4. Only the simple forms of the procedures NEW and DISPOSE are allowed. Tagfield values must not be specified. No garbage collection is performed.

5. Global labels are not implemented.

6. Subranges of characters are not allowed.

7. Comments may be delimited by either /* and */ or (* and *).

8. To avoid incompatibilities with any future release write SHORTINTEGER and LONGREAL as single words (as shown).

Compiler Restrictions

1. The maximum depth of nesting for procedure and function declarations is 5.

2. All program segments are restricted to 4K bytes of generated code. (NB. Constants and workspace are compiled into segments which are separate from both the code and each other.)

Compiling and Running PASCAL Programs

A preliminary set of procedures has been set up using the root PM; those currently available are:

PMC PMCL PMCLG PMCG

These will be extended as the need arises.

The compiler produces modules with standard OS linkage conventions, so that it should be possible to use standard library routines, provided that argument types are suitable; unless this facility is actually required, it is recommended that jobs which compile and execute PASCAL programs use the procedure PMCG in preference to PMCLG.

Full details of the compiler options will be found in the User Guide; however, in case the compiler runs out of workspace, try resubmitting the job with PARM.C=BIG and REGION.C=210K. Note, when using the Manitoba Pascal User Guide, that the names of both the procedures and stepnames are different: in particular, Manitoba stepnames PAS and GO correspond to RL stepnames C and G respectively.

The PASCAL Monitor

In cases where several different programs are to be compiled and executed separately for development purposes (ie. the program load modules are not going to be stored in a library) then the use of the PASCAL monitor is recommended:

this may be invoked by the procedure PMX. Within a single jobstep one or more PASCAL programs may be compiled and then executed any number of times with different input data. Details on the monitor control commands may by found in the User Guide.

Examples

Some files have been set up in ELECTRIC in directory HGMAINDR.PASCAL.USERS to illustrate the use of the compiler and monitor; the programs are the ones supplied by Manitoba to demonstrate use of the compiler.

There are three files: PMC, PMCG & PMX. Each has an automatic plant for the user's logged-in ID into the first two characters of the jobname, so that the files may be executed without auxiliary plants. The first file, PMC, demonstrates the compiler diagnostic messages. PMCG demonstrates the use of the compile and load procedure to compile and execute a simple banking example. The third example demonstrates the use of the monitor procedure, PMX, to compile and execute (in some cases several times) a number of programs. The complete input for the monitor run may be obtained by printing file HGMAINDR.PASCAL.EXAMPLE.

C S Cooper (Applications Group)

SECTION 5 Rutherford Laboratory Computer Advisory Committee and SRC Facilities Committee on Computing

RLCAC

The 195 Advisory Committee has been replaced by a new committee called the Rutherford Laboratory Computer Advisory Committee (RLCAC). The new body takes over the role of the previous, but has wider terms of reference to include all computers on-site. Its terms of reference are -

"The Committee will advise the Director of the Rutherford Laboratory on policies concerning the use and development of all computing interests which are a responsibility of the Laboratory. The Committee will also check that in the use and operation of the computers, interests of all authorised User Groups are fairly considered".
The membership reflects the community of users. It is:-

Dr. J.D.Dowell	Chairman
Professor B. Collinge	Daresbury (Chairman DLCAC)
Professor A.B. Clegg)	Nuclear Physics
Dr. P.I.P. Kalmus)	(Counters)
Dr. D.P. Dornan	Nuclear Physics (Film Analysis)
Dr. B.R.C. Martin	Nuclear Physics (Theory)
Professor P.G. Burke	Science Board
Professor M.G. Haines	Science Board
Professor F. Walkden	Engineering Board
Dr. E.M. Freeman	Engineering Board
Dr. E.B. Dorling	ASR Board
Dr. J.A. McGinnety	NERC
Dr. B.W. Davies	Daresbury Laboratory
Dr. B.R. Martin	Appleton Laboratory,ROE,RGO
Mrs. J.O. Paton	London Office
Dr. M.B. Dunn	London Office
Dr. G. Manning)	
Dr. J. Thresher)	Rutherford Laboratory
Mr. W. Walkinshaw)	

The Committee has met once to date (1 April, 1977). Most of the meeting was taken up with progress reports, however it did discuss the Durham HEP Database project. This project aims to provide (in collaboration with Berkeley) a database of HEP data. It is now beginning a trial user service. It was noted that the Nuclear Theory Sub-Committee is due to review the entire project in May 1978.

SRC Facilities Committee on Computing

Now that Council has taken direct responsibility for SRC central computers it has set up a committee to advise it on the provision, operation and allocation of use. The machines are the two 195s, the 1906A, and the Daresbury 360/165. A prime function of this committee is to deal with the annual estimates, and the "five year forward look", both for running costs, and the bids for available resources. Another function is to allocate available time each year between the boards.

The chairman is Professor Sir Herman Bondi (a member of Council). The membership includes representatives of each of the major user communities. Currently these are -

Professor A.P. Willmore	Astronomy, Space and Radio
Professor H.H.Rosenbrock	Engineering
Dr. J. Dowell	Nuclear Physics
Professor P.G. Burke	Science
Mr. A.E. Seddon	Other Research Councils

The committee has met and dealt with the estimates and five year forward look for 1977/78. In particular it has apportioned the available time for 1977/78 between the boards as given in the following table. The laboratories agree how much each machine handles. The third column gives a suggested allocation, with the 1976 usage in column 4. These allocations for the 195s have not yet been finally agreed or divided further between the various categories of users.

