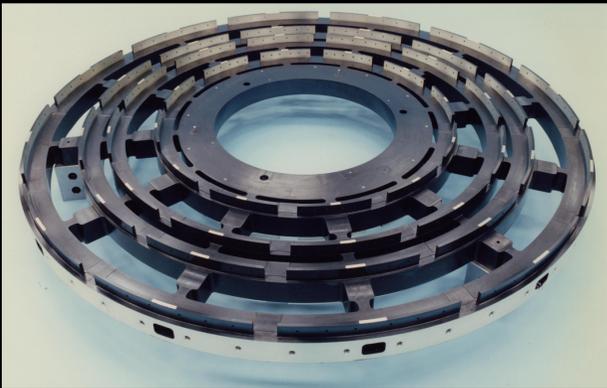


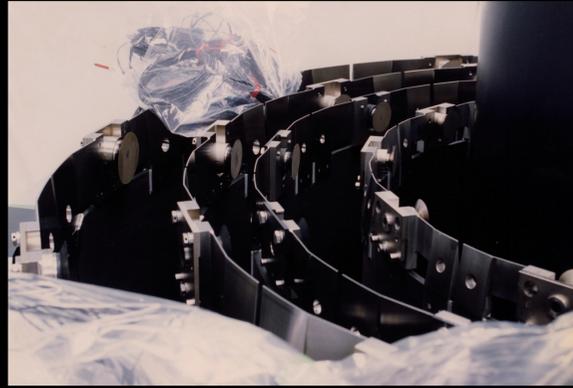
Verification Engineering Test Article (VETA) - II: The Path to a Successful Flight Build

Gary Matthews (ITT), Jeff Wynn (ITT Retired), Charlie Atkinson (NGAS)

VETA-II Center Aperture Plate replicated the HRMA CAP



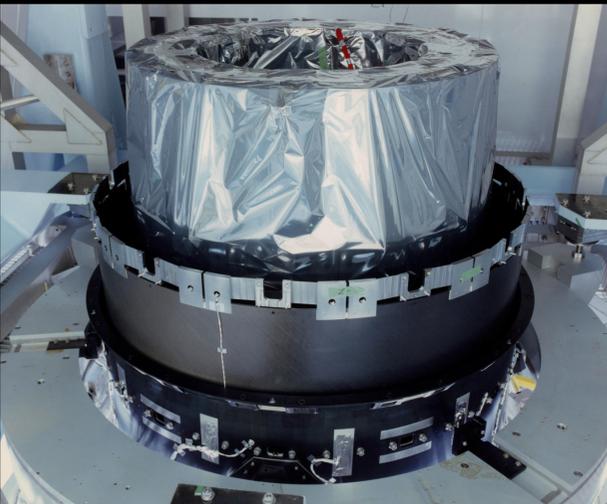
HRMA Structure included flexures for all mirrors



Partially assembled VETA-II P-mirror simulators installed



VETA-II with P1/H1 aluminum mirror simulators removed. Ready for tower alignment demonstration



H1 aluminum simulator integrated onto Mirror Alignment System (MAS)



H1 simulator moving to alignment tower



Uncoated P1 mirror moving into alignment tower on MAS



Uncoated P1 mirror on parts carriage for installation onto VETA-II



H1 simulator moving into position for the VETA-II handling demonstration



Close-up of MAS offloader on H1 mirror



The success of the HRMA alignment and the ultimate performance of the observatory is linked to the high fidelity process development enabled by the VETA-II "build" with aluminum mirror simulators and the real uncoated P1/H1 mirrors. The mirror bonding process was initially unsuccessful and would have led to unacceptable system performance without the VETA-II.