

But agricultural people don't know what's available, what can be done with what is available or what its limitations will be. Automation will free people to serve agricultural needs better, it is hoped. Lehnert said, finally, that there is a small problem in that forecasters know what they mean when they talk to each other, but the farmers don't get the same meaning when they hear the forecasts; so there must be improved communications.

Jerry Larue (NWS, Washington, D.C.) noted there have been increasing numbers of forecasts made in the last ten years, along with more watches and warnings. So the NWS has had to turn to mass dissemination in the form of recordings, VHF, and automatic communications. Contact with users has diminished greatly, so the public doesn't identify us (i.e. the NWS) as providers of services. The public is not being served by this lack of contact, therefore in the public's eye, there is a degradation of the product. And, if there is further automation, the NWS will lose control of the products.

It was noted that at a meeting of the Omaha AMS, Mr. Snellman of the NWS' Western Region informed them that since 1961, at Salt Lake City, automation has produced a leveling off in the goodness of the forecasting. A paper summarizing these results was referred to.

J. Norton (AWS) said there's dissension among forecasters who are losing jobs to automation, with the automaters pushing more automation. He agreed the product going to the public must

be improved, to gain better public acceptance. He wondered how to justify the amounts being spent on automation.

Sankey(FSS) asked the panel two questions. First, how to educate the public on available services; for example, pilots know where to look for what they need, but the public does not. Second, will the increase in demands for services brought about by increasing automation be limitless; if not, does anyone know what the limits will be?

Harrison replied that certain people can't be educated because they won't be, but even allowing for this, person-to-person contact must be retained. There was no reply on the limits question. Referring again to public contact, Gamble wondered how the public can get personal weather information, since there is no way for them to call the local NWS office. Would advertising be an answer? Harrison and LaRue both pointed out that at one time such listings were in the phone book, but no more.

This was the last of the discussion. Fawcett then summarized as follows. There are problems, but they must be made known to management. Automation is here to stay, and we must live with it. Ways must be found to live with it and to overcome the fear of losing jobs to automation. The human factor must be considered, and realistic planning needed. But, again, management needs more feedback from the people who will use the automated products. Fawcett admitted this has not been done before because management has not asked for it.

Summary of the panel discussion held at the first annual national NWA meeting,
December 14-15, 1976, on:

"THREE VIEWS ON TV AND RADIO WEATHER DISSEMINATION".

The panelists were:

Don Sarreals, NOAA
Herb Lieb, NOAA
Fred Davis, MIC, WSO Baltimore

Each panelist presented an opening statement, with discussion following. Don Sarreals led off, and prefaced his comments by noting that he no longer was on TV partly because of the problems in weather presentation. He added that stations that give problems in weather dissemination also present problems for the meteorologists who prepare the weather.

Don gave some insights on TV operations, historically and currently. Originally (in the 1950's) TV newscasts were short, and pattern-

ed after the highest standards of newspaper journalism. But it was discovered that TV stations didn't make money on newscasts, so more dynamic people were brought in to do the news. Also, equipment wasn't as advanced as it is today.

So, with time, people were brought in to do various segments of the news, like the sports and the weather. But even here the presentations were pretty straightforward. But this didn't sell either, and technological advances made more time to be filled.

Don continued: sponsorship of the news programs by the various companies probably led to the deterioration/compromise of TV news people, especially the "weathermen", because

there was now a lot more money available, and the newscasts began to become popularity contests to pull in viewers. The weather portion of the show has become abbreviated to as little as a minute and a half in some cases, and that is why NWS' products get chopped up.

With the news now a popularity contest, it was a form of entertainment. During the Vietnam war, the news was depressing much of the time. This led to the notion of "happy talk" programs to cheer up the viewers. In some circles, it was thought that the weather portion of the show provided a good opportunity for comic relief; again, make the people happy.

So, as it stands now, the people on the news shows have to make you, the viewers, more attentive for when the commercials come on. How is not important. This includes the weather people, so weather presentations have taken a beating. As long as money from the sponsors is involved, it will be like this; the NWS will butt their heads against the wall because there will be no cooperation from the media. And that's the way it is today.

Don recounted his experiences at WRC, Channel 4 here, when he was in competition with Willard Scott. There was no personal conflict between them only their approaches to the weather. Don wanted to get various types of weather equipment, but was turned down in favor of calling the NWS to get information.

Another attitude, Don continued, was that some TV managers had a fear of the weather; that it was a deep, mysterious thing. So a "stupid" weather person was brought in, who wouldn't scare anyone, and who'd keep the weather presentation simple. This is where you have problems with the charlatans who throw a bunch of "temperatures and weather" on a map and then gloss over the forecast. This practice insures the public's non-retention of the forecast so the TV "weatherman" can't be pinned down as no one will remember what he said.

