

"AVIATION WEATHER": ALASKA PUBLIC TELEVISION HELPING PILOTS

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Abstract

Aviation's role in the life of Alaska is probably unequalled in any of the other United States. Meteorologists of the National Weather Service in Anchorage, Alaska, produce and present a half hour weather program each weeknight that is designed to assist the aviation community in flight planning. Visual aids include various maps and satellite pictures. The program is broadcast live via satellite across the entire state, and is the only television weather program available in some areas. Because of this, future plans call for the expansion of the program to include marine weather, and the simplification of the terminology so that the program is easier for the lay person to understand.

1. INTRODUCTION

The role of aviation in the everyday life of Alaska is unequalled anywhere else in the United States. It has the highest number of pilots per capita of any state. With a population of only 400,000, more than 10,000 persons have at least a private pilot's license. There are approximately 6,500 aircraft of various kinds in Alaska operating out of nearly 100 airports and countless unimproved landing strips. Since there are very few roads linking the state's towns and villages, aviation's role ranges from transportation and commerce to pure recreation. The major volume of the activity is concentrated in the Anchorage area, where about half the state's population lives.

2. BACKGROUND

Such dependence on aviation, combined with the rugged terrain, and fickle (sometimes savage) weather, has also caused Alaska to have a disproportionately large number of aircraft accidents. In 1975, Bill Jackson, former manager of Anchorage Public Broadcasting Station KAKM, realized the potential benefit of a televised weather program aimed toward aviation. A show of this kind was already being aired by the Maryland Center for Public Broadcasting in the "lower 48". He discussed the idea with the National Weather Service in Anchorage. The Forecast Office, Alaska Regional Headquarters, and National Weather Service Headquarters also saw the usefulness of such a show, and all agreed to help make it a reality.

Allan Eustis² was hired by the National Weather Service in October 1976 as the first Meteorologist/Producer of Alaska's version of "Aviation Weather". Its debut on KAKM was on December

13, 1976. A short time later, other communities in south central Alaska, including Kenai, began receiving the program by translator.

Since July 7, 1977, "Aviation Weather" has been a part of the Alaska Satellite Demonstration Project, which beams the show into remote areas beyond Anchorage. This is done by sending a signal from a ground station in Anchorage to a geostationary communications satellite, which retransmits to receiving stations on earth. The Satellite Project now brings the show into Fairbanks, and 25 "bush" villages (see Figure 1). The "bush" villages receive programs using satellite receivers and mini-transmitters. These 10 watt mini-transmitters can broadcast out about 15 miles. Added satellite facilities and cable systems are expected to bring the show into many more communities in 1979.

3. THE DAILY PROGRAM

The 30-minute program is broadcast live across the vast state (there are four time zones) each weeknight, beginning at 6:30 Anchorage time. The weather is presented by meteorologists of the National Weather Service, who spend most of the day at the Anchorage Forecast Office, compiling and condensing data and forecasts into a television script. Forecast products from Anchorage, Fairbanks and Juneau Weather Service Offices are regularly used.

Each program uses numerous visual aids. Current and forecast surface maps show fronts, pressure

¹ Presently affiliated with National Weather Service Forecast Office, Atlanta, Georgia.

centers and weather. Other maps display winds aloft at various levels, mountain pass conditions, freezing level, and other parameters which may be important or interesting on a given day (Figure 2).

Of particular importance is satellite imagery available from the Anchorage Satellite Field Services Station, which is co-located with the Forecast Office. Forecasters in Alaska can use satellite pictures from two types of satellites, geostationary and polar-orbiting. Although photos are available from the geostationary satellite every half hour, they are of limited use, due to Alaska's high latitude. The polar-orbiting satellite, on the other hand, provides more detailed imagery, but it passes overhead only twice daily. Nevertheless, pictures from both satellites are shown on "Aviation Weather", along with explanations tailored for the aviation audience. During the winter season, when there is little or no daylight, infrared pictures are used.

