Wedge 10: what I have tested

- Am_test_vme: only talks to AMB, found 90% of AM troubles in the past. Ran OK

- Am_test_data_loop: sends data from Merger to AMS, reads roads from AMS output spy: cheks all AMS/AMB operations except AMS output drivers, cheks Merger to AMS cable. Ran OK.

- Hb_random_test: sends hits from Merger, sends roads from AMS, reads output from TF input spy. Checks all HB functionalities, checks AMS output drivers, checks cables between AMS and HB, between Merger and HB, and between HB and TF. Found in the past all HB problems. Ran OK.

- Looked at just one Spy dump from Dec 1st owl in b0dap30:/data1/cdf_svt/svttest/spymon/spydumps from b0svt05, found nothing wrong in HB Out Spy dump, but only ~20 events there. Need a way to get bigger dumps.

Wedge 10: attack plan 1.

- This is "interestiung"
- First time we have a clear problem that board diagnostics do not detect
- Data will probably not help. Corruption is clearly in AMS/AMB/HB. SVTSPYMON shows roads with no hits in HB Out Spy. This can not be due to bad Hits in input. HF/Merger can not be at fault.
- Try to extract a pattern:
  - ➢ Do we have extra roads ?
  - ➢ Do we have corrupted/missing roads ?
  - ➢ Are we hitting 63 road boundary ? Is it handled OK ?
- Dump HB Road/Out spy and find one dump that have the problem
  - ➢ Do the two spy have the same roads ?
    - ☞ Yes: Not HB problem
    - ☞ No: HB is broken. Get also Hit spy, find one event with the problem

Wedge 10 : attack plan 2

- If HB is OK
- Dump AMS Input/Output spy and HB Out Spy
- Look in HB Out for an event with the problem
- Extract the corresponding AMS Input/Output

- Replay event with problem through boards
  - ➢ Between stores
  - ➢ Better done by someone at B0
- If can reproduce, swap boards
  - ➢ Before swapping AMS or AMB, try to figure out from failure patter who is ta fault
- Replay event with problem through boards on test stand
- Hopefully the problem is still there and board can be fixed