

Doc. 29467/1-4.16 Ref. Doc. 28993/1-4.16 UNITED STATES DEPARTMENT OF COMMERCE National Telecommunications and Information Administration Annapolis Office

179 Admiral Cochrane Drive Annapolis, Md. 21401

WIRI GITT

September 22, 1995

William D. Gamble Deputy Associate Administrator, NTIA U.S. Department of Commerce Washington, D.C. 20230

Dear Mr. Gamble,

As you are aware, the working group on 404 MHz wind profilers chaired by Gary Patrick/NTIA recommended an extension of operating authority for the period of April 1, 1995 to September 30, 1995. During this period, a number of constraints continued to be imposed on 404 MHz profilers to protect the safety-oflife Cospas-Sarsat satellite system. These constraints included: 1) low mode output power was reduced on Wind Profiler Demonstration Network (WPDN) profilers to a maximum of 4 kW, 2) emissions from each WPDN profiler are inhibited whenever a Cospas-Sarsat satellite passes within 41 degrees of the zenith above that profiler, and 3) emissions from each non-WPDN profiler are inhibited whenever a Cospas-Sarsat satellite passes within 85 degrees of the zenith above that profiler.

During this period and operating under the constraints described above, there has been only one WPDN profiler detected by Sarsat. This occurrence, the first since February 25, 1995, was on one satellite pass on August 7, 1995. NOAA, as the agency responsible for both Sarsat and majority of 404 MHz profilers, has investigated and corrected the problem, caused by a combination of communications failure and human error.

In addition, during this period further tests have been made that could assist in changing the existing operational wind profiler constraints (i.e., power, inhibit elevation angle). These include closed-system tests on the Sarsat Search and Rescue Processor(SARP) instrument to determine the impact from 404 MHz wind profiler emissions and measurements of the WPDN antenna pattern at 406.05 MHz.

At this time, system analyses using the results of these tests have not been completed. As a result, we recommend that existing assignments for 404 MHz wind profilers be extended until September 30, 1996, using the same constraints as defined in the previous extension. The United States Mission Control Center (USMCC) will continue monitoring interference to Sarsat during this period. We anticipate that a further extension will be requested at that time. Furthermore,

modifications to existing wind profiler constraints during this one year period would require coordination and appropriate testing using selected wind profiler(s) and satellite passes. This procedure would allow proper validation of any suggested changes to current profiler operations, thus minimizing long-term impact to the Cospas-Sarsat system.

Sincerely,

Gary Patrick Chairman

Arthur Radice Army Representative

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Wayne Wamback AF Representative

Ronald Grandmaison CG Representative

Richard Barth DoC Representative

Michael Grunden Navy Representative

H: Frank Wright FCC Representative