Each show also contains a feature segment, 10 to 12 minutes long, which is intended to improve the skill and knowledge of the Alaskan pilot. Topics include aircraft safety and care, instruction, survival, aviation history, basic meteorology, and interviews or seminars.

4. THE FUTURE

Experience and wider coverage will lead to changes in the show. Because many coastal communities are reached, more detailed marine weather will soon be included. Interestingly, some of the show's strongest support from the very beginning has been from mariners who gleaned the weather information that they needed from "Aviation Weather". Better meeting of their needs is already overdue.

The show has been criticized as being too technical, and that aviation terminology is too difficult to understand for the lay person. This became a problem especially when the program began reaching the "bush", where "Aviation Weather" may literally be the only weather program available. Although the show is designed to meet aviation's requirements, the criticism does have merit, and the language is being simplified.

The challenge in the coming months will be to walk a careful path. As the show becomes more understandable and its appeal more broad, the aviation audience must not be cheated by any simplification. The show must better accommodate mariners. Finally, it should serve the ordinary viewer in the "bush", who may have no other access to weather information. Particular care must be taken regarding this last aspect, because

²Presently affiliated with WSB-TV, Atlanta, Georgia.

the program's purpose is not to compete with commercial television weathercasts in the more populated areas. Rather, it is an alternative meant to provide a specialized service, yet be understandable or educational to all viewers.

ACKNOWLEDGEMENTS

The authors wish to thank Dr. Edward Diemer, MIC, Anchorage National Weather Service Forecast Office, and Burton D. Goldenberg, Regional Services Operations Meteorologist of the National Weather Service, Alaska Region, for their helpful comments. Richard Enders, Program Manager, KAKM, helped in tracing the growth of the "Aviation Weather" audience, and provided the map. Thanks also to Frances Parmenter, Chief, Anchorage Satellite Field Services Station, for her comments concerning weather satellite facilities and this paper. Finally, thanks to Warren Runnerstrom, Public Affairs, Alaska Region, Federal Aviation Administration, for statistical information regarding aviation in Alaska.

REFERENCE

Office of Telecommunications, Office of the Governor, State of Alaska. "Satellite Television Demonstration Project", Final Report, Vol. 1, February 1, 1978.

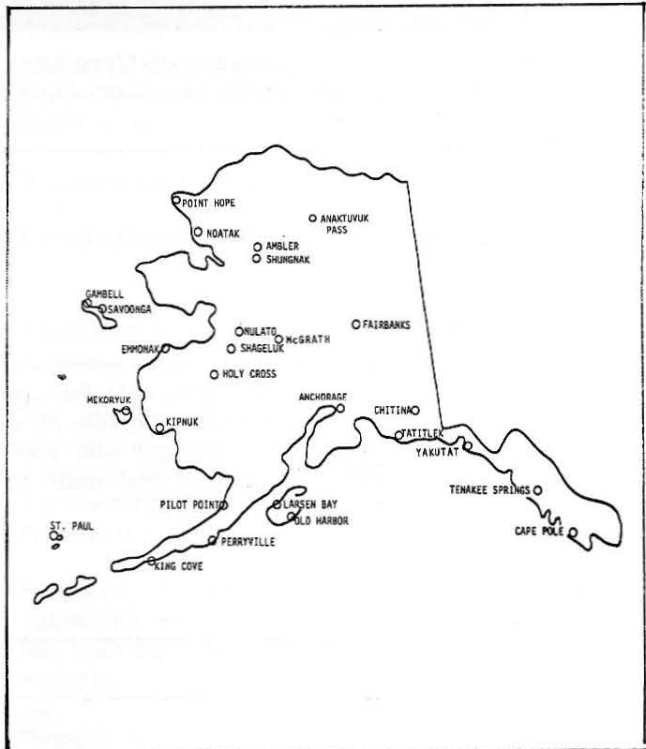


Figure 1. Map of Alaska showing towns and villages now receiving "Aviation Weather". Anchorage and vicinity receives the program through the transmitter and translator facilities of KAKM. The remaining areas receive the show by satellite, through the Alaska Satellite Television Demonstration Project.

