MINUTES OF THE JADE MEETING
HELD 15/8/85

AGENDA   1) Present Run
               2) Scanning of Multi-hadronic events
               3) Bugs in the TP data sets

1) Present Run.

Jan Olsson proposed alterations to JDAS enabling data taking to proceed in cases when the z chamber trips alone.

It was also suggested to Jan that the response from the JDAS control console to cases such as detector trips (i.e Stop Run, Yes or No?) should ideally include an option for pausing the run, since this is almost always the required course of action. Jan replied that this would be "tricky!".

2) Scanning Multihadronic events.

Multihadronic events are currently being scanned by a mere two, overworked, people (Michael Kuhlen and Rainer Ramcke). A backlog of 200 tapes are now being processed and an estimated 5000 Mh events will have to be scanned. In order to complete the scanning and selection of these Mhs before the end of November, a further 5 volunteers are needed to give up one hour per day, five days a week. No editing will be required. All are invited to have a "deep think" about helping out.

3) Bugs in the TP Data Sets.

Last week you read about the bug affecting the Heidelberg TP data sets. This week's bug(s) affect more tapes reports Chris Bowdery.

Bug No 1: For the 1979-81 TP Generation 8 data sets, the lead glass calibration routine (LGCALB) was not requested hence no new LG calibration was done. This means that for this period the energy of the lead glass clusters is overestimated by approximately 10%.

Bug No 2: The input argument to the ZSFIT routine is deviously changed within the routine itself! Thus the PATR 8's common z fit is overwritten by the z fit from ZSFIT (if you see what I mean!). This bug has affected all TP generation 8 plus Heidelberg data sets. Immediate steps will be taken to correct these errors. Watch this space to find out when these corrections are all implemented.

Next JADE-meeting 22/8/85

J. Chrin 19/8/85

Agenda   1) Current run
           2) Status of the graphics program
           3) Status of the FAMP
           4) AOB

1) Current run.

There was nothing to report on the current run: "no news is good news!"

2) Status of the graphics program.

Chris Bowdery gave a report on new features in the JADE graphics. The JADE computer note 34 which purports to describe the graphics program is very out-of-date, and a new note is in preparation. As this is not yet ready, the main new features are summarised here for reference.

1. *HELP feature.*
Information on all graphics commands is now stored on a direct-access dataset for easy reference during a graphics session. Typing HELP enters the HELP subsystem: a list of available commands is displayed, and the user is prompted to enter the name of the command about which he wants information. The system is more-or-less self-explanatory.

2. *Multiple command lines.*
More than one command can now be entered on a single line. Individual commands are separated by a semi-colon (;) and are executed sequentially. For example, the command
CSTV2;N;TR1;VRES;MUONS;DEDX-4;CSTV2
will go to the next event, display the standard view with inner detector mirror and noise hits suppressed, add the reconstructed tracks, show any good muons, and draw the dE/dx plot in the bottom left-hand corner. Pressing RETURN will repeat the entire sequence.

3. *Macros.*
This is an extension of the above, allowing the user to give a name to a specific multiple command line, thus effectively defining a new command. Up to 30 macros are allowed. Macros can be nested (i.e. reference other macros) up to 9 deep. Four commands are involved:
MACRO   defines a macro (name and definition are requested)
EDITMAC   edits existing macro
RENAMAC   renames existing macro
DELMAC   deletes existing macro.

For example, the command line above could be defined as a macro by
MACRO
Enter name...
SCAN
Enter definition
CSTV2;N;TR1;VRES;MUONS;DEDX-4;CSTV2
The definition is not checked to see if it works. The user will quickly find out if it doesn't!

4. *Permanent macros.*
To save having to redefine personal macros at the beginning of each session, they can be

created outside the graphics environment and then automatically read in. For this purpose the user must store his macros in a file called userid.GRAPHICS.PROFILE.MACROS, which should be a sequential dataset with DCB=CARDS (use NEWLIB's ALLOC facility to copy a NEWLIB member into a suitable dataset). This will then be read in automatically whenever the user userid starts a graphics session. The format is repeated pairs of lines

```
name
definition
e.g.
SCAN
CSTV2;N;TR1;VRES;MUONS;CSTV2
EXTRAS
DEDX-4;TOF-4;QP3
MYCDTL
CDTL4;CDTL6;CDTL31;CDTL32;CDTL40
```

3) Status of the FAMP.

