

UNITED STATES DEPARTMENT OF COMMERCE  
U.S. WEATHER BUREAU  
WASHINGTON

June 21, 1962



IN REPLY, PLEASE ADDRESS  
CHIEF, U. S. WEATHER BUREAU  
WASHINGTON 25, D. C.  
AND REFER TO

C-3.1

MEMORANDUM

TO : Area and State Climatologists, NWRC, WRPCs, Field Aides (HC), Field Aides, River Forecast Centers, River District Offices, and Area Engineers (with copies to Regional Administrative Offices and Advisory Agricultural Meteorologists for information)

FROM : Director, Climatology

SUBJECT: Climatological Services Memorandum No. 94

1. MINUTES OF THE COMMITTEE ON CLIMATOLOGY ADVISORY TO THE U. S. WEATHER BUREAU OF THE NATIONAL ACADEMY OF SCIENCES--NATIONAL RESEARCH COUNCIL: Meeting held on 11 May 1962 at New Haven, Connecticut. The Committee consisting of Dr. Reifsnyder (Chairman), Dr. D. Carter, Dr. J. Mather, Dr. D. Miller, met at the Yale University School of Forestry, Marsh Hall at the invitation of the Chairman. The Director of Climatology, U. S. Weather Bureau, was present throughout the meeting.

Item 1 - Information Item. Dr. Landsberg distributed copies of Executive Order 11007 for the information of the Committee and indicated that the Secretary of Commerce had formally approved the Committee and its current membership, in accordance with this order. No essential changes in the modus operandi of the Committee are foreseen.

Item 2 - Progress Report by Office of Climatology. A brief review of progress by the Office of Climatology was presented. There is gratifying advance in the preparation of the Decennial Census of U. S. Climate (1960). New monthly station and division normals have been printed and distributed. Daily normals of first order stations have been prepared. Ten year summaries of hourly observations will be finished for a number of stations this fiscal year, more will follow after July 1, 1962. Normals for international CLIMAT network stations have been prepared and forwarded to the World Meteorological Organization. WMO will publish these for the whole network.

Work will soon start on the 1951-1960 Bulletin W supplement and the 1951-60 World Weather Records.

Final copy is being prepared for the Climatic City Guides for Chicago, Ill., and Houston, Texas. The climatic charts for the National Atlas are making steady progress.

The Committee will make formal recommendation to the Chief of the Weather Bureau to have charts with many or confusing lines printed in layered color tints. One committee member suggested that soil temperature charts be included in the planned program. The Committee will make recommendations for this

and possible other additions after further deliberation.

Dr. Landsberg gave a brief resume of the GSA space survey at NWRC, Asheville, which will eventually result in additional floor space for the activities there.

The status of the Soil Conservation - Office of Climatology cooperative program on climatic summaries for the County Soil Survey Reports was reviewed. The Committee requested a sample copy and also information on how these reports may be obtained.

The statewide Air Pollution surveys with climatic summaries by State Climatologists, also underway, were briefly appraised. The Committee wishes a list of those completed with the issuing agency indicated.

The moves of State Climatologists from Huron to Brookings in South Dakota and Albany to Ithaca, New York, were indicated. Prospects of future relocations to colleges or universities were briefly discussed.

Item 3 - Status of State Climatologist Program. The 3-year plan to fill the existing gaps in the ranks of full-time State Climatologists was endorsed.

The Committee will stress the importance of completing this program in a formal recommendation to the Chief of the Weather Bureau.

Item 4 - Consolidation of Weather Records Processing Centers. The plan to consolidate the Weather Records Processing Centers with the National Weather Records Center at Asheville was presented. This consolidation will take place within the next two years and lead to greater efficiency in the quality control, machine processing, printing and dissemination of climatic data.

Item 5 - Commemorative Stamp. The Committee was greatly interested in the proposal for a commemorative stamp to honor the 150th anniversary in 1964 of the order initiating widespread weather observations in the U. S. by Surgeon General James Tilton. No action seemed appropriate for the Committee, except noting the favorable endorsement by many organizations.

Item 6 - Report on Survey of Research in Climatology. Dr. Miller reported on the survey of climatological research in progress, conducted on behalf of the Association of American Geographers. The Committee entrusted with this survey met in Miami. The questionnaires for this survey have already been distributed through governmental channel in the U. S. and Canada to the various members of weather services engaged in climatology.

An attempt will be made to have the American Meteorological Society make further distribution to those meteorologists (3%) who indicated climatology as their first preference on the National Roster of Scientific Personnel and to the additional 5% who list it as second preference. Judging from 145 questionnaires returned so far the preponderance of research lies in micro- and agro-climatology, followed by regional studies and radiation and evapotranspiration. The final results of the survey will be published in the Professional Geographer.

