

ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE
CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

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CM-P00074578

Votre référence
Your reference

Notre référence
Our reference

CERN/TCC 70-9

▶ A rappeler dans la réponse
Please quote in your reply

Genève, le 5.2.1970

Dear Colleague,

It is now about two years since we last made a survey of European film-measuring capacity. The last survey was very useful in providing a forward indication of how measuring power might develop and in relating this to possible demands on CERN. A graph based on the survey figures is attached.

I suggest that it would be very useful to repeat the survey now, to compare with our predictions and take into account new developments over the past two years; therefore a questionnaire form is enclosed which we should be very grateful if you would complete and return to Dr. R. Budde by 1st April 1970.

In answering the questions on the future it is important that the information you give corresponds to your best realistic estimate of the position (rather than 'maximum' plans).

The answers of individual groups will not be published, but we shall have some discussion of the overall picture at a TCC meeting later this year.

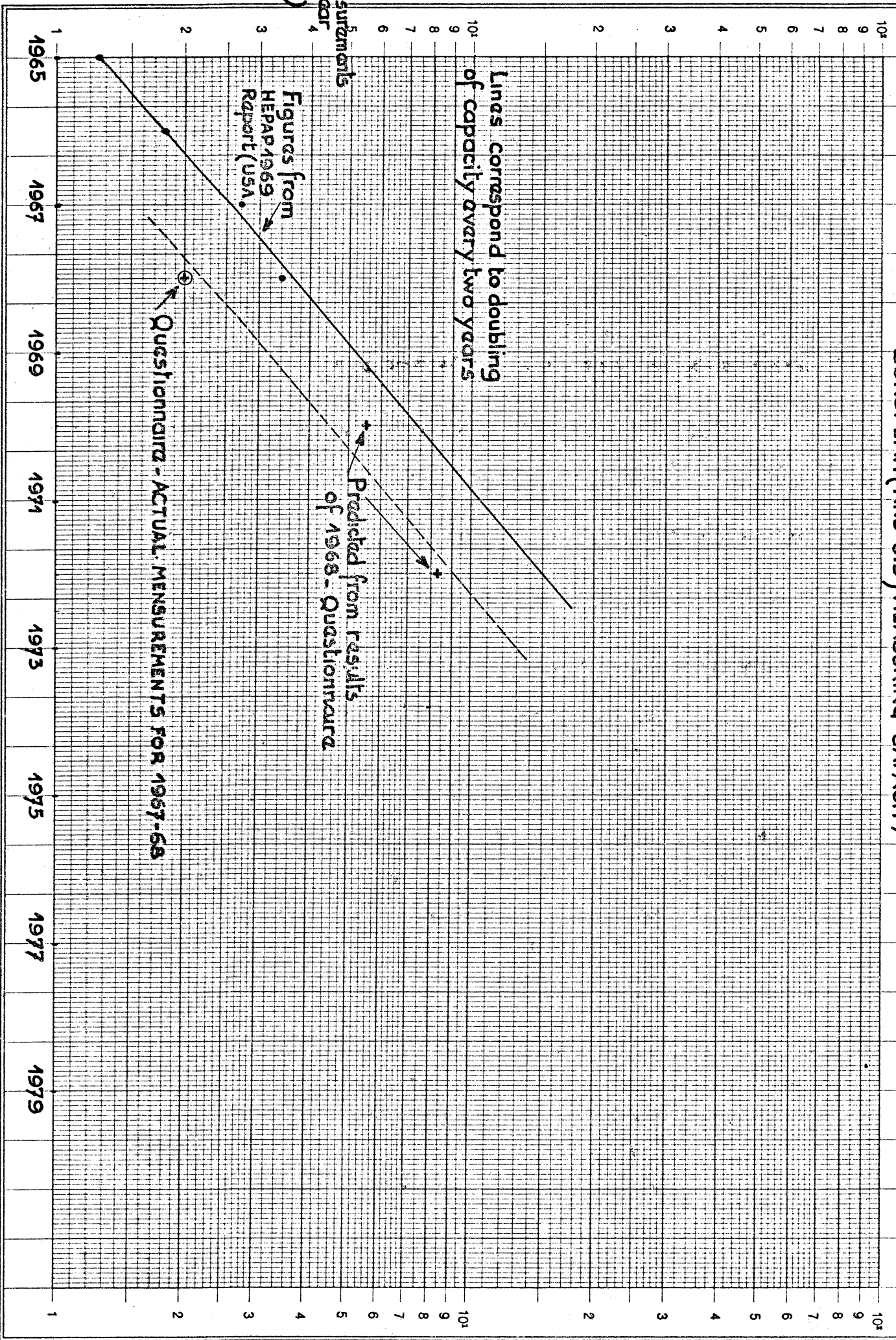
An important aspect to which we should like to draw your attention is the magnitude of the associated computing load, particularly for post-Grind 'physics' analysis, and we ask you to try to estimate this part of your computing load. We should be very interested in any comments you have, in particular on the future trends in experimental elementary particle physics using bubble-chambers or other devices.

