ORIGINAL

REVISIONS				
SYMBOL	PREP BY	DESCRIPTION	DATE	APPROVAL

PREPARED BY John P. Lawrence	DATE 7/22/85	TITLE Procurement Specification for a Thermostatic Switch (Elmwood Sensors)
APPROVED George P. Kramer, Jr.	7/22/85	
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		# S-311-426

Branch – PARTS
Division –
Project –

GODDARD SPACE FLIGHT CENTER
GREENBELT, MARYLAND

520-23 (3/64)

1.0 SCOPE: This document defines the special requirements to be specified by the user and acceptance test requirements to be performed by the manufacturer (Elmwood Sensors Inc.) prior to shipment.

2.0 GENERAL

2.1 Intended Application: These thermostatic switches must meet the rigors of launch and subsequent extended spaceflight with extremely high probability of successful operation.

2.2 Standard Test Conditions: Unless otherwise specified, all tests, measurements, inspections and examinations shall be conducted under the following conditions:

a. Temperature - +15° to 35°C

b. Relative Humidity - 30 to 80 percent

c. Barometric Pressure - 750 to 800mm of mercury

2.3 Recording and Shipment of Data: Acceptance test data shall be recorded on data sheets suitable for the purpose. Data shall be related to the respective switch serial number. A copy of the data summary shall be shipped with the switches.

3.0 REQUIREMENTS: The total switch requirements are comprised of those delineated in:

a. The purchase order/request (see para. 3.1)

b. Para. 3.2

3.1 Purchase Order/Request Requirements: The purchase order/request shall specify the following:

a. The physical configuration desired

b. Define the temperature set points as maximum temperature and minimum temperature with 20°F minimum spread between maximum and minimum limits and with

a 7°F minimum differential. Specify whether the switch should open on temperature rise or close on temperature rise,

or alternately,

define open or close as the critical set point with a tolerance of ±5°F and allow the other set point to float 7 to 20°F above or below the critical set point.

3.2 Inspection, Screening and Quality Control Requirements: The following Elmwood Sensors Inc. (Cranston, Rhode Island) documents, in effect on the date of imitation for bids, or request for proposal, form a part of the switch requirements. Unless otherwise specified, the entire document applies:

a. PS2204 - Pre-cap Inspection for Hi-rel Switches 1/

b. PS2229 - Small Particle Cleaning Station Operation 2/

c. SR109-1 - Special Requirements and Procedures for Group "A" Inspection 3/

d. ES1177 - Group "B" Inspection Procedure

e. PS2000-11 - Plating Specifications (Nickel Plate-Dull)

Reference:

1/ Pre-cap visual inspection - 100 percent of specimens.
2/ Millipore cleaning and inspection - cleaning, 100 percent; inspection 2 percent.
3/ Screening tests - 100 percent of specimens.
4/ Group "B" tests - 4 specimens from Group A screening.