Item 7 - NAS-NRC Committee on Atmospheric Sciences Planning Task Force Report. The Chairman presented the first two volumes of the planning study by the Committee on Atmospheric Sciences of the National Academy of Sciences "The Atmospheric Sciences 1961-1971". He indicated that a third volume on Aeronomy and Planetary Atmospheres is to follow. A number of recommendations of the Report concern climatology. These are primarily contained in the chapter on "Motions and Weather Systems", and "Biometeorology". The section headed "Climates" refers to problems of past climates, present climates and the changes, and future trends; bench mark networks; three-dimensional climatology and climatic atlases, and the proposal for a climatic research center.

Copies of the Report will be obtained for the members of the Committee and distributed when they become available.

In discussing the report, members of the Committee expressed concern about long-range implementation in relation to existing and anticipated manpower. With the contemplated expansion of research this will become acute five to ten years from now. Students starting college now cannot expect to have their Ph.D. until about seven years hence. The question is how to encourage enrollment in this field and develop a pool of climatologists who will be needed in the future both for research and operations.

The Committee will make this problem its major item of discussion at the next meeting.

Item 8 - World Data Centers. The Secretary of the Earth Sciences Division of the National Research Council has asked for comments on the continuing need for the World Data Centers set up during the IGY. The Committee noted the functions of WDC-A (Meteorology and Nuclear Radiation) operated at NWRC, Asheville. There seems to be little need to maintain a separate organization for this purpose in the climatological field. However, every effort should be made to maintain the international exchange fostered by the IGY.

Item 9 - U.S.-U.S.S.R. Scientist Exchange Program. The Secretary of the Earth Sciences Division of NRC also requested suggestions in line with the recently concluded new agreement between the U. S. and the U.S.S.R. on scientific personnel exchange. The Committee thought it would be useful if a knowledgeable U. S. climatologist with Russian language background would visit the Main Geophysical Observatory in Leningrad directed by Dr. Budyko. Several names were mentioned.

Item 10 - Roster of Personnel Suggested for Service on Advisory Committee. The Committee briefly discussed names of prospective future members of the Committee, as replacement for present members who are to retire under the National Research Council rotation policy. After further canvass of Committee members a roster will be presented to Dr. Hoover.

Item 11 - Liaison with NAS-NRC Committee on Atmospheric Sciences. The liaison with the NAS Committee on Atmospheric Sciences was reviewed. The Chairman briefed the Committee on a meeting he had held with the NAS Committee Chairman, Dr. Malone, and Dr. Landsberg. Invitations have been extended to

have Dr. Malone attend meetings, or be represented by Mr. Sievers, the Executive Secretary of the NAS Committee. The future tasks the NAS Committee plans to undertake include problems of meteorological education, hydrology and water resources, and the pinpointing of specific goals in the field.

Item 12 - Committee Report. The Chairman will prepare a brief activity report for the NRC Division of Earth Sciences and circulate it to the members for comment. He will also draft a letter to the Chief of the Weather Bureau dealing with the specific recommendations resulting from the current meeting for approval by members of the Committee.

Item 13 - Date and Place of Next Meeting. The Committee will hold its next meeting at the National Weather Records Center. The date of the meeting will be set to be right after the American Meteorological Society Conference on Climatology, at the end of October 1962.

2. SPECIAL SERVICE AWARDS. Re: CSM 92, Item 14 and Par. 1-D-5107(e) of Volume I, WB Manual. A survey of the uses made of this award indicates that it has been used very little. All those concerned with substation administration should keep in mind the purpose for which this award was designed, and should take every appropriate opportunity to issue it. A copy of the citation used should be given the same distribution as is given WB Form 531-1.

Some examples for which the award could be given are:

- a. Timely and unusual action to insure receipt of weather reports at collection centers.
- b. Actions related to weather observing or reporting beyond the ordinary "call of duty" resulting in saving of life or property.
- c. Unusual assistance or ingenuity in maintaining equipment and observations in times of emergency.
- d. Consistent or unusual service rendered a local office where other awards do not apply.
- e. As an intermediate award when significant services are rendered to warrant recognition but requirements of other awards have not been met.

3. CD MAPS TO BE REVISED. The base used for the CD map is to be revised as the maps are reprinted. The Albers equal area projection will be used. It will be several months, possibly a year or so, before all maps have been redrawn.

4. NEW STATE CLIMATOLOGISTS. Mr. Edgar J. Saltsman has reported at New Orleans WBO for service as State Climatologist for Louisiana and Mississippi. He replaced Ralph Sanders who retired. The new State Climatologist for New Mexico is Mr. Frank Houghton from the WB Office of Planning. He will report at WBAS, Albuquerque near the end of June replacing George Von Eschen who has also retired. Filling the vacancy in South Dakota caused by the move of Dr. A. B. Pack to the newly created State Climatologist office at Cornell University in Ithaca, New York, will be Mr. Walter S. Spuhler from the F&SR

Division of the Central Office. Mr. Spuhler will also report in late June and will then move the State Climatologist office from Huron to the campus of South Dakota State College at Brookings.

