allowed to be "deconfigured" during the winter and use the Universal gauge for winter precipitation measurements.

Tom Lockhart (Meteorological Standards Institute) talked about wind continuity issues. The old fastest mile and fastest minute reports are being replaced with fastest 2-minute observations. He also said that ASOS wind gusts will be lower because the F420 gust recorder had a 1/2 second time constant, while the ASOS has a 5 second time constant.

Nolan Doesken (Colorado Assistant SC) handed out a questionaire concerning continuation of snow measurements at spin-down sites. He stated that the AASC needs to reach a consensus and let people know where we stand on this issue.

Tom McKee reported that their ASOS/HO83 temperature comparisons show quite a bit of spread, but on the average ASOS max temperature is about 1 degree cooler and ASOS min temperatures are also about 1 degree cooler. There is no bias between the ASOS and the field standard, but the HO83 has an approximately 0.5 degree F warm bias. The HO83 has a solar heating problem. McKee found no dewpoint bias, but the ASOS dewpoints do exhibit some "excursions".

State Reports

Some state reports rounded out the afternoon session.

Andy Horvitz (NWS ASOS Program Office) addressed the issue of measurement of snowfall, snow depth and water equivalent at spin-down NWS sites.



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Dr. D. James Baker, NOAA Administrator, was the guest speaker.

It was noted that 1996 would be the 20th anniversary meeting of the AASC.

North Carolina

Tom Keever (North Carolina Assistant SC) reported an increase in that office's service program. The office is in need of funding and may have to close if it is not received.

Alabama

John Christy (University of Alabama/Huntsville) discussed their work on tailored high-resolution forecasts and tailored products using the long-lead outlooks.

New Jersey

David Robinson (New Jersey SC) reported that his office reorganized to bring together the various climate elements at Rutgers. This reorganization and responding to a very large number of media contacts has resulted in more visibility and recognition for the program. The office's WWW homepage can be found http://climate.rutgers.edu

Annual Banquet

The AASC Annual Banquet was held at the Grove Park Inn and Country Club on Thursday evening. Dr. D. James Baker, NOAA Administrator, was the guest speaker. The title of his presentation was "Partnerships for Uncertain Times."

Friday, August 4, 1995

The AASC annual business meeting was held during breakfast at the

Federal Building's Courtside Cafe. Minutes follow:

Minutes of Business Meeting

The meeting was called to order at 7:45 am by David J. Smith.

Executive Committee Report

The meeting started with the Executive Committee Report. The idea of creating a new AASC logo was brought up for discussion. John Hughes suggested the design on the meeting packet that featured shadowed boxes with the letters AASC surrounded by drawings of a snow flake, branch with leaves, the sun and a leaf could be used. Members commented that there were too many colors and that it was too complex to be used as a logo. It was decided that other possibilities should be explored.

The next topic was the idea for the creation of an AASC homepage on the World Wide Web. This homepage could contain "The State Climatologist" newsletter and a clickable image map of the United States that would link to individual state's homepages. This homepage could possibly be hosted by the NCDC computer. Other suggestions for items that could be available the homepage on included the constitution and list of officers.

It was noted that 1996 would be the 20th anniversary meeting of the AASC. Anyone with suggestions



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C o I o r a d o reported that they are cultivating relationships with the DAPMs (Data Acquisition Program Managers).

Under Old Business, the committee on Honorary Membership presented their report.

for special events to mark this anniversary were urged to contact D.J. Smith.

Keith Eggleston reported that the arduous process of applying for federal tax-exempt status was underway and the relevant forms had been obtained. Work on this project will continue during the upcoming year.

The final item from the Executive Committee's Report was coop program efforts. We were told that a new "climate records panel" had been formed as part of the National Academy of Science's NWS Modernization Committee. The guestion was raised, "What should the AASC be doing" with regard to this panel. The consensus was that we should wait and see what this panel does in the upcoming year. Still on the topic of coop program efforts, Colorado reported that they are cultivating relationships with the DAPMs (Data Acquisition Program Managers). Such a relationship can prove beneficial for both parties. They urged other SCs to do likewise. They noted that "The State Climatologist" publication goes to NWS offices and that articles are always needed.

Other comments regarding strengthening the coop program were:

- * Articles could be written on this subject for BAMS and the NWA Digest;
- * AASC might consider producing a brochure about the coop program;

* The observer's manual should be reprinted.

