

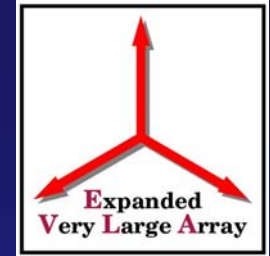
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# EVLA Monitor and Control

## Monitor & Control Transition



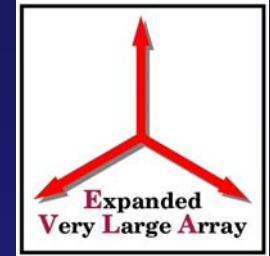
# Antennas



- Antennas – Front Ends
  - Not all Front Ends Will Be EVLA Until 2010
    - ◆ F320 FE Transition Module
    - ◆ Interfaces up to Two F14's
    - ◆ Uses A/D Design by George Peck
    - ◆ In-House Design Simulates VLA Dataset



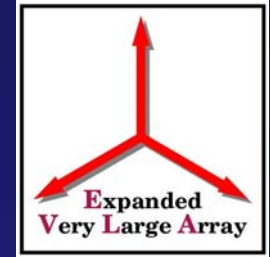
# Antennas



- Antennas – Wye Monitor System
  - M302 Utility Interface Replacement
    - ◆ Wye-Com Cable Will Disappear
    - ◆ Reduce Two M&C Systems into One
  - Consolidate Functions to Their Devices
    - ◆ Reduce Number of External Functions



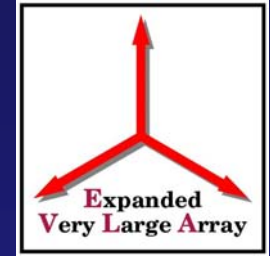
# Antennas



- Antennas – ACU and FRM Systems
  - ACU & FRM System Replacements Not Part of EVLA Phase I
  - ◆ Bob Broilo Designed Interface
    - ◆ Interface is Between MIB and DCS System
    - ACU & FRM if Replaced Early Will be Paid by Operations or EVLA Contingency



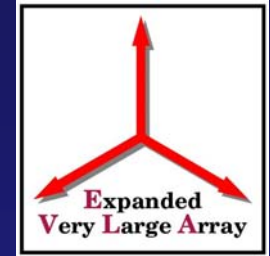
# Control Building



- Control Building To Antennas
  - EVLA Antennas Connect to EVLA M&C
    - ◆ Includes Transition Modules
  - SLC Operates VLA Antennas
    - ◆ Operates EVLA at VLA Baseband Until New Correlator is Installed
    - ◆ No VLA Baseband Transition for the New Correlator



