

*The weather communicator: An interdisciplinary specialist*

**JAMES S. BIGNEY**

Examinations of the special requirements of broadcast weather dissemination tend to indicate that good public service weathercasting is as much a matter of a high level of communications ability as it is a matter of meteorological expertise.

The development of formal standards for and recognition of a professional broadcast weather communicator is proposed. This individual's preparation is interdisciplinary and his or her activity is defined in terms of four primary roles and four basic relationships.

The individual functions as 1) Reporter/Editor, 2) Translator/Educator, 3) Electronic media technician, and 4) "Politician." He or she works within consistent, symbiotic relationships: the several publics, the science and profession of meteorology, the federal agencies, and the broadcast establishment. The individual may not be a professional meteorologist, but must be an effective, appropriately trained communicator of weather news.

The roles and relationships are explored in an introductory way. Common difficulties in weather information dissemination are acknowledged and responsibility is rather equally assigned to meteorologists and broadcasters alike.

Although the paper is, by definition, concerned with broadcasting, brief reference is made to similar problems and opportunities in the print media.

*The TV meteorologist and related interests*

**VIRGINIA BIGLER**

Contact with specific groups, such as environmental, skiing, soaring, and others can make the broadcast meteorologist more valuable to his community, most likely more interesting, and even possibly more in demand to his viewers.

*Weathercasters in action*

**GEORGE A. WINTERLING**

Observations on approaches of television meteorologists to the problem of presenting weather information to the general public in various localities is followed by a series of film-clips of weathercasters doing their thing.

## corrigenda

Program of the Eighth Technical Conference on Hurricanes and Tropical Meteorology, May 14–17, 1973, Key Biscayne, Miami, Fla., in the February BULLETIN, **54**, 147–188. In Session 8: Cumulus Structure and Modification, a line was omitted from the abstract by Orville, Hubbard, and Kopp (p. 171). The affiliations of Messrs. Hubbard and Kopp (p. 152) should have been given as the Institute of Atmospheric Sciences, South Dakota School of Mines, Rapid City, S. Dak. The first sentence of the abstract by Thaw and Feteris (p. 173) was omitted. The corrected abstracts follow.

*On the numerical simulation of cloud seeding effects in highly parameterized cloud models*

**H. D. ORVILLE,  
K. HUBBARD, AND  
F. J. KOPP**

In order to make cloud seeding experiments more quantitative several cases have been hypothesized and tested in numerical cloud models. The seeding categories are heavy and light continuous silver iodide (AgI) seeding and salt seeding. Four types of cloud water are represented in the models—cloud liquid, cloud ice, rain and graupel (or hail). The simulations are effected by changing all of the cloud liquid to cloud ice and rain to graupel at  $-10\text{C}$  for heavy AgI seeding, only the rain to graupel at  $-10\text{C}$  for light AgI seeding and the  $N_0$  parameters in the Marshall-Palmer raindrop distribution for salt seeding ( $N_0$  decreased by an order of magnitude). The effects of these changes are compared with the "natural" numerical cloud.

In the experiments conducted so far the heavy continuous seeding has resulted in less rain, the other simulated seedings in more rain with the salt case producing the most rain.

*Distribution and intensity of convective rains in relation to the stratification of the atmosphere in the tropics*

**U. SAN HLA THAW AND  
PIETER J. FETERIS**

This research has been guided by the numerical modeling of precipitation and vertical air currents by Kessler and Baumgarner (1971) in NOAA Technical Memo ERL-NSSL-54 and of precipitating convective clouds by Takeda (1971) in *J. Atmos. Sci.*, **28**, 350–376. The occurrence in the tropics of the different vertical velocity regimes predicted by their models (ranging from damped oscillations without cloud formation via short-lived showers to sustained high-speed and low-speed updrafts) is suggested by visual observation and inspection of rainfall records in the Philippines. The different types of rainfall, and additional information about the associated types of convection as deduced from satellite photographs over the area, will be related to stability with respect to moist ascent and dry descent, saturation deficit, horizontal and vertical wind distributions, and minimum perturbation buoyancy required to initiate the different kinds of convection. The concept of perturbation buoyancy may form an important link of the microphysics and cloud dynamics with larger scale dynamics.