1977/78 ALLOCATIONS TO BOARDS (195 equivalent hours)

	CPU HOURS	%	SUGGESTED FOR 195s	1976 USAGE
ASR	500	5	455	300
ENGINEERING	500	5	420	240
NP	7000	68	5580	4325
SCIENCE	1400	13	995	855
LO/LABS.	450	4	210)	385
EXTERNAL	500	5	410)	
	10350	100	8070	6105

A T Lea (Head of User Support Group)

SECTION 6 CENTRAL COMPUTER REORGANISATION NOTICES

The following notices have been issued:

CCR/1	A Note to all Project Holders	W Walkinshaw
CCR/2	Break in 1906A Services	A T Lea
CCR/3	Progress Report	H Hurst
CCR/4	1906A Questionnaire	W Walkinshaw
CCR/5	Proposals for R26 and R1 Data Preparation Area Facilities for 195 Access	A T Lea
CCR/6	Temporary arrangements for R1 and R26/27	A T Lea
CCR/7	Second 195 Recommisioning - Early Experience	H Hurst
CCR/8	360/195 Catalogue Management - A User Guide	C D Osland
CCR/9	Program Advisory Offices	V M Boulton
CCR/10	Second 195 Project Installation Planning - Revised Programme from 31 March 1977	H Hurst

SECTION 7 Telecommunication Problems - Fault Reporting

These procedures apply to users of Private Telephone lines, Dial-in facilities and GEC 2050 workstations.

1. Who and where to contact:

0830-1700(1600 fridays):- Telecomms Operator on
(i) Abingdon (0235) 21900 ext. 6389
(ii) Rowstock (023583) 486
(iii) Rowstock (23583) 251
(iv) Private Wire
(v) Contacta 00

Evenings/Nights/Weekends:- Operations Shift Leader on
(i) Abingdon (0235) 21900 ext. 280
(ii) Rowstock (023583) 486
(iii) Contacta 15.

Note: Rowstock 486 is switched between the two positions according to whether the telecommunications area is manned.

2. Procedure

a. The recipient of the call fills in a 'Fault Report Form' noting details of symptoms, reporter and actions taken.

b. During Prime Shift this is passed to a 'duty telecommunications engineer' for diagnosis and action.

c. If required, calls are made on contracted engineers once the area of the problem is clearly established.

d. At other times, this judgement is exercised by the Shift Leader. If he is unable to make a decision or clear the problem, it is referred to the duty engineer the next day. Note: GEC 2050 machines are contracted for maintenance only on a Monday-Friday (08.30 - 18.00 hours) basis. Post Office lines are notionally under maintenance at all times, but some Post Office Areas will not work overtime without prior written approval. However, it is usual for an engineer to 'stay with the fault' until it is fixed where practical.

e. The Telecomms Operator maintains pressure on the contractors where required, and closes the Incident Report Form. The details are recorded for later analysis. Note: Please confirm with the Telecomms Operator the completion of work on a fault with the time and date.

C Balderson (Telecommunications Group)

SECTION 8 Workstations as at 31/8/77

Site	Remote No	Site Identifier
Appleton Laboratory	12	X4
Birmingham	4	XB
Bristol	16	XT
CERN	10	XC
Daresbury	31	XD
Durham	8	XH
Edinburgh	33	XE
Glasgow	9	XG
IGS	15	X3
IGS (Edinburgh)	1	X3
IGS Keyworth	52	X3
IMER	27	X5
Imperial College	7	XI
IOS	21	X6
Lancaster	43	XL
Liverpool	44	XP
Manchester	41	XM
MSSL	18	X2
Oxford	2	XX
R1	23,24	XA
Reading	17	XR
Royal Holloway College	26	X1
St. Andrews	37	XN
Southampton	11	XS
UCL (Dept of Statistics and Computer Science)	3	XF
University College	14	XU
Westfield College	13	XW

Sites with Identifiers Only	Site Identifier
Bedford College	XV
Bradford	XJ
Kent	XQ
King's College	XK
Surrey	XY
Visitors to R26	XZ

SECTION 9 SOME USEFUL PHONE NUMBERS

Rutherford Laboratory	Abingdon(STD 0235) 21900 Abingdon(STD 0235) 21991
STD prefix for Rowstock	023583

	Extension
360 Program Advisory Office	6111
Magnetic Tape Library	333
External Reception (Post and Courier work)	429
Job Reception (R27)	6257
Pigeon Holes (R1)	360
Computer Reception (R1) documentation, administration, etc.	352
Shift Leader	280
silent hours	Rowstock 486
Communications Area	6389 Rowstock 486
Dial up terminals (110-300bps)	Rowstock 631
(600-1200bps)	Rowstock 8056
Dial up workstation	Oxford 43516
FR80	239
Travel and visit arrangements	6296

Computing and Automation Division Management

Division Head:	W Walkinshaw	547
Applications:	J W Burren	6618
Systems:	Dr R Taylor	6175
User Support:	Dr A T Lea	6121
Telecommunications:	Dr M R Jane	408
Grant Support:	E B Fossey	479
	Grant Applications Secretary (P C Thompson)	6188
Operations:	H Hurst (Computer Manager)	361
	D G House (Deputy Manager)	515
	G A Lambert (Operations Supervisor)	6623