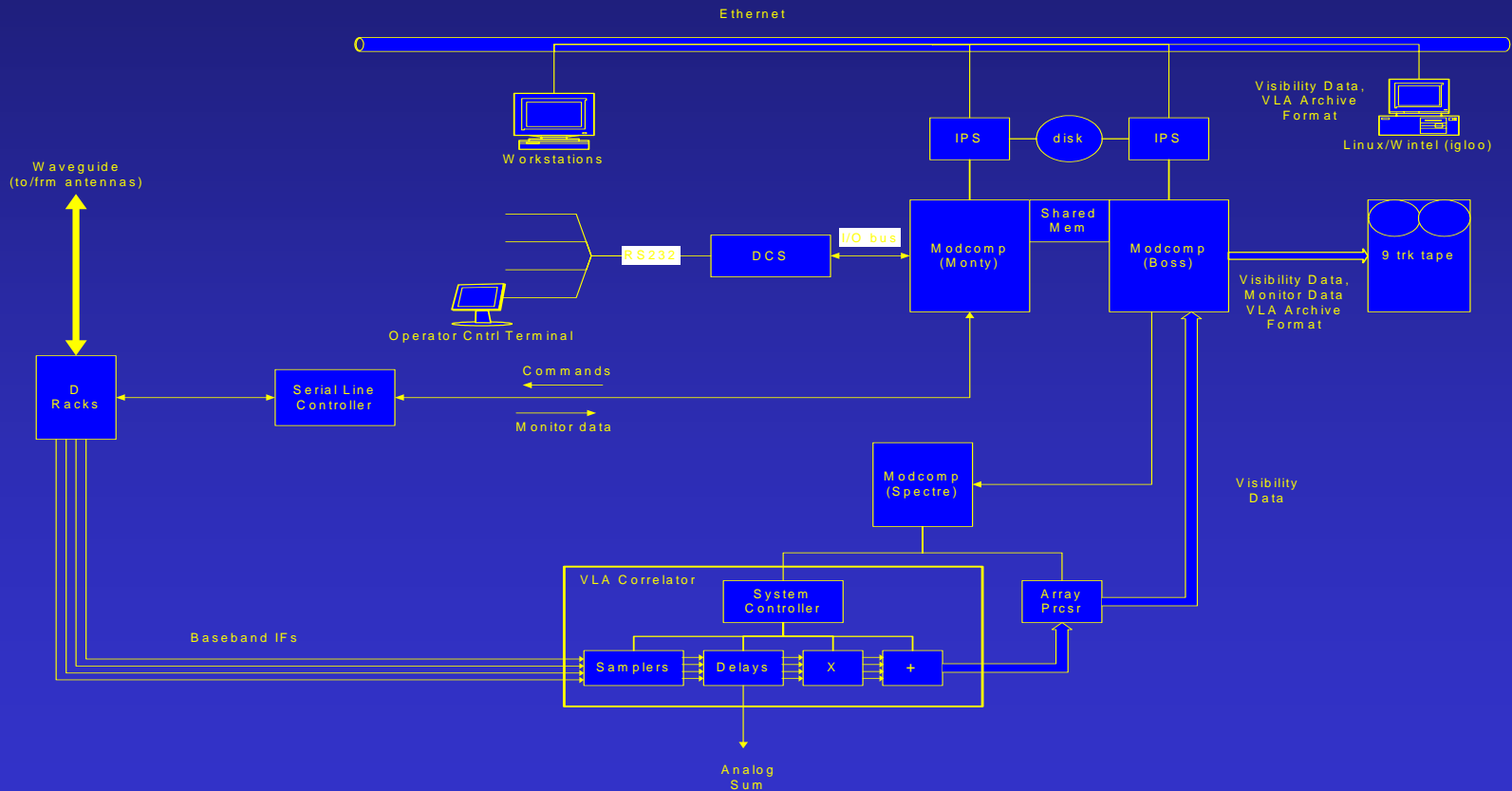
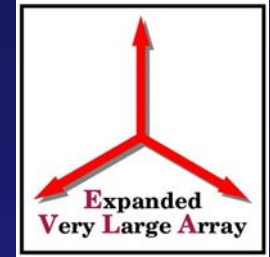
# Control Building



- Control Building to Master Rack
  - EVLA Master Rack Connected to EVLA M&C
  - SLC Controls VLA Master Rack
  - SLC is Connected to Modcomps
    - ◆ Upon Modcomp Retirement SLC will be Placed under Control of EVLA M&C

