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1          TITLE  JORDAT - JOB DATA AREA (FIRST 140 LOC OF USER AREA) V407
2          SUBTTL  T, HASTINGS/TH TS 15 MAR 69
3          000407 IFNDEF UJOB DAT,<VJOB DT=407
4          INTERN VJOB DT          IPUT VERSION NUMBER IF NOT USER VERSION
5          >
6          ;TO ELIMINATE MOST OF UNWANTED GLOBALS USERS
7          ;ASSEMBLING INSTRUCTIONS TO MAKE USER VERSION FOR CUSP:
8          ;DSK:JOB DAT+TTY:,OSK:JOB DAT
9          ;UJOB DAT=1
10         ;*Z
11         IFDEF DEV DAT,<PRINTX PLEASE REASSEMBLE WITHOUT S,MAC
12         >
13
14         IFNDEF UJOB DAT,<
15         ENTRY DATJOB
16         DATJOB:
17         >
18
19         ;THIS AREA PROVIDES STORAGE OF ITEMS OF INTEREST TO BOTH
20
21         ;THE MONITOR AND THE USER
22
23         ;MACRO TO DEFINE SYMBOLS FOR MONITOR USE ONLY
24         ;THESE MAY BE CHANGED TO SUIT MONITOR
25
26         DEFINE M(SYMBOL,VALUE,LENGTH)
27         <          SYMBOL=VALUE
28         IFNDEF UJOB DAT,<INTERNAL SYMBOL> ;MAKE GLOBAL ONLY IF ASSEM FOR MONITOR
29         LOC=VALUE+LENGTH>
30
31         ;MACRO TO DEFINE SYMBOLS FOR USER USE
32         ;THESE CANNOT BE CHANGED WITHOUT INVALIDATING OLD SAVED FILES
33
34         DEFINE U(SYMBOL,VALUE,LENGTH)
35         <          SYMBOL=VALUE
36         ENTRY SYMBOL
37         LOC=VALUE+LENGTH>
38
39         ;MACRO TO DEFINE PARAMETERS OF INTEREST TO MONITOR ONLY
40         ;THESE MAY BE CHANGED TO SUIT MONITOR
41         ;THESE WILL NOT PRINT OUT WITH DDT
42
43         DEFINE XP(SYMBOL,VALUE)
44         <          SYMBOL=VALUE
45         IFNDEF UJOB DAT,<INTERNAL SYMBOL>> ;MAKE GLOBAL ONLY IF ASSEM FOR MONITOR
46
47         ;DEFINE MONITOR ACS AS LOCALS SO JOB DAT DOES NOT NEED TO BE ASSEMBLED WITH S,MAC
48         ;THIS IS SO THE USER IS NOT FACED WITH A LOT OF INTERNAL SYMBOLS
49         ;WHICH MAY CONFLICT WITH HIS AND GIVE HIM MULTIPLY DEFINED GLOBALS
50         000003 PDP=3
51         000007 PRG=7
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52				
53	000000	M	JOBAC,0,20+	JOBAC=0
54				PLACE WHERE USER ACS ARE STORED ON UOO CALLS
55				IE RELATIVE 0-17 IN USER AREA
56	000020	M	JORDAC,LOC,17+	JORDAC=LOC
57				PLACE WHERE HARDWARE ACS(0-16) ARE STORED
58				WHEN JOB IS INACTIVE, THESE ARE EITHER THE
59				USERS AC IF JOB WAS STOPPED IN USER MODE
60				OR ARE THE EXEC IF STOPPED IN EXEC MODE
61				0-16 ALSO STORED HERE ON CLK INTERRUPTS
62	000023	XP	JOBDDP, JORDAC+PDP+	JOBDDP==JORDAC+PDP
63				IAC PDP DUMPED HERE
64	000027	XP	JOBDDPG, JORDAC+PROG+	JOBDDPG==JORDAC+PROG
65				IAC PROG DUMPED HERE
66	000034	XP	JOBDD14, JORDAC+14+	JOBDD14==JORDAC+14
67				IAC 14 DUMPED HERE
68	000035	XP	JOBDD15, JORDAC+15+	JOBDD15==JORDAC+15
69				IAC 15 DUMPED HERE
70	000036	XP	JOBDD16, JORDAC+16+	JOBDD16==JORDAC+16
71				IAC 16 DUMPED HERE
72	000037	XP	JOBDD17, JORDAC+17+	JOBDD17==JORDAC+17
73				IAC 17 DUMPED HERE
74	000040	U	JOBDDUO, 40, 1+	JOBDDUO=40
75				USER UOO TRAP LOC. (UOO STORED HERE)
76	000041	U	JOB41, 41, 1+	JOB41=41
77				USER UOO JSR LOCATION
78				(SET FROM HIGH SEG DATA AREA ON GET IN NO LOW FILE)
