

Progress on U.S. CMS (Compact Muon Solenoid) Construction Activities-

1st Quarter FY01



Left- Crates at CERN from Felguera, Spain containing the individual sectors (see inset) of the brass absorber for the Hadron Barrel calorimeter. The entire CMS Hadron Calorimeter subsystem is managed by the U.S. through Fermilab. The Hadron Calorimeter is scheduled to go into the CMS surface hall (SX5) near the end of 2001.

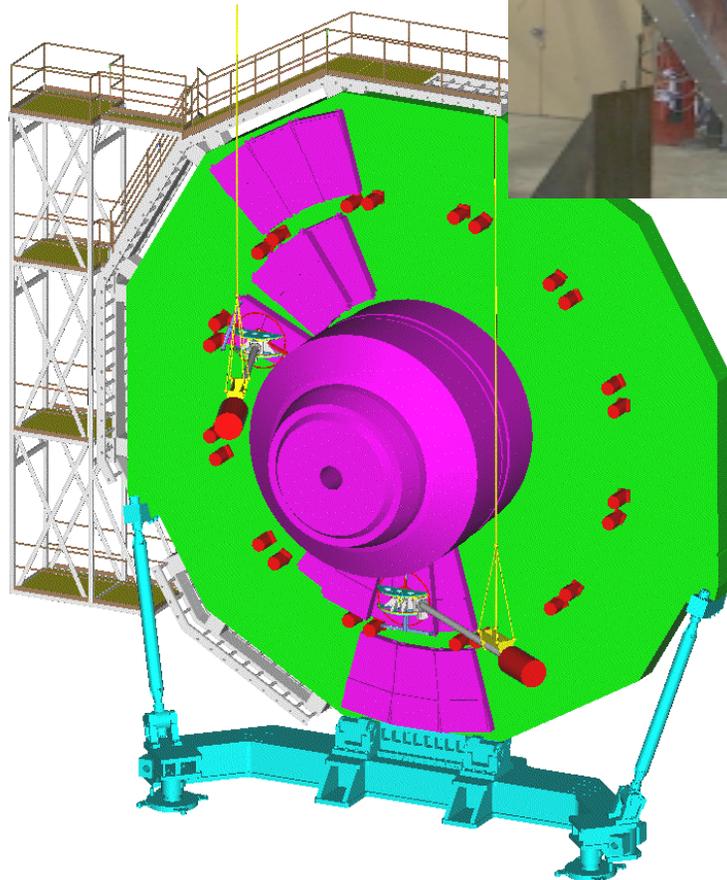
Right- The Hadron Barrel Calorimeter “Megatile Transporter” shown at CERN in front of crates of megatile (scintillator tile) from Fermilab. The transporter was built by Florida State University. Megatiles are installed into the spaces of the brass absorber shown above. A pre-production proto-type tile from Fermilab is shown at far right in a CERN test-beam area, where previous beam tests were run.



2nd Quarter FY01

Below- Computer model showing Endcap Muon Integration and Installation design and procedure work.

Right- Endcap Muon Cathode Strip Chamber Installation Fixture, designed by the University of Wisconsin, shown demonstrated at Fermilab.



Below- Probing Station for Silicon Tracker pre-production activities at Kansas State University (KSU recently joined U.S. CMS).



Below- Gantry for assembly of Silicon Tracker modules, recently delivered to Fermilab.



3rd Quarter FY01



Above- U.S. CMS team from Fermilab and University of Rochester at CERN, after completing installation of the Hadron calorimeter (HCAL) scintillation tiles into the barrel wedges at Building 186;

Above (Top)- HCAL barrel wedges are presently being moved from Building 186 to the CMS Surface Building SX-5 for assembly.



Above- Completed assembly of a CMS Magnet end-cap steel yoke section (YE-2) at CERN, part of the U.S. CMS Common Projects.

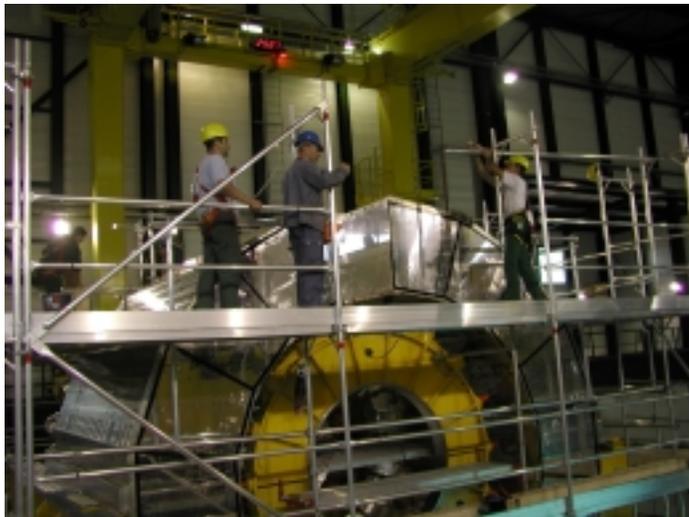
4th Quarter FY01



Above- A Cathode Strip Chamber (CSC) at UCLA undergoing tests on a Cosmic-Ray Test Stand. UCLA is one of two U.S. University sites where CSC's produced at Fermilab are assembled with mechanical, cooling, cable and electronics components mounted and tested.



Above- At CERN an installation test for CSC's is completed successfully, as the CSC is installed onto a completed CMS End-cap Disk. The University of Wisconsin designed the installation fixture used. The end-cap disk was also part of the U.S. CMS Common Projects contribution. ATLAS collaborators observed the test above in the interest of considering this system for ATLAS Muon System installation.



Left- The first Half-Barrel of the CMS Hadron Calorimeter (HCAL) is installed at CERN, in the CMS Surface Building SX-5. The top portion of the brass HCAL barrel is shown behind the scaffolding, before installation of the last (keystone) wedge in the top center of the arch. The U.S. CMS Project is responsible for the HCAL sub-system.