On radio, there are time limitations which lead to semi-unintentional altering of the forecasts. Other stations are the "format" variety ("beautiful" music, for instance) and have no weather news at all. This brings up the problems of censorship of the news and weather, which is done so as not to interrupt the format. Thus, you won't hear things such as weather warnings on these stations.

D. Sankey (FSS, Pasadena) asked what the duties of these weather persons are, when they're not presenting the weather. Sarreals replied that there are two possibilities of duty. First, you may be a regular, eight-hours-a-day employee; so the weather is in addition to your regular announcing duties. Or, you may have a contract to do only the weather

(but other tasks are demanded of you.)

W. Smith (NWS) stated that the American Medical Association put pressure on phony doctors who pushed pills, to get off the air. Can't the same be done to remove the phony weather types? Don replied that you can complain to the station, who must keep records of the complaints for the FCC. H. Lieb (NOAA) added that once the NWA get going, it can do a great deal to eliminate "boobs" on TV, more than the NWS or others can, especially if you involve the TV managers.

Sankey wondered if the AMS has been able to curb abuses through their Seal of Approval program. Sarreals answered that people who do get the Seal are better than those who do not, but the AMS doesn't follow up on them. Besides, the AMS will not specify a format for them. Art Thomas (NWS) suggested the AMS doesn't recognize incompetence and will avoid any mention of it. Jerry LaRue (NWS) mentioned the letter to the FCC appearing in a recent NWA "Newsletter", and said it has aroused some umbrage at Wichita, Ks., where there are "good" TV weather persons. This is, in general, not the case in Washington. LaRue asked whether broadcasters would fight any attempts to remove incompetents. Don said, no, but they will attempt compromise. He reminded everyone that only a doctor can give medical advice on TV; only a lawyer can give legal advice on TV; but any damn fool can give weather advice on TV.

Tony Tancreto (NWS) described the situation in Boston; essentially, the TV stations seem to want to give a good weather presentation. Lieb stated there has been too much desire to have the FCC step in; it's best to influence the stations by dealing with the state TV and broadcasting associations, and the local managers. The FCC isn't responsive, it's powerless and it's unwilling to exert force to improve the quality of TV presentations.

The next panelist was Herb Lieb (NOAA), who expressed the following views. He knows what the weather people in this area are like, so he can sympathize with Jerry LaRue's problems. Furthermore, TV and radio are, or become, extensions of the Weather Service; the NWS is part of the broadcasting business, like it or not. He didn't think, though, that the problems with the media in the Washington area are typical of the situation nationwide. There has been overall progress nationwide in the last 25 years, but there are still a few "bad apples" around.

The most significant problems are in the area of warnings. They arise in that the MIC and staff aren't making the effort to meet with the people at the TV stations and don't know

their problems. Management can be persuaded to eliminate bad performers.

He came up with these statistics: about 97 percent of American homes have TV (as of September 1973), 98 percent have radios. There are some 368 million radios in use in these homes. So it pays to have a good presentation on the air.

Finally, Lieb said, that although editing of the forecast is done-- and not in the public's interest, necessarily,-- the NWS must not give up trying to get better presentations.

The last panelist was Fred Davis, (MIC, NWS, BAL), who described the communications system there, and their contacts with the media through:

- the local loop that has 25-30 subscribers including the major TV and radio stations;
- the NOAA Weather Wire that serves other stations;
- direct broadcasts to several stations, including two a day to WBAL, which are listened to a lot, and two a day to a station in Westminster where VHF reception is difficult;
- three marine and travelers weather recordings and a limited WE6-1212;
- an unlisted number for use by the media useful for making unscheduled broadcasts ("beepers");
- a public line which provides access to the public during administrative hours only. It's answered by a secretary whose pay is funded by the State of Maryland.

He said, that there are no problems in Baltimore with TV and radio stations, because the NWS meets with them regularly. The only difficulty arises in adverse weather, when too many demands can result in insufficient dissemination. For instance, too many calls can result in a statement not getting onto the teletype circuit or VHF as soon as it should.

The all-news stations have more time to fill so they ask for more from the NWS there. In general, though, the relations with the media are good.

Some minor confusion can arise due to the fact that there's a private weather forecaster active on one station; this confusion arises in that it's not always possible to find out who put out which forecast.

The discussion was then open to the floor.

Lieb asked Tancreto (NWS) to describe the situation in Boston a bit more. Tony did: he said relations were good. Most of the TV weathermen were meteorologists who want to make their own forecasts. There is some variability among them and the NWS, but nothing which isn't acceptable. TV stations go along with the NWS in severe weather and to a lesser degree when hurricanes threaten. Most of them as he said, want to give their own forecasts, but they'll give the NWS forecast first.