Finally, it was noted that a "climate reference network" was being developed from a subset of the cooperative observers by Tom Karl. The members decided that we needed to obtain more information before this initiative could be endorsed.

At this point in the meeting it was finally determined that a quorum had been obtained and business could be conducted. The minutes of the 1994 annual meeting were then unanimously approved by voice vote.

Old Business

Under Old Business, the committee on Honorary Membership presented their report. It was suggested that the category of Honorary Members be created and added to Section IV, Number 1 in the Constitution. In addition, under Section IV, Number 4 will be added which will read:

"An Honorary Member must be nominated for the category and elected by receiving a majority of the votes of those attending a regularly scheduled meeting of the AASC. To be eligible to be nominated as an Honorary Member, an individual must meet two or more of the following criteria:

1. Been a significant contributer to the furtherance of the goals and objectives of the AASC;



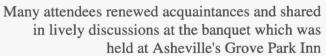
Spouse field trip to the University of North Carolina—Asheville Botanical Gardens led by Barbara Hadeen



A few brave souls pause near the summit of Mt. Mitchell, the highest point in the U.S. east of the Mississippi River



Dr. D. James Baker, NOAA Administrator, talking to AASC President Mr. D.J. Smith and wife during the annual banquet









The new Federal Plaza, home of the National Climatic Data Center and site of the 1995 AASC Annual Meeting



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Suggestions for the first official installation of honorary members were Arnold Court, Paul Waite, and Stan Changnon.

It was noted that some Honorary Members may already exist, including Harold Crutcher.

- 2. Been a former State Climatologist who made significant contributions to the field of applied climatology and/or the advancement of state climate programs;
- 3. Been a significant contributer to the area of applied climatology; or
- 4. Been a Federal Employee who consistently worked in the support of the applied climatology area and in support of the State Climate Programs.

Honorary Members will pay no dues and have no vote. They are welcome and encouraged to attend and participate in all activities and meetings of the AASC.

Nominations for Honorary Membership shall be made by the Nominations Committee which will provide a background narrative in support of the individual. Individual members are encouraged to provide suggestions and supporting documentation to the Nominations Committee for consideration of worthy individuals.

Nominations for no more than three (3) individuals shall be put forth by the Nominations Committee in any given year."

This amendment received unanimous approval. Suggestions for the first official installation of honorary members were Arnold Court, Paul Waite, and Stan Changnon.

Financial Report

Treasurer Keith Eggleston reported that the savings account balance increased by \$333.41 from

\$10,161.10 in August 1994 to \$10,494.51 in August 1995. The checking account balance as of July 1, 1995 was \$4,593.76 and \$1,030 in dues had been collected to date. Eggleston further noted that 37 members had paid their dues for '94-'95 and 28 had paid so far for '95-'96. [Several others paid by the end of the meeting.] This report was approved unanimously.

New Business

The first item under new business was the report of the Nominations Committee. Keith Eggleston was nominated for another term as Secretary-Treasurer, and Pam Naber-Knox as the new President-Elect. It was moved and seconded that this slate of officers be elected by acclamation. These officers were then approved by voice vote.

The following were nominated for Associate Membership: James R. Augustine by Bill Mork; Kathy Vreeland by Keith Eggleston; Robert Rohli by Bob Muller; Hope Poteat, Dave Barthel and Sandi St. Claire by David J. Smith; and Tim Brown by Kelly Redmond. These nominations were approved by voice vote.

It was noted that some Honorary Members may already exist, including Harold Crutcher. The minutes of previous meetings will be checked for others.

Also on the subject of membership, it was suggested that those Associate Members that have not paid dues in the past three years be purged from the membership list.



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...the Executive Committee will take under advisement electronic balloting in the future for votes on items such as nominations. meeting locations. by-law changes, and policy documents.

C a n a d i a n weather and climate services will receive a 33% cut in funding in the next 2 years and 800 positions will be eliminated.

The next item of new business was the location for next year's meeting. The suggestions were Portland, OR, Laramie, WY and Puerto Rico. The vote was 1 for Portland, 3 for Puerto Rico and 17 for Laramie. So the next meeting will be held in Laramie, WY on either August 1-2 or August 8-9.

In two final items, the Executive Committee will take under advisement electronic balloting in the future for votes on items such as nominations, meeting locations, by-law changes, and policy documents. David Robinson suggested that the Executive Committee do a follow-up survey to the one D.J. Smith reported on.