79	000042	U	JOBERR, 42, 1+	JOBERR=42
80				ILH UNUSED-SAVE FOR LATER THINGS, SO USER PROGRAMS
81				SHOULD IGNORE LH IN ALL PROGRAMS
82				IRH=COUNT OF NO. OF ERRORS IN RPG(RAPID PROGRAM
83				GENERATION) SEQUENCE OF CUSPS,
84				NOT CHANGED FROM GET TO GET.
85	000043	M	JOBBENB, 43, 1+	JOBBENB=43
86				ILH UNUSED
87				IRH=APR CONSO FLAGS FOR USER APR TRAPPING
88				SET BY CALL (SIXBIT /APRENB/)
89	000044	U	JOBBREL, 44, 1+	JOBBREL=44
90				ILH=0, RH=HIGHEST REL. ADR. IN USER AREA (IE LOW SEGMENT)
91				SET BY MONITOR EACH TIME JOB RUNS OR CHANGES CORE SIZE
92	000045	M	JOBBPD1, LOC, 0+	JOBBPD1=LOC
93				FIRST LOC. OF SYSTEM UOO PUSHDOWN LIST
94	000044	XP	JOBBPDL, JOBBPD1-1+	JOBBPDL==JOBBPD1-1
95				FIRST LOC.=1
96	000047	XP	JOBBPD3, JOBBPDL+3+	JOBBPD3==JOBBPDL+3
97				PLACE FOR STORING FIRST PUSH IN A UOO ROUTINE (THIRD ENTRY)
98				USED BY RUN AND GETSEG UOOS
99	000045	U	JOBBLT, JOBBPD1, 3+	JOBBLT=JOBBPD1
100				3 WORDS USED BY LINKING LOADER TO MOVE PROGRAM DOWN
101				BEFORE CALLING EXIT.
102				OK TO USE EXEC PD LIST BEFORE EXECUTING UOO

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123      000072 LOC=72
124      777777 777752 XP MJOBPD,JOBPDL-LOC+      MJOBPD==JOBPDL-LOC
125                                          ;MINUS LENGTH OF PUSHDOWN LIST
126      777777 777753 XP MJOBP1,MJOBPD+1+      MJOBP1==MJOBPD+1
127                                          ;-LENGTH+1
128      000072 XP JOBPRT,LOC+      JOBPRT==LOC
129                                          ;FIRST LOC PROTECTED BY BEING COPIED INTO MONITOR
130      000073 XP JOBPRT1,JOBPRT+1+      JOBPRT1==JOBPRT+1
131                                          ;FIRST LOC+1
132      000072 M JOBRCU,LOC,1+      JOBRCU=LOC
133                                          ;HIGHEST USER IO CHANNEL IN USE
134                                          ;ONLY JOBJDA,,JOBJDA+C(JOBRCU) ARE COPIED INTO
135                                          ;MONITOR WHEN JOB IS RUN, 0 MEANS NONE OR
136                                          ;CHAN, 0 IN USE, NEG LH MEANS SAVEGET HAS ACTIVE IO(RH STILL
137                                          ; HIGHEST CHAN IN USE)
138      000073 M JOBPC,LOC,1+      JOBPC=LOC
139                                          ;JOB PC WHEN JOB INACTIVE
140      000074 U JOBDOT,74,1+      JOBDOT=74
141                                          ;LH UNUSED,RH=STARTING ADDRESS OF USER DDT

142      000073 XP JOBSAV,JOBDOT-1+      JOBSAV==JOBDOT-1
143                                          ;FIRST LOC,-1 WRITTEN BY SAVE COMMAND
144      000075 M JOBJDA,LOC,20+      JOBJDA=LOC
145                                          ;JOB DEVICE ASSIGNMENT TABLE
146      000076 XP JOBSV,JOBJDA+1+      JOBSV==JOBJDA+1
147                                          ;LH=LUOS DONE SO FAR, RH=ADR. OF DEVICE DATA BLOCK IN MONITOR
148                                          ;FIRST LOC READ INTO OR WRITTEN FROM BY NEW SAVGET
149                                          ; WHICH ZERO COMPRESSES ON ALL DEVICES
150                                          ; THIS LOC CONTAINS THE FIRST IOWD WITH NO-NO. OF DATA WORDS
151                                          ; IN LH, FIRST ADR-1 IN RH
152                                          ; MONITOR SUPPRESSES STORING IN RH OF JOBHRL DURING
153                                          ; SAVEGET(USRCHU NEG.)