Petri Laurikainen reported on the work he has done on the FAMP. It seems that the initial problems have now been overcome, and the track-finding algorithm works well, rejecting about half of the T2 triggers that it is allowed to process. In three weeks' running only one probable physics event ($\gamma\gamma$) was rejected, which compares very favourably with the MIPROC-16. It is therefore proposed that the REFORM program be modified so that it throws away FAMP-rejected events (subject to some reliability criteria, since certain multi-record events where the jet-chamber data are split will produce meaningless results). This would save approximately 20% of our current tape use.

This proposal was accepted in principle. However some practical implementation difficulties were discovered, in that Petri goes back to Finland on the 22nd, and wants to check the changes, but the REFORM experts Ramcke, Bartel and Becker are all just about to leave for holidays or conferences. Consequently it was decided to make the changes in a separate test version which can be checked by Petri before he leaves and by Rainer after he returns.

4) AOB.

Chris Bowdery reported a bug in the TP program. This affects the multihadronic sample from Heidelberg, *not* the standard Generation 8 datasets. The effect is that the linking of tracks to lead-glass clusters is not done, and so those people who use this to correct for hadronic energy deposition in the lead-glass will find that their visible energy is wrong (typically by 4–5 GeV).

Next JADE-meeting 15/8/85

S. Cartwright 10/8/85

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Rolf Felst announced that he had nothing to announce.

A list of broken bits of DESY was compiled:— there was an 8-hour access for Mark J to allow them to repair the damage they did while mending some broken phototubes a few days earlier; TASSO had one sector of their inner detector $(\frac{1}{64})$ not working; PETRA had an oscillating quadrupole power supply, and the principal expert was on holiday; JADE had a broken air-conditioning compressor, and the previously announced z-chamber soft trip had had to be taken out again because of unexpected problems. (The z-chamber soft trip is still not working—the other problems are fixed as far as we know!)

<p style="text-align:center">MINUTES OF THE JADE MEETING
25/7/85</p>

In another exciting meeting, further trouble with PETRA was reported, this time a water leak in the DESY cooling system.

Wulf Bartel summarised the news from the Bari conference — not much — CDHS have changed all their cross-sections by 10%, because of wrong normalisation in the earlier results; Mark III gave some new results on J/ψ and ψ'' decays; UA5 found nothing unexpected at 900 GeV; the E and the ι may be the same particle (a new analysis of the E spin-parity suggested 0^- not 1^+); nobody confirmed the $\xi(2.2)$ (but it's not as dead as the ς); HRS see a peak at the F mass, but with unexpected spin-parity; the ratio $\tau(D^\pm)/\tau(D^0)$ is now 2.03 ± 0.25; TPC showed some results on baryons, favouring the "popcorn" model, and their new improved (new coil) dE/dx, which can tell π's from μ's; most of the "anomalous" collider events have gone away with increased statistics.

<p style="text-align:center">MINUTES OF THE JADE MEETING
1/8/85</p>

Agenda   1) Current run
             2) Search for new particles in e^+e^- annihilation
             3) AOB

1) Current run.

Wulf Bartel reported that the PETRA groups had complained to the directorate about the poor performance of the machine, and about the interference to normal running caused by work on DESY-II. There were promises (of doubtful sincerity) that things would improve.

Susan Cartwright said that there have been some problems with the z-chamber, which was drawing current on some dividing wires. Two cables have been pulled to isolate the most obvious culprits. To facilitate investigations, it is requested that if the z-chamber trips *by itself*, for no obvious reason, day shift crews should call the Rutherford office so that we can come and check the meters. *N.B. This does NOT mean we want to be called out at night, unless there are real problems (chamber trips every five minutes, chamber will not reset, etc.)!*

2) Search for new particles in e^+e^- annihilation.

Sachio Komamiya gave a preview of his talk for the Kyoto conference and the SLAC summer school. Just about every theorist's creation you have ever heard of has been looked for (and not found) by PEP, PETRA or even DORIS experiments.

3) AOB.

Wulf Bartel announced that we intend to send off the iota paper *quickly*, before anybody else thinks to look for it. Therefore the current draft will be given to Söding tomorrow and sent to the publishers early next week. If you have not handed in your comments and you are reading these minutes, it's probably too late to bother.

Next JADE-meeting 8/8/85

S. Cartwright 1/8/85