The business meeting was adjourned at 9:23 am.

Canadian Climate Services

Friday's presentations started with a report from Environment Canada given by David Phillips. reported that Canadian weather and climate services will receive a 33% cut in funding in the next 2 years and 800 positions will be eliminated. Weather services will be consolidated into 17 offices and 56 offices will be closed in the process. By 1997, all forecasts will be automated. Collecting and archival of basic data will continue, but services could be terminated if costs can't be recovered. Applied climatology will not be permitted unless it can provide revenue. Many coop stations will be closed.

State Reports - continued

California

The first of these was given by Bill Mork (California SC). He talked about the flooding in January and March. It was among the 3 wettest water years of the century, with 177% of the normal precipitation. Mork indicated his disappointment in lack of remarks in ASOS observations.

Nebraska

Alan Dutcher (Nebraska SC and High Plains Climate Center) reported on the Long-Lead Outlook workshop held by the High Plains Climate Center. He also noted that the wet spring followed by dry summer has resulted in many crops being delayed. He expressed his concern over the loss of NWS agricultural weather services.

South Carolina

Hope Poteat (South Carolina Assistant SC) reported that their office produces a weekly drought status report. The office responded to over 4000 data requests with the help of their CIRRUS system. The State Climatologist is a member of the state hurricane task force. The office has developed a WWW homepage.

Minnesota

Jim Zandlo (Minnesota SC) also discussed the impacts of recent



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Court and Waite reported that the AASC came into existence in 1976 with a meeting in Asheville.

The committee is working on other lists and tables documenting AASC history.

periods of wet, dry, and hot weather on his state. Work has progressed on keying of pre-1948 hourly temperatures and historical daily precipitation data. The office has a WWW page and gopher server on the Internet. The office has also been working on a lake water budget project.

Colorado

Nolan Doesken (Colorado Assistant SC) reported that the ASOS data continuity project is still in progress. He noted that close connections with local state NWS offices are being built. They have been publishing a state monthly climate summary for 18 years. A snow questionaire was distributed at the meeting. Doesken expects their snow booklet to be available by the end of 1996.

Oregon

Taylor (Oregon George wrapped up the morning's state reports. He reported that their WWW homepage receives about The office 500 hits/week. responded to over 4000 data requests in the last year. The balance of his report addressed work on PRISM. A publicly available version of the program should be coming out soon. Workshops will be conducted covering use of the program. The program is able to handle other elements besides precipitation (temperature for example).

AASC History

A presentation entitled "A Retrospective: What Can We Learn from

the Past?" was presented by Arnold Court and Paul Waite (AASC history) and Dick Davis (NCDC history). Court and Waite reported that the AASC came into existence in 1976 with a meeting in Asheville. There were 20 SCs, 10 NOAA representatives, 1 acting SC and 1 visitor in attendance. The committee is working on other lists and tables documenting AASC history. Bob Muller will be working on an RCC history.

Dick Davis noted some milestones in NCDC's history: 1934-Climate Atlas of the US was produced; 1936-punching of cards began in New Orleans; 1951-52-moved to Grove Arcade Federal Building in Asheville. Davis pointed out four phases in the history of NCDC: 1) Golden Age (purpose to produce a publication; 2) The Fall (exponential development of technology), 3) Purgatory (heavy criticism); 4) Climb Back (upgraded computer system and digital databases). An oral history of NCDC will hopefully be produced.

UCAN Project

Kelly Redmond, Phil Pasteris and Marc Plantico teamed up on a presentation "Connectivity between State, Regional and Federal Agencies: Making a Seamless Connection". Much of this presentation addressed the UCAN (Unified Climate Access Network) project. Redmond outlined the rationale and plans for this project. He stated that the RCCs have needed to be able to access each other's data. The NRCS UCAN proposal provided the incentive to get such a project started. The project, once



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Mary Knapp (Kansas SC) informed the group that a climatic atlas for Kansas was completed and is available.

Hal Kleiforth
(N e v a d a
Assistant SC)
suggested the
A A S C
encourage PBS
to reinstate AM
Weather.

completed, should allow for seamless, transparent access to data from all parts of the country by a user. The RCCs will initially benefit from this, but it will eventually be beneficial to others (such as SCs). The RCC computer specialists are developing a framework for data storage and transport. The Design Team (regional climatologists) is identifying products and formats. Pasteris added that UCAN will provide data, analysis and knowledge through this consortium of federal and state agencies and the RCCs. Plantico discussed the concept of a "Virtual Data Center" with more on-line data. He also noted that NCDC will be participating in the UCAN project.