154                                          ; SO THAT OLD ZERO COMPRESSED DECTAPE FILES WILL
155                                          ; ALWAYS FIT IN CORE (JOBHRL USRD TO BE 0)
156                                          ; THIS CHECK COULD HAVE BEEN ELIMINATED, IF JOBSV HAD BEEN
157                                          ; DEFINED AS JOBHRL+1(JORSYM), HOWEVER JOBSYM ALMOST
158                                          ; ALWAYS HAS NON-ZERO DATA, SO SAVEGET WOULD HAVE TO
159                                          ; BE WRITTEN TO EXPAND DOWN OR UP RATHER THAN JUST UP
160      000075 XP JOBSVM,JORSV-1+      JOBSVM==JORSV-1
161                                          ;FIRST LOC-1, USED FOR SETTING UP DUMPE MODE
162      000101 XP JOBSV3,JORSV+3+      JOBSV3==JORSV+3
163                                          ; COMMAND LIST FOR SAVGET
164                                          ;LOC WHICH SHOULD NOT CONTAIN 0 UNLESS FILE WAS
165                                          ; CREATED BY CONVERTING OLD FORMAT TO NEW FORMAT
166      000072 XP JOBSVD,JORSVM-JOBSAV+      JOBSVD==JORSVM-JOBSAV
167                                          ;NO. OF LOCATIONS TO MOVE DOWN OLD (NON-COMPRESSED DSK)
168      000073 XP JOBSDP,JORSV-JOBSAV+      JOBSDP==JORSV-JOBSAV
169                                          ; SAVE FILES WHICH WERE ALWAYS WRITTEN FROM JOBSAV+1
170                                          ; WHICH ARE ALWAYS WRITTEN FROM JOBSAV+1 AND HAVE
171                                          ; AN IOWD ADDED ON FRONT SO IT LOOKS LIKE A COMPRESSED FILE
    
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154          000106 U JOBCN6,JOBJDA+11+          JOBCN6=JOBJDA+11
155          ;6 TEMP LOCATIONS USED BY CHAIN TO HOLD ERROR ROUTINE
156          ; WHEN IT LOADS NEXT CHAIN LINK.(JOBJDA+11...16)
157          ; THESE LOCATIONS ARE OK TO USE SINCE CHAIN RELEASES ALL
158          ; USFR CHANNELS AND MONITOR WILL NOT DESTROY THEM
159          ; WHEN JOB CONTEXT IS SWITCHED
160          000114 XP JOBSDD,JORJDA+17+          JOBSDD=JOBJDA+17
161          ;PLACE TO SAVE JOBDT ON SAVE SO ZERO EXPANSION ON GET
162          ;ALWAYS MOVES UP
163          000113 XP JOBSD1,JORSDD-1+          JOBSD1=JORSDD-1
164          ;FOR COMPUTING JWD'S
165          777777 777775 XP JOBJMH,JORHCU-JOBJDA+          JOBJMH=JORHCU-JOBJDA
166          ;JOBHCU-JOBJDA
167          ;USED BY ANYACT ROUT. IN CORE1
168          000114 XP JOBPFI,JORJDA+17+          JOBPFI=JOBJDA+17
169          ;HIGHEST LOC. IN JOB DATA AREA PROTECTED FROM IO
