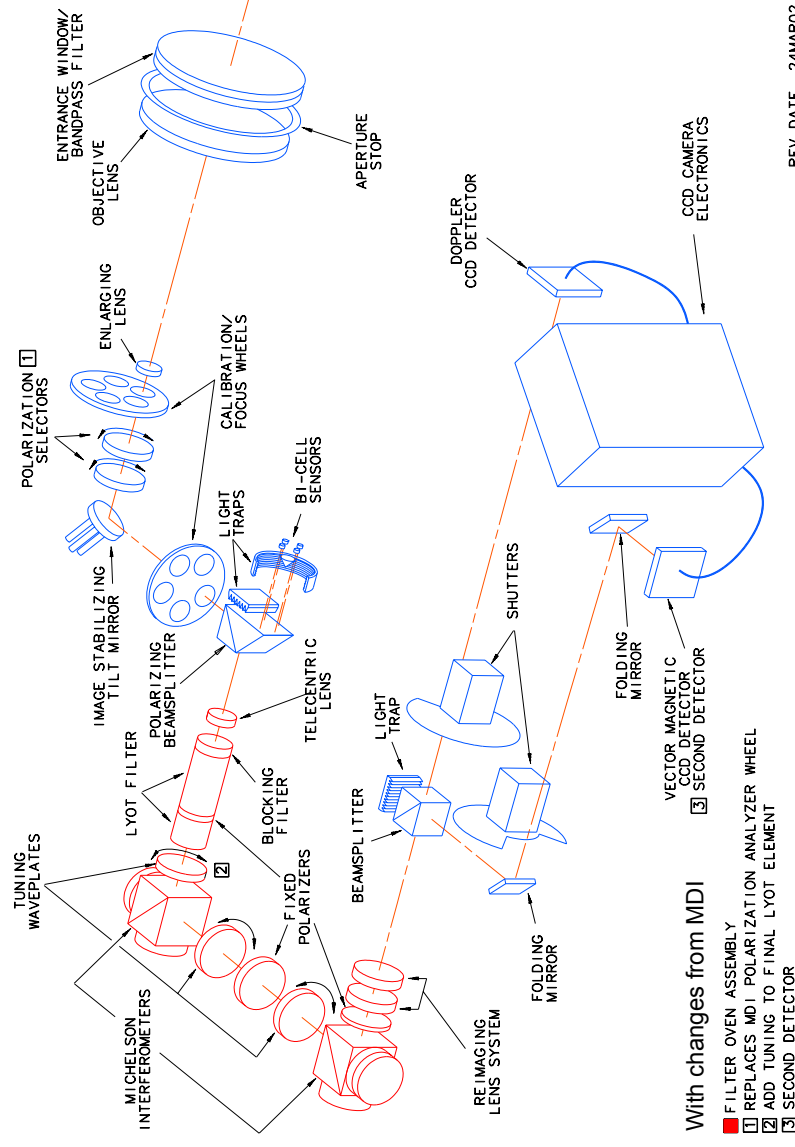
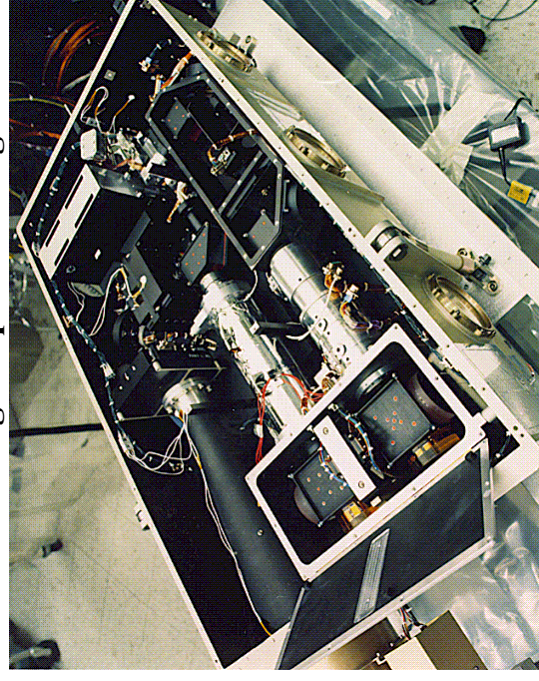