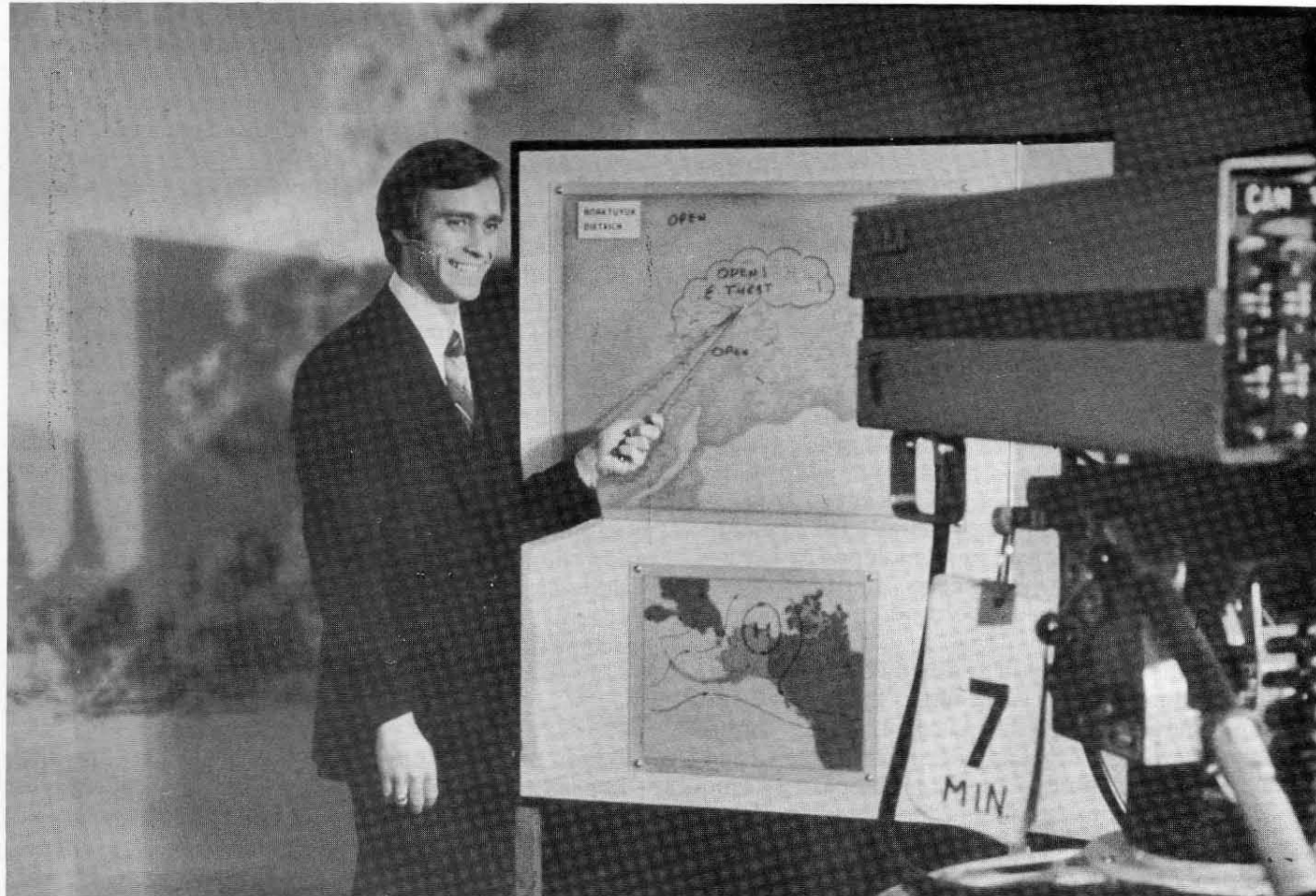


Figure 2. Eric Meindl, meteorologist/producer of "Aviation Weather", discusses flying weather through some of the mountain passes of Alaska on the program, which airs each weeknight for thirty minutes.

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