

A collection of military medals and a pair of glasses are arranged on a light-colored surface. On the left, a blue ribbon with a red star is pinned to a dark blue board with a checkered pattern and several small circular medals. Below it, a silver star-shaped medal with a central emblem is visible. A pair of gold-rimmed glasses with thin temples lies across the center. In the bottom left corner, a circular compass is partially visible. The text 'U.S. LHC Program Office Report' is overlaid on the right side of the image.

U.S. LHC Program Office Report

Jan 29, 2002

HEPAP Meeting

G. Crawford



Since We Last Met

✍ LHC Cost and Schedule Makes News

- ✍ approx 0.5B CHF in overruns and “unanticipated” costs (~20% TPC)
- ✍ Much ado in *Nature* and elsewhere
- ✍ *Mea Culpa* by CERN Mgmt
 - ✍ Revising LHC plan
 - ✍ Looking for new/add'l Euros
 - ✍ Internal cost-cutting and hand-wringing: 5 task forces to look at possible internal savings and re-alignment
 - ✍ External review (R. Aymar, ITER Dir., chair) underway
- ✍ Interim reports in March, final by June Council Mtg



CERN Response

- ✍ CERN Finance Comm generally supportive
- ✍ CERN Council approved LHC dipole contracts, last “big ticket” item for accelerator
- ✍ Council approved CY02 budget but xferred ~30MCHF to LHC and held ~50MCHF in reserve pending outcome of planning exercises
- ✍ Internal Task Forces now taking user input over the Web



U.S. Response

- ✍ Moral support
- ✍ Resist calls for more substantive support
(as required by law!)
- ✍ Stay “above the fray”
- ✍ Continue keeping our house in order
- ✍ Impact on long-range U.S. HEP plans
unknown (but sign probably **negative**)



U.S. Detector Projects Status

- ✍ Completed semi-annual mini-reviews
- ✍ Both making good technical progress; both ~60% complete
- ✍ Costs under control and contingency appears adequate
- ✍ Schedule is the only real issue; still working to nominal Spring '06 “pilot run”
- ✍ Lehman Reviews: June 3-6 at FNAL



U.S. LHC Computing Status

- ✍ Just completed major annual review
- ✍ Result: both collaborations passed
 - ✍ Near-term plans look sound
 - ✍ Long-term plans look okay for Fall 2006 start
 - ✍ Issues are “off-project” and international
- ◆ NSF proposal under review
- ◆ Computing mgmt plans ready for approval

U.S. LHC Accelerator

 Bruce will cover





U.S. LHC Research Program

✍ This is meant to include:

✍ Maintenance and Operations (M&O)

✍ Software and Computing (S&C)

✍ Upgrade R&D (R&D)

✍ Detectors have advanced proposals

✍ NSF proposals (complete package) under review

✍ S&C pieces have established reviews

✍ “Lehman” review of M&O piece Apr 9-11

✍ Agency guidance needed on M&O envelope, scope

- Letters in process at agencies to address this



U.S. LHC Research Program II

- ✍ Detectors will have **real** needs in FY02/03
 - ✍ Installation/commissioning begins this year!
 - ✍ Another reason to “baseline” M&O costs now
- ✍ US LHC Accelerator Research proposal less advanced, more R&D-oriented
 - ✍ Parallel guidance and similar reviews under development



An Aside on M&O

- ✍ CERN has established “Scrutiny Group” to assess M&O costs on behalf of RRB:
 - ✍ Category A: Common items
 - ✍ Category B: “You built it, you maintain it”
 - ✍ Category C: Host lab costs (small by design)
- ✍ We (U.S.) participate in the Scrutiny Group and expect to continue. Interested volunteers welcome!



Other Issues

- ✍ Infrastructure for Research Program
 - ✍ Networking, Grids
 - ✍ Base program support during transition
- ✍ Endgame interfaces (U.S./non-U.S.)
 - ✍ Some construction work will be delayed (parts, installation, better price performance)
 - ✍ Participation in staged/deferred items?
- ✍ Program Office personnel shortage
 - ✍ We (both DOE and NSF) are playing short-handed



Summary/Next Steps

- ✍ CERN is dealing with cost/schedule issues
 - ✍ We are watching closely
- ✍ U.S. Detector projects on track to complete within baseline cost and schedule.
- ✍ US LHC Research Program to launch soon
 - ✍ Software and Computing already underway
 - ✍ Maintenance and Ops. Review in April
 - ✍ Accelerator R&D review ~summer?