State Reports - continued

Idaho

The first came from Myron Molnau (Idaho SC) via phone. He reported that the high-resolution precipitation map for the state has been finished and printed. He also reported on a wind climatology project for the Columbia Plateau, mapping of weekly precipitation, and development of a web page which contains some of the most frequently requested products.

Delaware

Dan Leathers (Delaware SC) reported that he responds to 2-3 requests/ week and has been working on a lot of Northeast-oriented research. Recent projects include a tornado climatology and a monthly water budget analysis. He also discussed differences in snowfall

amounts between coop and first-order stations across small areas due to differences in observation time and observing methods.

Kansas

Mary Knapp (Kansas SC) informed the group that a climatic atlas for Kansas was completed and is available.

Missouri

Wayne Decker introduced the new Missouri SC, Steven Hu.

Wisconsin

Pam Knox (Wisconsin SC) reported that she responds to 2500 requests/ year. There has been a recent increase in the number of requests involving insurance claims. A wind atlas is in press. She has also been working on keypunching pre-1948 data for the Midwest Climate Center.

Nevada

Hal Kleiforth (Nevada Assistant SC) suggested the AASC encourage PBS to reinstate AM Weather. He also showed slides of the Reno station and other unique and interesting locations.

Georgia

Tim Anderson (Georgia Assistant SC) reported that Bob Bell is the new SC and that the office receives nine-month funding. The office receives 5-7 requests/week. They have also developed a web site.



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The Oklahoma Climate Atlas was accepted by the Oklahoma Press and is now available.

...there were several "big events" in the Southern Region in the last year.

Michigan

Fred Nurnberger (Michigan SC) reported that comparisons between the MMTS and RM Young sensors showed the two to be very close. The Michigan office has suffered from a decrease in funding.

lowa

Harry Hillaker (Iowa SC) stated that nearly 100% of his effort is service-oriented. He does the Weekly Weather and Crop summary and also does a two-page monthly summary. The Iowa Climate Review is produced from data sent in by observers and keypunched in the office.

Alaska

Dwight Pollard (Alaska SC) reported that his office survives on a mixture of hard and soft money. The office has worked with NOAA on oceanographic and climatic analyses. They log approximately 1200 requests per year.

Oklahoma

Howard Johnson (Oklahoma Assistant SC) reported that the Mesonet's bid to get a \$200,000 line item in the state budget was vetoed. Instead it is receiving funding from the agencies using the data. The Oklahoma Climate Atlas was accepted by the Oklahoma Press and is now available.

Regional Climate Center Reports

Northeast Region

Warren Knapp (NRCC) led off by listing NRCC's new publications dealing with evapotranspiration and soil moisture estimation, a snow water equivalent atlas, and a short-duration precipitation atlas. He also noted the development of a popular lawn-watering index for the Northeast and the development of a homepage by the Center http://met-www.cit.cornell.edu.

Southern Region

Bob Muller (SRCC) reported that his Center had reorganized recently-moving from a research to service emphasis. He noted that in the area of climate impacts, there were several "big events" in the Southern Region in the last year.

Southeastern Region

Sandi St. Claire (SERCC) reported that the Center supports the state programs through grants, equipment and access to databases. Their WWW homepage has pointers to state office pages, as well as climate calendars and listings of climate normals (both requested by SCs). The SCs provide input to their newsletter, "Weather and Climate Impacts in the Southeast."



Western Region

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Kelly Redmond (WRCC) reported work in the areas of climate, salmon and hydropower. Greg McCurdy has been hired as a programmer. The Center receives 35-50 requests per day.

Midwestern Region

Wayne Wendland (MCC) noted research was performed for the development of a wind climatology. He stated that MICIS might have to be terminated if RCC funding is discontinued. This would impact SCs, since 41% of the system's use

comes from SCs. MCC has funded SC keying of historical data. Between 350 and 400 stations have been added prior to 1948. Glen Conner (KY) picked up this report by describing the QC process that has been employed for these data. They have uncovered a number of station number/name problems.

The meeting was adjourned Friday afternoon. Some participants stayed around for a field trip to Mount Mitchell on Saturday.

 Submitted by Keith L. Eggleston AASC Secretary

U.S. DEPARTMENT OF COMMERCE

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