LaRue (NWS, DCA) mentioned another problem, that of grandstanders who want to forecast something spectacular all the time; in particular, they are "snowbirds" who want it to snow.

Tancreto asked whether conflict in forecasts was necessarily bad. Don Sarreals (NOAA) said no; if the people involved are qualified to make forecasts. But there should be efforts to coordinate. Tony then asked if there should be a basic product put out by the NWS, then others could give their viewpoints. Also, as an organization, what approach does the NWA take--- will it encourage diversity of forecasts on TV and radio? Many users want diverse opinions; what does the public want? Do they want several opinions? It was agreed that in a warning situation, one voice is best, but how to handle it otherwise?

Don pointed out that the weather historically was low on the journalism totem pole; it started out that way on radio and TV. So, the weathercasters have to sell themselves, especially by emphasizing the differences from the NWS, even to going out on a limb and creating confusion in the public's mind. What do the people want? A spectrum of things, but what they want most is to know what the weather will be, without getting involved in the technical details. The idea then, is to give accurate forecasts, so people will remember and come back to you--- aim to help the people.

Sol Hirsch (NESS) suggested the TV weathercasters should always identify the source of their forecast, whether NWS or not. There should be no doubt that the responsibility for the weather, especially in warning situations, belongs to the NWS. H. Lehnert (USDA-ES) proposed the education of people; that is, give the forecast and say why things will happen. He also stated that the discussion of the media problems, up until this time, had been a lost cause, that nothing would be changed.

J. Giraytys (NOAA) proposed that the NWA set up a checklist of things to look for in TV/radio presentations. This could be a project for a local NWA chapter. The list could then

be sent to all stations and to the editors of newspapers. The list would have to be objective.

End of Discussion.

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ERRATA

page 3, Vol. 1, No.1, Tornado occurred on October 11 1975.

page 7, Vol. 1, No.1, Case 3 should be February 1976.

page 12, Vol. 1, No.1, Appendix B should be corrected to read:

Transverse Circulations associated with jet streaks.

A basic characteristic of a jet streak with maximum winds exceeding the propagation rate of the core is the transverse circulations which develop in the entrance and exit regions of the jet core (Reiter 1963, Cahir, 1971).

As air parcels accelerate into the core, the ageostrophic components force a transverse circulation with rising motion in the right (anticyclonic) quadrant and sinking motion in the left (cyclonic) quadrant. In the exit region, decelerating parcels force a transverse circulation with rising motion in the left (cyclonic) quadrant and sinking motion in the right (anticyclonic) quadrant (Fig. 10).

The four cell vertical motion pattern can be related to vorticity advection (Fig. 10). The NVA at the jet-streak level in the cyclonic rear and anticyclonic forward quadrants coincides with convergence aloft and subsequent sinking motion. The PVA in the anticyclonic rear and cyclonic forward quadrants is related to divergence aloft and subsequent rising motion.

An important difference exists between the transverse circulations in the entrance and exit regions of a jet core. In the entrance region, cold air sinks while warm air rises resulting in a conversion of available potential energy to kinetic energy. Thus, the transverse circulation in the entrance region is a "direct" circulation. In the exit region, cold air rises and warm air sinks converting kinetic energy to available potential energy. Thus the transverse circulation in the exit region is an "indirect" circulation (Johnson, 1970).

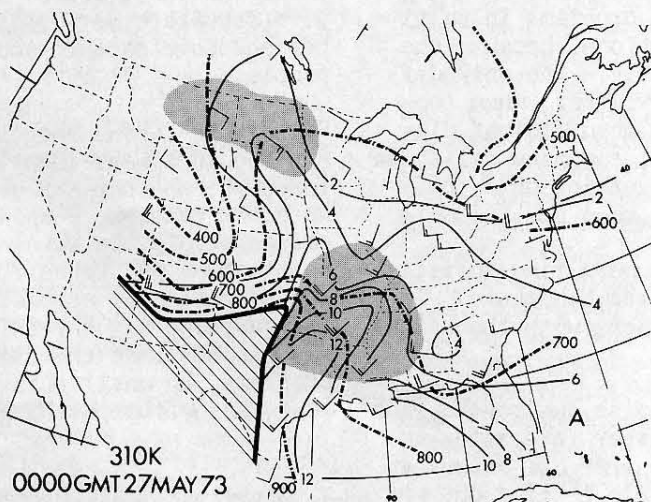


Figure 4, page 6, Vol 1, No 1, is reprinted here for easier comparison.