5. COMMEMORATIVE POSTAGE STAMP. Re: CSM 93, Item 8. The following have sent to the Postmaster General indorsements of our proposal for a commemorative postage stamp:

The New York Academy of Sciences  
 The American Medical Association  
 The Deputy Surgeon General, U. S. Army  
 The American Society of Agronomy  
 The National Society of the Sons of the American Revolution  
 The National Society of the Daughters of the American Revolution  
 Association of Military Surgeons of the United States  
 Deputy Assistant Secretary of Defense for Health and Medicine  
 The American Geophysical Union  
 The American Meteorological Society  
 Building Research Advisory Board

It is expected that a number of other organizations will also indorse the proposal. We understand that this will come before the Stamp Advisory Committee of the Post Office Department in 1963.

6. CONSOLIDATION OF WRPCs. In order that all concerned might be prepared to answer some of the questions which probably will be asked we shall attempt to give you a general idea of what we believe will take place as a result of the WRPC consolidation:

- a. Substation management functions previously performed by the WRPCs, in general, will be transferred to the RAOs. There are several exceptions to this, of course, such as the routing of forms for the Water Supply Forecasts, the supervision of special networks, etc. Special procedures will be provided in these cases.
- b. We see no great change in routing of 612-14 and 612-13 forms except that more stations will be required to make split mailings. (Although we shunned this originally a good bit of it has been practiced with very little difficulty.)
- c. Work on the arrays will be carried on essentially as in the past with the NWRC doing the work and air mailing a copy to the S/C for his review. We expect to do this in such a way that the individuals involved at NWRC will process data from the same area consistently and thereby use a high degree of experience in their judgments.

We do not believe that there should be any greater delay in release of the published data. In fact, it should be possible, eventually, to gain a day or two due to the elimination of mailing printers' copy to NWRC.

The fact that we have not been able to establish a definite schedule for the consolidation will undoubtedly result in loss of efficiency for a period of time. However, this should be resolved and we feel certain much higher efficiency will result.

To be sure, this is a move in the direction of mass operations. In fact this cannot be avoided if one is to proceed with effective utilization of mass data processing techniques.

Undoubtedly there are those who remember with a certain amount of regret the days gone by when definite advantages were noted from very personal relationships between Section Directors and cooperative observers. We would in no way detract from these values. In fact, we believe that close personal relationship should and must be formed with the cooperative observers but now it must be through the Field Aide (HC). We also believe that improved supervisory channels for Field Aides (HC) can result not only in this fine relationship but also in increased inspection efficiency.

7. STATE CLIMATOLOGIST MEETING. The meeting of the NE Area has been postponed until the fall of 1962. Present plans are to begin the second series of these meetings sometime during calendar year 1963. Several people have requested a sort of workshop or seminar covering technical problems as basis for the second series.

8. AIR POLLUTION SURVEYS. A number of State Climatologists have been requested to cooperate with Public Health Service personnel on state or community air pollution surveys. Such cooperation ranges from advice and consultation to actually assembling data and preparing a climatological summary. This appears to be an excellent type of activity for a State Climatologist. Assistance and advice are available from the Special Projects Section, Investigations Branch, O/C. Examples of work done in other states are available on loan from the above Section.

The Office of Climatology has liaison with Public Health Service personnel and also with Office of Meteorological Research air pollution investigators. It appears that there will be an increase in climatological data requirements for air pollution studies and we are now discussing the best way to fill these requirements.

9. CAGM-III TORONTO. Preparations for the Toronto Session of the Commission for Agricultural Meteorology are proceeding at an accelerated rate. Correspondence is being carried out as required with individual State and Area Climatologists, Experiment Station personnel, and others in this connection. A series of articles in the Weekly Weather and Crop Bulletin (February 12 and 26, May 14) by Mr. Milton L. Blanc, who will head the U. S. delegation, describes the history and work of this body.

10. PUBLICATIONS DISTRIBUTED TO STATE AND AREA CLIMATOLOGISTS SINCE CSM 93. "Goals in Climatology", H. E. Landsberg, reprinted from the Journal of the Washington Academy of Sciences.

List of State Geologists - mimeographed by U. S. Geological Survey.

"Washington State Freeze Circular", Stations Circular 400, Washington  
Agricultural Experiment Stations.

  
H. E. Landsberg

GUIDE TO CLIMATOLOGICAL SERVICES  
MEMORANDUM NO. 94

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