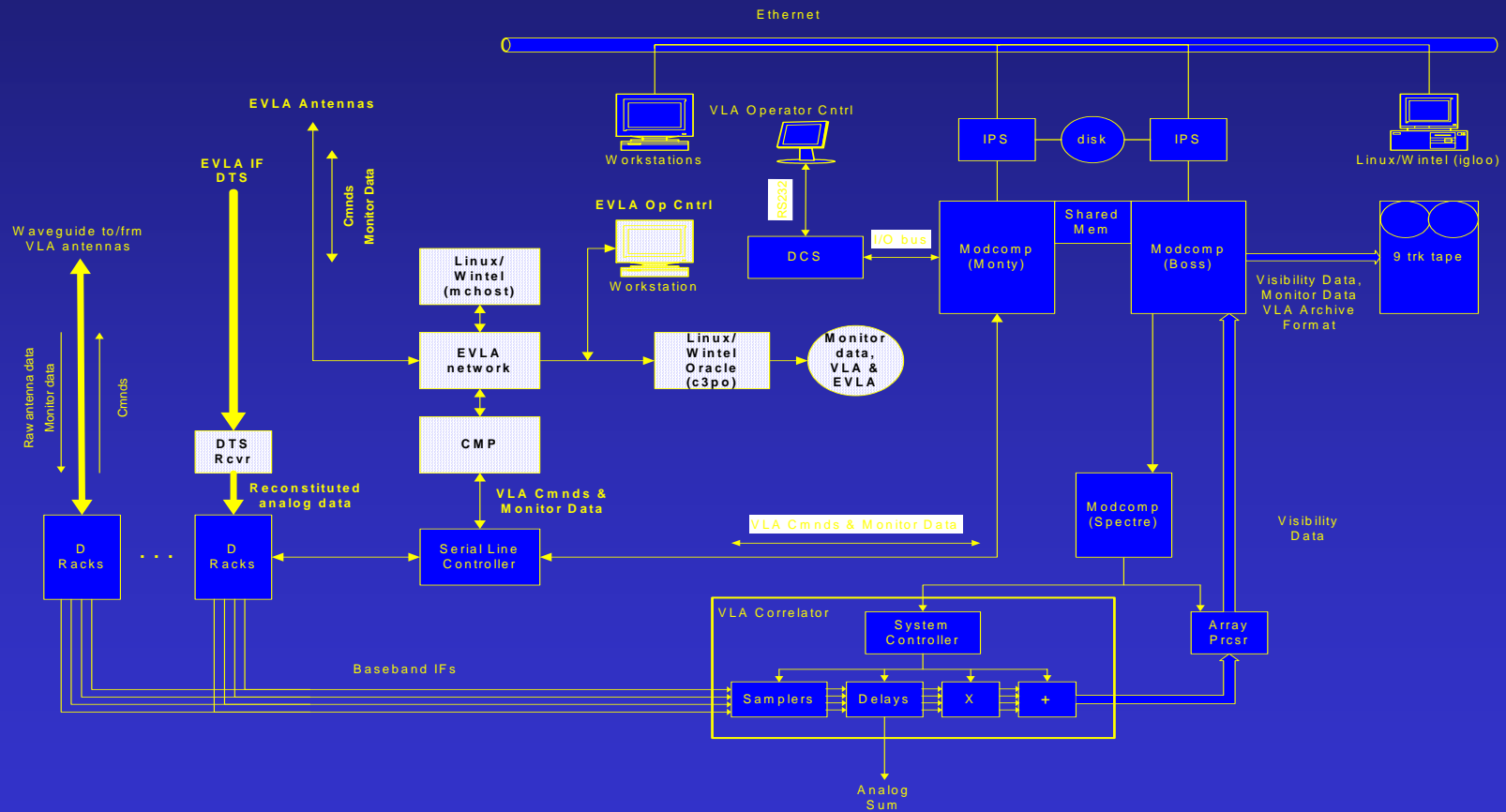
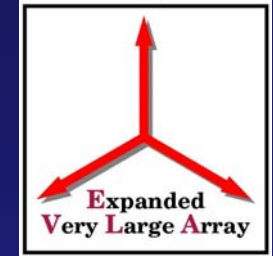


