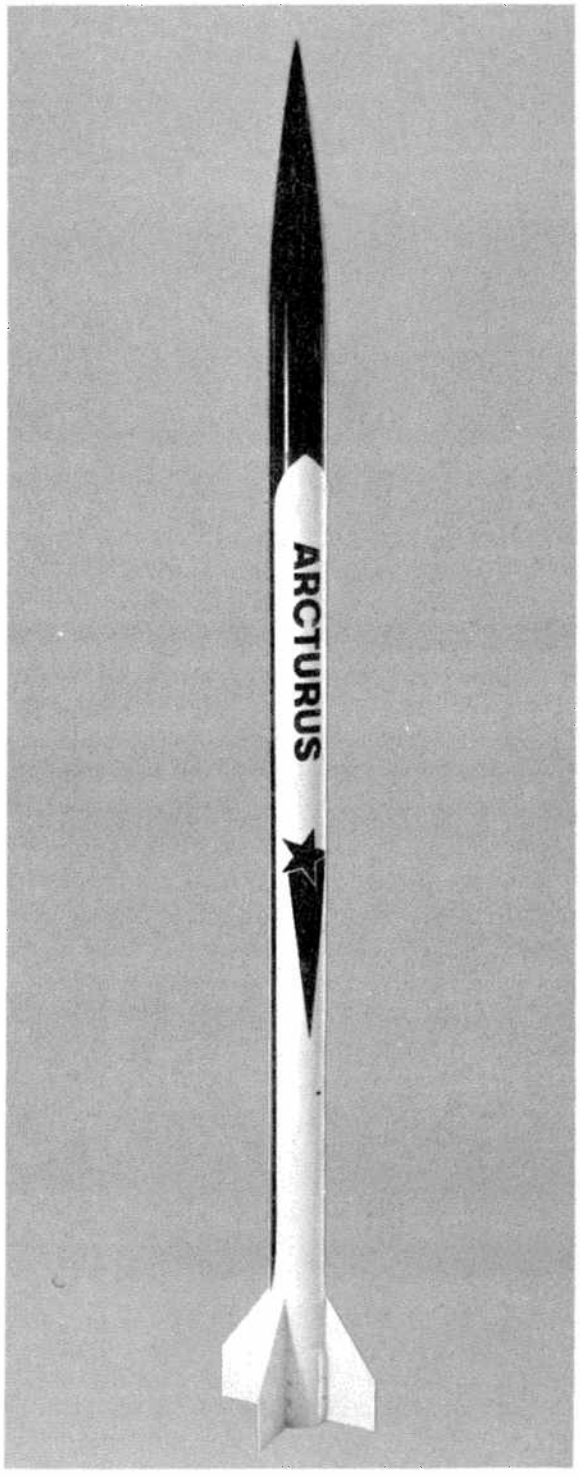
PROPULSION DIVISION

UPPER ATMOSPHERE SOUNDING VEHICLES

ARCTURUS™



PERFORMANCE DATA

Payload*
- Weight - 3.6 to 11.5 kg (8 to 25 lb)
- Diameter - 10.8 cm (4.25 in)
- Length (nominal) - 66 cm (26 in)

Launch Data
- Payload - 4.1 kg (9.0 lb)
- Launcher - - - - - - - - - - - - - - - - - - ARCAS closed breech
- Gas Generator

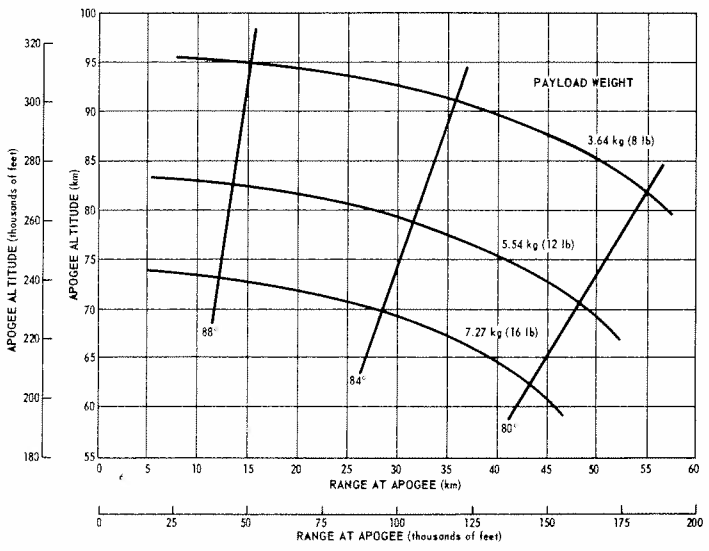
Augmentation	Exit Velocity	Acceleration
None	65.5 m/sec (215 ft/sec)	50 g
One	106.7 m/sec (350 ft/sec)	110 g

- Maximum Launch Winds - - - - - - - - - - - - - - - - 19.5 m/sec (38 kn)

Vehicle Flight Details
- Launch Angle, Sea Level - 84°
- Payload - 9 lb
- Burnout Velocity (approx.) - - - - - - - - - - 1220 m/sec (4000 ft/sec)
- Burnout Altitude (approx.) - - - - - - - - - - - - - - 19 km (66,000 ft)
- Time to Apogee - 155 sec
- Nominal Spin Rate at Burnout - - - - - - - - - - - - - - - - - 20 rps

Weights (with Standard Payload)
- Launch - 39.0 kg (85.8 lb)
- Burnout - 17.3 kg (38.0 lb)
- Standard Nose Cone and Cylindrical Housing - - - - - - - - 0.91 kg (2 lb)

*The payload size shown is standard; longer and heavier payloads can be flown. Length/weight relationships are governed by vehicle stability requirements.



ATLANTIC RESEARCH