



**Western Region Technical Attachment
No. 91-13
April 2, 1991**

**HIGHLIGHTS FROM THE
SSD CHIEFS CONFERENCE**

COMET

- Rich Wagoner has compiled a database of potential Science and Operations Officer (SOO) candidates from within and outside the NWS. There are now over 60 individuals in this listing. Information such as experience level, education, short/long-term goals, and desired locations are catalogued on each individual. This is strictly an information database and voluntary. Anyone interested in becoming a SOO should contact Rich (303-497-8475) or SSD.
- Brian Heckman, COMET, demonstrated a recently developed Computer Based Learning (CBL) module on a COMET Professional Development Workstation (PDW). Very impressive! The PDWs are being procured for each future WFO, the CWSUs, and RFCs, and should be available within the next two years. A list of CBL topics, and the year they will be completed, is shown in Attachment 1.
- The National SOO/DOH Conference originally scheduled for the summer of 1991 has been tentatively rescheduled for January 1992, in Atlanta, concurrent with the AMS Conference.
- A few private companies and the National Climatic Data Center are now offering hydrometeorological data on CD ROMs. Since the COMET PDWs will feature a CD ROM reader, we felt it was important to investigate the period of record and types of data currently available on CD ROMs. This medium could provide offices with a large amount of historical data for a relatively low cost. Uses include applied research and handling public service requests.
- The first eight-week course for SOOs, COMAP I, will be held in the fall of 1991. COMAP II, originally scheduled for early 1992, will be postponed till the fall of 1992, due to the slippage in NEXRAD installations. Brad Colman, WSFO Seattle, Chris Hill, SSD, and Larry Dunn, SSD, are involved in developing the course and will help teach it.

TRAINING

- **MARINE**
Since coastal WFOs will assume marine forecast responsibility for out to 100 miles in the modernized Weather Service, approximately 500 forecasters (42 coastal WFOs) will need additional marine training. The Cooperative Institute of Applied Meteorological Study at Texas A & M is developing a Marine Reference Manual and Forecast Guide. This self-study module will be available by October 1992 and will eventually be converted to a COMET CBL. Regional workshops are also being planned to train forecasters.

- **AVIATION**
The Pilot Weather Briefer Course will soon be scaled down to 14 lessons. It will continue to be offered in the self-study format.

Biennial Aviation Workshops are planned for operational forecasters. The first will be held in December 1991 in Kansas City. The Office of Meteorology (OM) will support three forecasters from each region.

- **WARNING COORDINATION METEOROLOGIST (WCM)**
[Also Warning Preparedness Meteorologist (WPM)]
From 1970 to the present, most WCM training was basically on-the-job training on site. This was generally ineffective and uneven. The original preparedness handbook is out-of-date.

Proposals call for a short course for new WCMs--the first one was held in Norman, Oklahoma, earlier this year. A new preparedness handbook will be drafted--OM has the lead. At new WFOs, the MIC and SOO will provide initial WCM training.

NWS TRAINING CENTER (NWSTC)

- In order to meet the demand for more quality management training, it is proposed that the current three-week Management Training Course be reduced to two weeks, but require pre-requisite coursework. The pre-requisite courses would include modules from nationally-known groups that specialize in training future managers.
- The intern backlog is growing for the resident Forecaster Development Course (FDC) in all the regions. The NWSTC will investigate methods to increase course offerings.

SAN JOSE STATE UNIVERSITY (SJSU) SUMMER COURSE

It is fairly certain that a SJSU Summer Course for Met Tech cross-overs will be held in 1992. The availability of a course in 1993 depends on funding and the interest of qualified students.

Proposals were entertained to change the current course. These included shortening the course to eight or nine weeks. However, the general consensus was to keep the course much as it is but upgrade the synoptic lab and improve the pre-course math tutorial. SJSU staff would also provide all the tutoring for the math tutorial.

NEXRAD TRAINING

The four-week operations training course has been suspended since late 1990. Only one class for field meteorologists and hydrologists has been held. The reasons for the delay include the movement of the WSR-88D equipment to a permanent site at the Operational Support Facility (OSF) in Norman and changes to the course material which were recommended by the first class. The earliest that the next course could be held is mid-May, but it will probably be later than that.

The pre-cursor modules are behind schedule, however, the videotapes and workbooks should become available by this summer.

REGIONALIZATION OF NEXRAD ALGORITHMS

Most radar algorithms were developed in the early 1970s at a few select sites, and the OSF recognizes that these will not work very well at most WFOs. Generalized algorithms will be installed with WSR-88D at each site, but will be equipped with on-site adjustable parameters. This will help. The revision of an algorithm, however, will involve a more detailed process, in coordination with the OSF, and could take a year or longer.

GOES UPDATE

As reported in the Staff Notes during the past several months, the GOES-NEXT program is about three years behind schedule and substantially over budget. We are hoping to avoid a No-GOES scenario. The earliest realistic date for a GOES-I launch is October 1992. Even if all goes well, it would take six months to check out the spacecraft instruments (April 1993). Therefore, NWS/NESDIS are considering backup plans which include the possible procurement of a similar geostationary satellite from the European Space Agency or from Hughes, which builds the Japanese GMS satellites. One of these spacecraft could be used to fill the potential void between GOES-7 and GOES-I.

MOS UPDATE

The full suite of NGM MOS products should be available by the end of this year. Currently, only the PoP, mx/mn temperatures, wind, and cloud guidance is sent via the FWC AFOS category. Once the full NGM MOS package is available, TDL/NMC plan to discontinue the LFM, probably in 1992.

TDL is also developing a modified perfect prog (MPP) guidance package based on the global MRF model. This package will provide temperature, wind, cloud, and precipitation guidance out to seven days and should be available in late 1992 or early 1993. An advantage of the perfect prog approach is that it is not affected by changes in the model. The MPP output will be modified towards climatology in days 4-7.



Distance Learning Program
Curriculum Development Plan

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| 1991 | 1. Doppler radar interpretation
2. Convection initiation |
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| 1992 | 3. Forecasting heavy precipitation
4. Forecasting process
5. Mesoscale instabilities & free circulation |
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| 1993 | 6. Convective hazards to aviation
7. Marine meteorology
8. Numerical weather prediction
9. Thunderstorm & mesoscale convection |
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| 1994 | 10. Extratropical cyclone development
11. Forecasting fog & low stratus clouds
12. Detecting & nowcasting severe weather
13. Tropical forecasting |
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| 1995 | 14. Mesoscale forced circulation
15. Winter storm forecasting
16. Forecasting aircraft & structural icing
17. Turbulence & atmospheric wave motion |
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| 1996 | 18. Polar meteorology
19. Forecasting high winds
20. Forecasting main stem flooding
21. Instrumentation |