# VLA





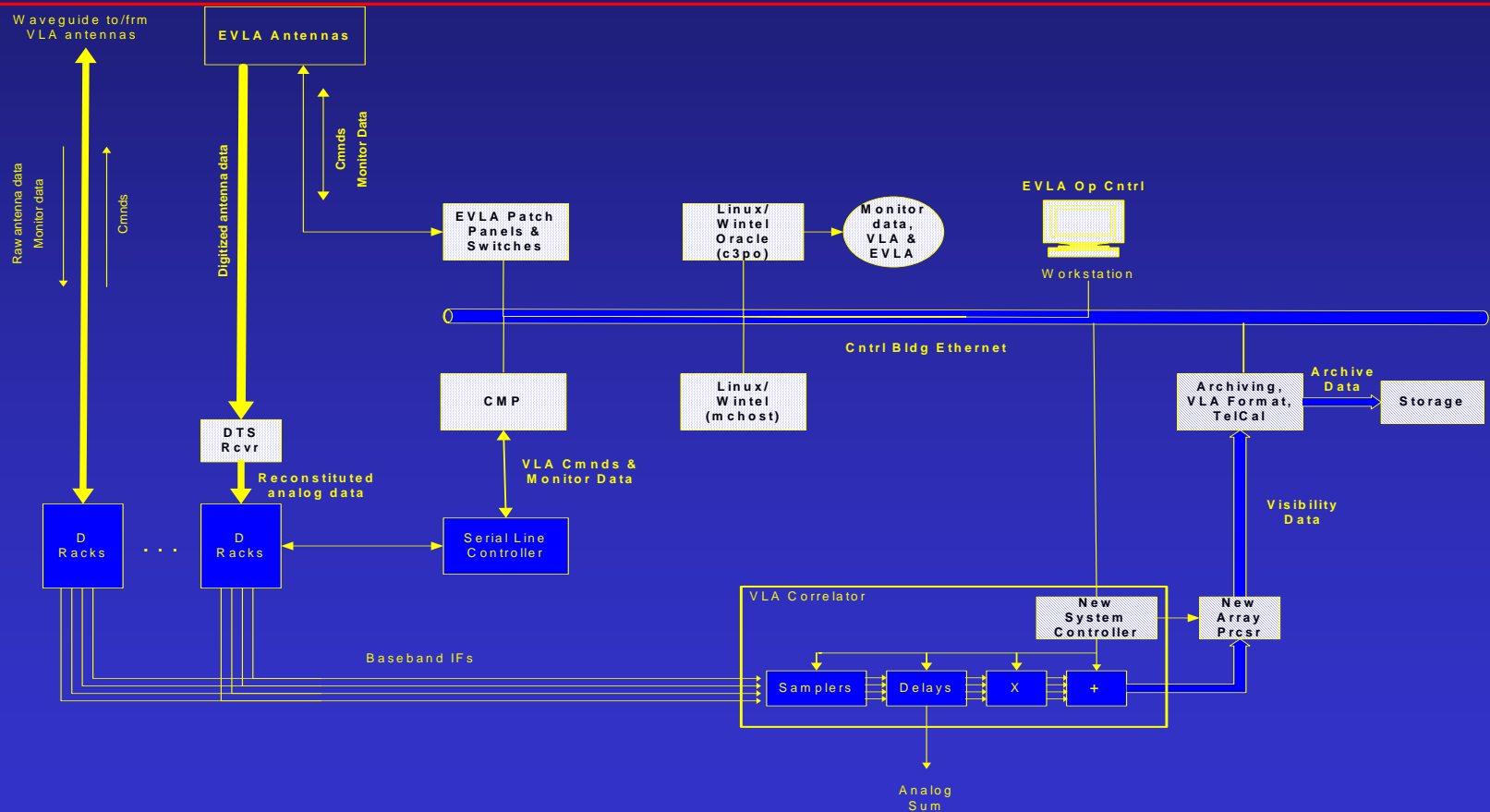
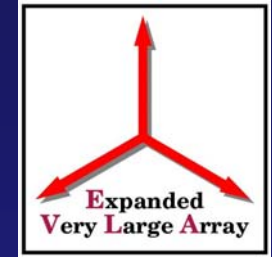
# EVLA & VLA (I)





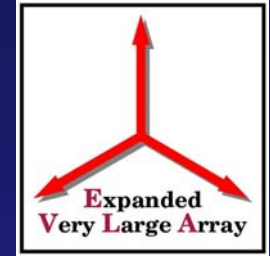


# EVLA & VLA (II)





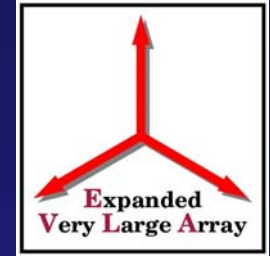
# Control Building



- Weather Station
  - Connected to VLA Master Rack
  - Interfaces Re-Designed for EVLA
    - ◆ Modernized Weather Instrumentation
    - ◆ Fiber Run to Weather Station in Place



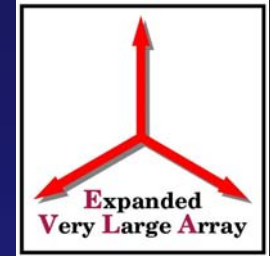
# Control Building



- Control Building to Wye Monitor System
  - HVACs, UPS's, and Generators
    - ◆ Interfaces Re-Designed for EVLA
    - ◆ Fiber Runs to Generator Building, Etc.



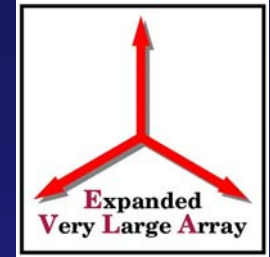
# Control Building



- Control Building to Other
  - Atmospheric Phase Interferometer (API)
    - ◆ Modernized API for EVLA
  - VLBI/VLBA Racks
    - ◆ Interface Hooks to EVLA M&C



# Control Building



- Control Building to Other
  - HTRP or Pulsar Equipment Racks
    - ◆ Stand-Alone – Provide EVLA Hooks
    - ◆ New Correlator Provides Improved Capabilities for Pulsar Work
  - Pie Town Link
    - ◆ Modernized to EVLA in Future
    - ◆ Part of Phase II