

Specification 5100-454  
December 1963

U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

SPECIFICATION FOR

ANEMOMETER, FLOATING BALL TYPE, PLASTIC

A. General

A.1. Purpose and Description. The floating ball type Anemometer is a pocket-size wind velocity meter, used to estimate the wind speed in miles per hour, for fire-weather data. It will fit into the Belt Mounted Fire-Weather Instrument Kit, USFS Standard Specification No. 5100-452. Overall dimensions of the instrument and case must therefore not exceed 3" width, 8" height, and 3/4" thickness. Weight of the instrument and case shall not exceed 3 ounces.

A.2. Contracting Officer's Instructions.

A.2a. Required Options. Bid invitation and orders must specify options selected by the Contracting Officer under the following sections:

Section E.1a. Specify arrangement for qualification tests if the prospective bidders have not previously had their products qualified.

Section E.1b. Specify arrangements for acceptance inspection and tests.

A.2b. Other Options. If desired, bid invitation and orders may specify options selected by the Contracting Officer as to packing or marking.

A.2c. Warranty. Bid invitations and orders will specify that the contractor shall agree to replace without cost to the Government, all products or parts furnished under this specification that are found to be defective due to workmanship or materials.

B. Other Applicable Plans and Specifications. None.

C. Requirements.

- C.1. General. The instrument shall consist of a transparent case, housing on integrally moulded dual scale of non-corrosive metal, and an accurately calibrated, tapered flow-meter tube. A plastic float ball, housed within this tube shall indicate wind velocities by direct reading on the calibrated scales. Such readings to be accurate within  $\pm 1/2$  MPH on the lower scale of 0-10 MPH, and within  $\pm 3$  MPH on the upper scale of 2-60 MPH.
- C.2. Performance. Performance shall not be impaired by repeated exposure over periods of 8 hours, to ambient temperature of  $+ 150^\circ$  F.

- C.3. Cleaning Materials. With each instrument shall be furnished 3 or more cleaning rods, suitably treated with an effective anti-static treatment for cleaning the flow-meter tube (pipe cleaner type). Also 3 or more plastic rods of nylon or similar material, for cleaning the flow-meter orifice, shall be included.

- C.4. Instructions. Instructions for the use, care and cleaning of the instrument shall be clearly printed on the instrument and within the case.

D. Preparation for Delivery.

- D.1. Packing. Unless otherwise specified by the Contracting Officer, floating ball type anemometers shall be packed according to standard commercial practice to insure acceptance by common carrier and Post Office Department, for safe transportation at the lowest rate.

- D.2. Marking. Unless otherwise specified by the Contracting Officer, each shipping container or package shall be marked in accordance with FPD-STD-123 with additional special markings as follows:

E. Method of Sampling Inspection and Test.  
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- E.1a Submission of Sample. The prospective contractors shall furnish without cost to the Beltsville Radio Laboratory, Agricultural Research Center, Beltsville, Maryland, two samples of the products to be furnished under this specification. The Government assumes no responsibility for samples submitted for qualification.

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E.1b. Inspection and Test of Sample. The sample submitted in accordance with Section E.1a. shall be examined for important defects and conformance to this specification, and to determine if the product meets the field requirements of the Forest Service.

E.1c. Classification of Defects. The classification of defects shall be in accordance with MIL-STD-105B and the acceptable quality level shall be 10.0.