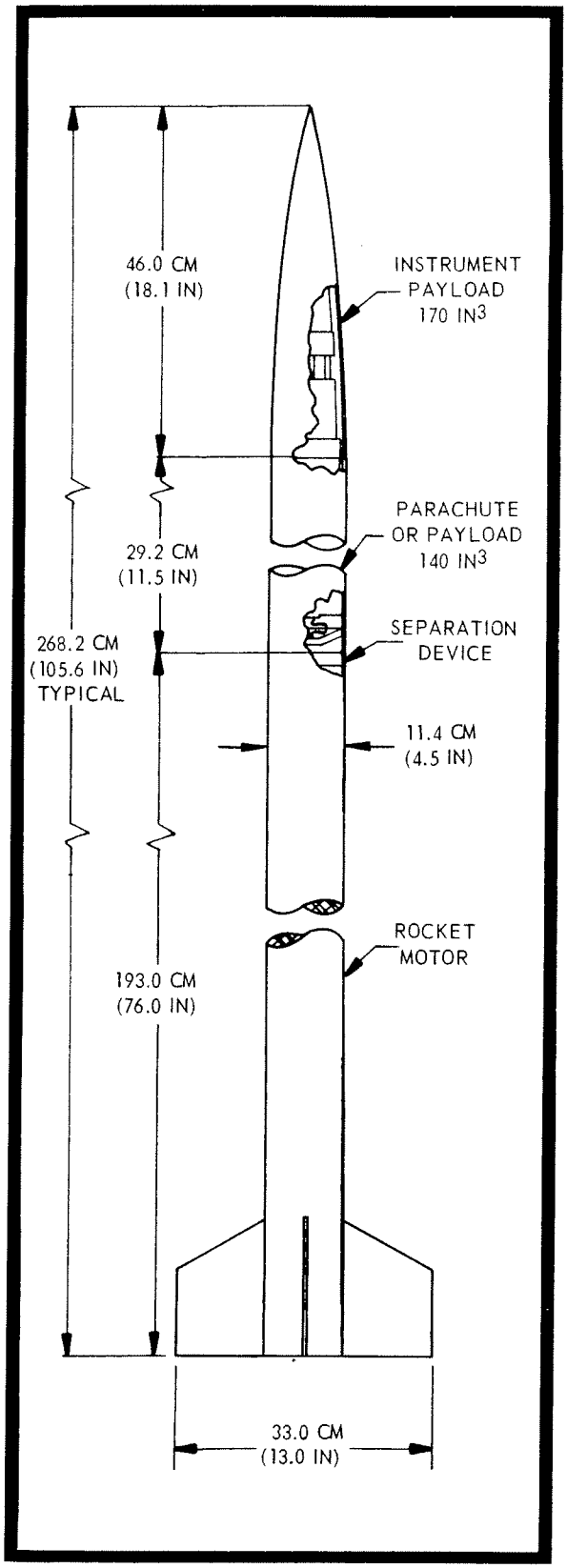

The ARCTURUS is a low-cost sounding rocket system, developed under a company-sponsored program, to meet the ongoing needs of the worldwide meteorological sounding community. The system can accommodate both existing and projected third-generation meteorological and research payloads.

Features of the new system include:

- Low-cost design
- Increased altitude, to 300,000 feet
- Low wind sensitivity and dispersion, permissible launch winds to 38 knots
- A transponding payload for use with second- and third-generation ground stations
- An improved descent device, with standard payload ballistic coefficients ranging from 0.025 to 0.035.

The ARCTURUS can be launched from existing standard ARCAS launchers installed at major launch sites all over the free world. Assembly and launch preparation can be accomplished by a relatively unskilled two-man crew.

VEHICLE DATA

Rocket Motor, Dual Thrust	
Burn Time: Boost Phase	0.3 sec
Sustain Phase	29.4 sec
Thrust: Boost Phase	220 kg (485 lb)
Sustain Phase	159 kg (350 lb)
Propellant	Solid, composite
Igniter Current	5-amp firing current (1.2- to 1.5-ohm resistance)
Storage	Two years, minimum
Temperature Limits	-45°C to +55°C (-50°F to +130°F)
Payload Separation	
Method	Gas pressure (pyrotechnic delay)
Initiation	Electrically
Delay	155 sec (adjustable)
Payload Housing	
Threaded Cylinder	Length optional
Material	Aluminum, 1 mm (0.040 in) thick wall
Nose Cone	
No. 10	46.0 cm (18.1 in) long, 170 in^3
No. 8	57 cm (22 in) long, 230 in^3
Material	Asbestoes phenolic or fiber glass
Launch Accessories	Piston and foam spacers furnished with each vehicle

ARCTURUS

For further information, contact: PROPULSION DIVISION
ATLANTIC RESEARCH CORPORATION
A Division of THE SUSQUEHANNA CORPORATION
Shirley Highway at Edsall Road, Alexandria, Virginia 22314
Telephone: 703-354-3400 TWX: 710-832-9828 Overseas Cable: ATRECO

™ Trademark of The Susquehanna Corporation

© THE SUSQUEHANNA CORPORATION, 1968
PRINTED IN U.S.A.

5C-1-68