

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
WEATHER BUREAU

OFFICE NOTE 44

NMC PERMANENT FILES

by

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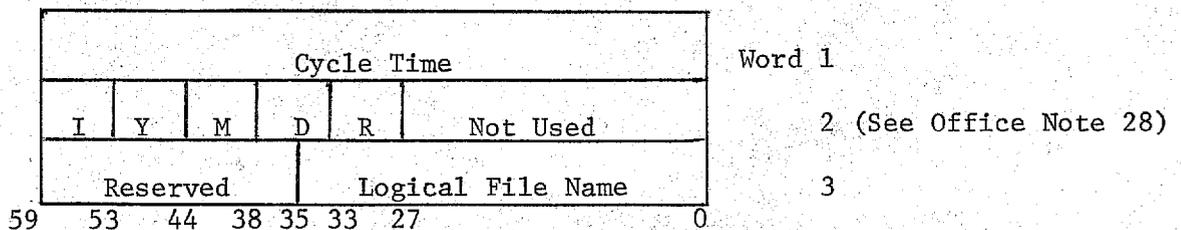
October 1970

NMC's initial use of the Permanent File features in the CDC 6600 SCOPE System will be limited to 22 logical files in 5 permanent files. See attachment for names to be used. Two logical files will be permanent in the strictest sense. Data records in the remaining files will be purged at the beginning of each twelve hour cycle.

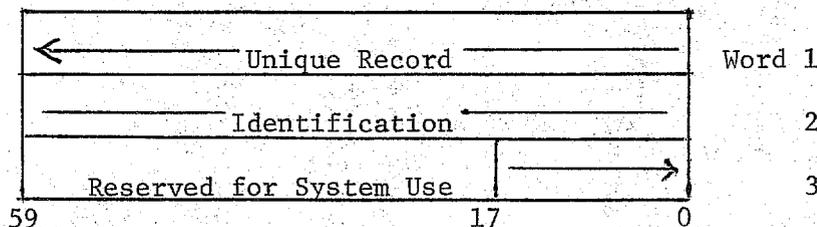
File Structure

I. Random Files:

Record one will contain a table of record identifiers for each data record in the file (Table of Contents or ID Table). The first three words of the table will contain the date and time of the cycle (integers), the run number (integer), and the logical file name (coded-left justified, zero filled).



The remaining entries in the table, three words per record, must be in the following form.



Records containing grid point data will be packed and identified according to the scheme given in Office Note 28.

Access to logical records in random files will be through the subroutines W3FK00, W3FK01, W3FK02, W3FK03, and W3FK04. These subroutines use the Mass Storage I/O in FTN FORTRAN. Logical records in random files can be unpacked and packed using the subroutines W3AI00 and W3AI01.

II. Sequential Files:

The logical files ADPUPA and ADPSFC are the only sequential files within NMC's Permanent Files.

Record one, three words long, will contain the date and time of the cycle, logical file name, and the location of the data collection center. (All information is coded.) The structure will be as follows:

59	35	23	11	0			
Cycle				Y	M	D	Word 1
File Name							2
W A S H I N G T O N							3

Data records will contain ADP reports blocked into sets of, at most, 512 CM words. The form of the report is described in Office Note 29. Each report will be terminated by the word END REPORT. Each logical record will terminate with the word END RECORD. The first word of the last logical record in the file will contain the ten characters ENDOF FILE.

The blocked records can be packed and unpacked through the use of the subroutines W3AI03 and W3AI02.

BUFFER IN must be used to read sequential files in FORTRAN codes or the READSKP macro in COMPASS codes.

NMC PERMANENT FILES

<u>PF Name</u>	<u>Cycle</u>	<u>LFN</u>	<u>READ PW</u>	<u>No. of Rcds</u>	<u>Contents of Logical File</u>
W3FCSTA	51	GES	READ	112	Data from previous cycles needed for this cycle
	52	ANL	READ	112	Analyses from run 3 (OPNL) ADP data
	53	F00	READ	112	Initial data from the forecast model(run 3)
	54	F12	READ	224	3, 6, 9, and 12 hour forecast data(run 3)
	55	F24	READ	224	15, 18, 21, and 24 hour forecast data(run 3)
W3FCSTB	51	F36	READ	224	27, 30, 33, and 36 hour forecast data(run 3)
	52	F48	READ	224	42 and 48 hour forecast data(run 3)
	53	F60	READ	112	60 hour forecast data(run 3)
	54	F72	READ	112	72 hour forecast data(run 3)
	55	F84	READ	112	84 hour forecast data(run 3)
W3FCSTC	51	ANL1	READ	56	Analyses from run 1 (RADAT) ADP data
	52	FCST1	READ	56	Forecast data from run 1 analyses
	53	ANL2	READ	112	Analyses from run 2 (RAOB) ADP data
	54	ANL5	READ	56	Analyses from run 5 (FINAL) ADP data
	55	FCST5	READ	56	Forecast data from run 5 analyses
W3ADP	51	ADPUPA	READ	500	Upper air ADP data
	52	ADPSFC	READ	175	Surface ADP data
	53	OLDPAP	READ	225	12 hour old pre-analysis processed U.A. ADP data
	54	NEWPAP	READ	225	Current pre-analysis processed U.A. ADP data
	55	MRGPAP	READ	250	12 hour old and current pap data merged
W3FXNRM	1	FIXFLD	READ	14	Constant data (Mtns, drag, etc.)
	2	NORMLS	READ	98	Climatological data

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<u>PF Name</u>	<u>Cycle</u>	<u>LFN</u>	<u>Read PW</u>	<u>No. of Rcds</u>	<u>Contents of Logical File</u>
W3FCSTD	51	FMANL	READ	112	LFM Analyses
	52	FM00	READ	112	LFM Initialized data
	53	FM12	READ	224	LFM 6 and 12 hr forecasts
	54	FM24	READ	224	LFM 18 and 24 hr forecasts
	55	FM36	READ	224	LFM 30 and 36 hr forecasts
W3ADPB	51	SFCPAP	READ	225	Current pre-analysis processed surface data
**** CORRECTION ***					
W3FCSTC	53	FMGES	READ	112	Data from previous cycle needed for current cycle

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Mar 5, 1971