2.E - HMI Functional Block Diagram

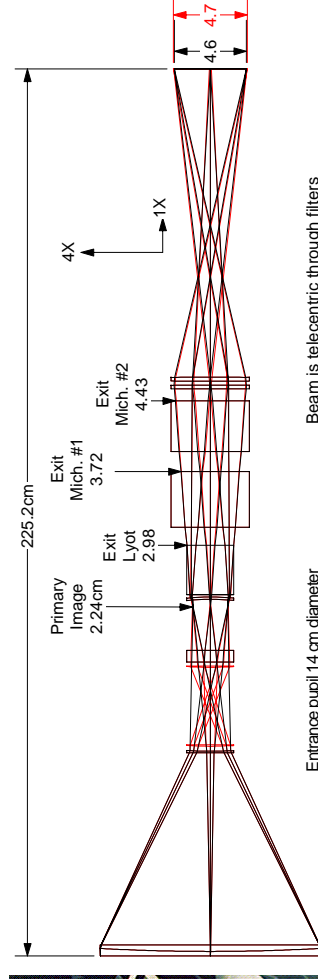


2.A - HMI Optical Schematic and Layout

2.D - MDI Flight Optics Package



Superimposed Calibration and Imaging Modes



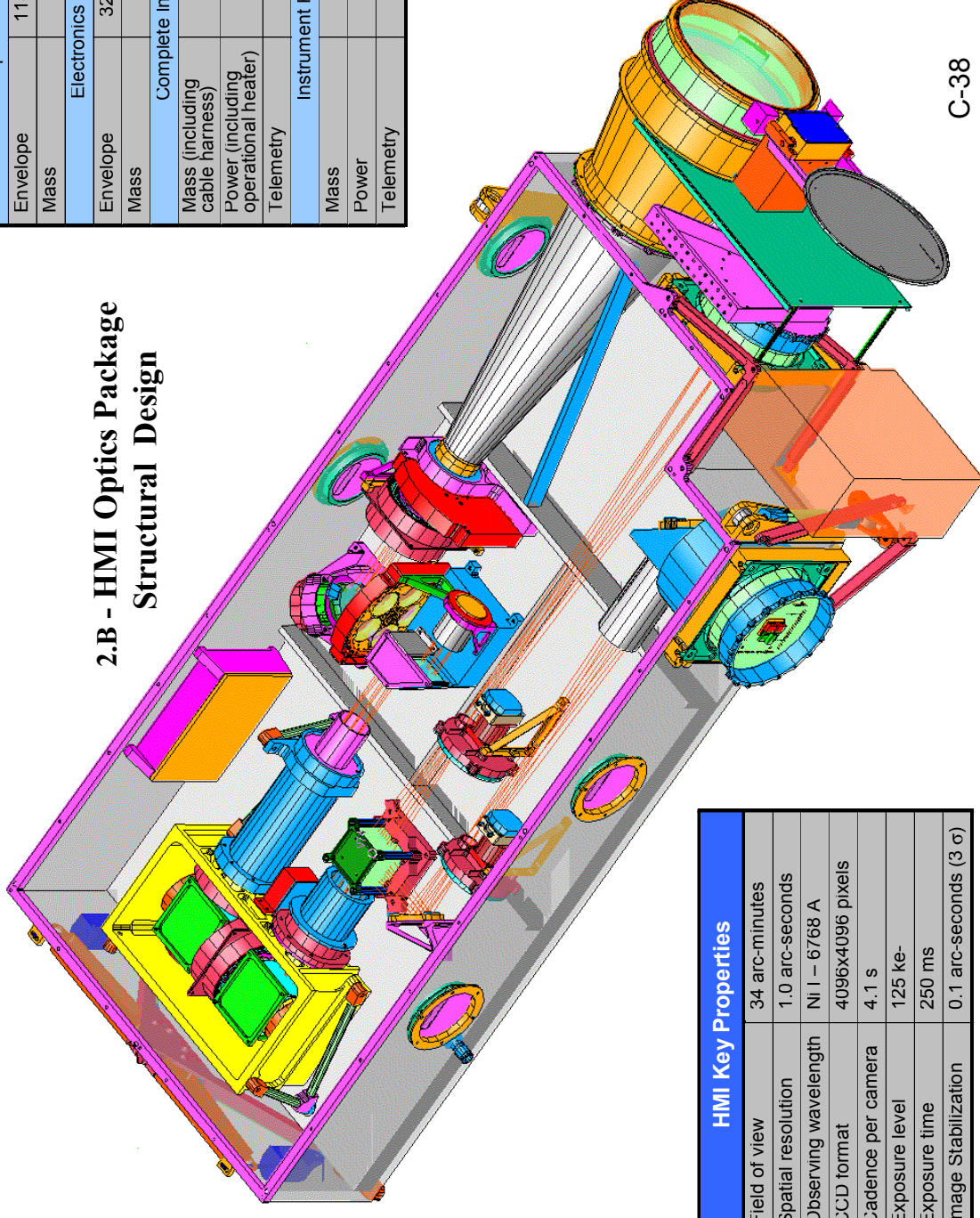
Entrance pupil 14 cm diameter
EFL 485 cm, Total path 225 cm
Image size 4.60 cm for 32.64 arc-min

Beam is telecentric through filters
Focal ratio at final image 34.6
Focal ratio inside Lyot filter 30.3

2.C - HMI Optical Design Raytrace

HMI Resources	
Optics Package	
Envelope	118 cm x 53 cm x 24 cm
Mass	28 kg
Electronics Package	
Envelope	32 cm x 28 cm x 21 cm
Mass	15 kg
Complete Instrument	
Mass (including cable harness)	46 kg
Power (including operational heater)	60 W
Telemetry	50 Mbit/s
Instrument Reserves	
Mass	9 kg
Power	12 W
Telemetry	5 Mbit/s

2.B - HMI Optics Package Structural Design



HMI Key Properties	
Field of view	34 arc-minutes
Spatial resolution	1.0 arc-seconds
Observing wavelength	NI I - 6768 Å
CCD format	4096x4096 pixels
Cadence per camera	4.1 s
Exposure level	125 ke-
Exposure time	250 ms
Image Stabilization	0.1 arc-seconds (3 σ)