Yours sincerely,

J.H. Mulvey

Chairman, Track Chamber Committee

EUROPEAN (AND U.S.) MEASURING CAPACITY



Logar. Teilung } 1-100, Einheit } 83,33 mm

5.2.1970

Remarks on Answering Questionnaire

1. Would the person answering please fill in his name and that of the group; in the case of several groups replying from the same University or Institut please make sure the equipment and staff numbers etc. are not counted more than once ! If your group uses an HPD (or similar device) please give the hours per week used by your group.

2. In making the estimates for the future give the number of measurements you regard as adequate for a satisfactory research programme (not just the theoretically possible maximum from, say, an HPD working for $\pi 10^7$ seconds per year). If your programme is (or will be) limited by availability of measuring power or computer time, please say so in space provided for comment.

3. Computer time. Here we should like two figures :

i) Total need but excluding actual measuring machine 'on-line' time (e.g. Spiral reader on PDP9, or HPD on 360/44);

ii) Time required for all 'post-GRIND' computation (e.g. SUMX, phase-shift analysis, Monte-Carlo calculations, etc.)

The unit chosen is one-7090-year. To make the necessary conversions please use the table, which gives equivalence factors assumed in a recent ECFA report where applicable CPU-time has to be converted to real-time before using the table.

4. Please answer the staff questions in terms of the number of 'full-time-equivalents'. 'Research Physicist' means those actively engaged in the research programme; physicists engaged in supporting activities (programming, or engineering) should be included under the other appropriate headings. Please include people engaged in development

(e.g. building PEPR etc.). Under 'Scanners and Measurers etc.' please include all expeditors, librarians etc.

5. Please make use of space for General Comments !

Table 1 : Assumed equivalence factors

Computer	Size in "6400 units"
6600	2.5
6500	2.0
6400	1.0
3800	0.7
3600	0.5
3300	0.4
3200	0.2
360/91	5.0
360/75	1.5
360/65	1.0
360/50	0.5
360/44	0.3

Computer	Size in "6400 units"
7094	0.4
7090	0.3
7074	0.2
7044	0.25
7040	0.2
1108	1.3
1107	0.25
PDP10	0.4
PDP6	0.3
Sigma7	0.5
Atlas2	0.8
KDF9	0.1

MEASURING POWER QUESTIONNAIRE : Please return to : R. Budde, CERNS, before Wednesday 1st April 1970

University or Institute	Group	Name of correspondent	Year ending 1st March 1970				1972				1974				General Comments etc. Do you plan to use : a) BEBC yes/no b) Gargamelle yes/no c) Ω - project yes/no d) Other projects
			No. of machines (or hrs)	No. of measurements/yr	Total computer time	Post GRIND time (1 - 7090 - year)	No. of machines (or hrs)	No. of measurements/yr expected	Estimate of total computer time	Post GRIND time (1 - 7090 - year)	No. of machines (or hrs)	No. of measurements/yr expected	Estimate of total computer time	Post GRIND time (1 - 7090 - year)	
			on line												
			off line												
			on line												
			off line												
			HPD in hours/week												
			PEPR in hours/week												
			SPIRAL READER in hours/week												
			POLLY (or other - please specify) hr/week												
			TOTALS												
			No. of Research Physicists												
			No. of Graduate Students												
			No. of Programmers etc.												
			No. of Scanners and measurers etc												
			No. of supporting Physicists and engineers												
			No. of Technicians												
Type of Computer used for final data processing and analysis. Please give hrs/week available for B.C. work.															

General Comments: (continue on a separate sheet)