170          777777 777704 XP MJORCK,JORDAC-JOBPFI+          MJORCK=JORDAC-JOBPFI
171          ;AREA CHECKSUMMED DURING SWAPPING
172          000115 U JOBHRL,115,1+          JOBHRL=115
173          ;LH IS FIRST FREE LOC IN HIGH SEG RELATIVE TO ITS ORIGIN
174          ;ANALOGOUS TO LH OF JOBSA FOR LOW SEG
175          ; (IN OTHER WORDS LH=LENGTH TO SAVE ON SAVE COMMAND)
176          ; SET BY LINKING LOADER
177          ;RH ANALOGOUS TO JOBREL, IE HIGHEST LEGAL
178          ;USER ADDRESS IN HIGH SEG. SET BY MONITOR EVERY TIME
179          ;USER RUNS. IF JOBHRL=0, JOR DOES NOT HAVE A HIGH SEG
180          ;USER PROGRAMS SHOULD BE WRITTEN SO THAT
181          ;THEY CAN BE ONE OR TWO SEGMENT PROGRAMS. JOBHRL
182          ;CAN BE TESTED FOR NON-ZERO TO SEE IF HIGH SEG EXISTS
183          000116 U JORSYM,116,1+          JORSYM=116
184          ;POINTER TO LOADER AND DDT SYMBOL TABLE POINTER
185          000117 U JOBUSY,117,1+          JOBUSY=117
186          ;POINTER TO UNDEFINED SYMBOL TABLE
187          ;SET BY LOADER, NOT YET USED BY DDT
188          000120 U JOBSA,120,1+          JOBSA=120
189          ;LH=INITIAL FIRST FREE LOCATION IN LOW SEG (SET BY LINKING LOAD
190          ER)
191          ;RH=STARTING ADDRESS OF USER PROGRAM
    
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192		U	JOBFF,121,1	;(SET FROM HIGH DATA AREA ON GET IF NO LOW FILE)
193				;(CURRENT FIRST FREE LOCATION IN LOW SEG
194				;)USED AND UPDATED BY MONITOR TO ASSIGN I/O BUFFERS IN TOP
195				;)OF USER AREA
196				;) USER MAY CHANGE CONTENTS IN ORDER TO AFFECT PLACEMENT OF
197				;) BUFFERS BY MONITOR
198	000122	U	JOBS41,122,1*	JOBS41=122
199				;(JOB41) SAVED HERE ON SAVE COMMAND
200				;)RESTORE FROM HERE ON GET
201	000123	M	JOEXM,LOC,1*	JOEXM=LOC
202				;)LAST LOC EXAMINED OR DEPOSITED USING
203				;)D OR E COMMANDS
204				;)LH=-1 IF LAST COM WAS AN E, 0 IF IT WAS A D
205	000124	U	JOBREN,124,1*	JOBREN=124
206				;)REENTER ADDRESS FOR REENTER COMMAND
207				;) (SET FROM HIGH DATA AREA ON GET IF NO LOW FILE)
208	000125	U	JOBAPR,125,1*	JOBAPR=125
209				;)PLACE TO TRAP TO IN USER AREA ON APR TRAP
210				;)ENABLED BY APRENB UJO
211	000126	U	JORCNI,126,1*	JORCNI=126
212				;)APR IS CONIED INTO C(JORCNI) ON APR TRAP
213	000127	U	JOBTPC,127,1*	JOBTPC=127
214				;)PC IS STORED HERE ON USER APR TRAP
215	000130	U	JOROPC,130,1*	JOROPC=130
216				;)OLD PC IS STORED HERE ON START,DDT,REENTER,
217				;)STARTC COMMANDS
218	000131	U	JOBCHN,131,1*	JOBCHN=131
219				;)LH=FIRST LOC AFTER FIRST FORTRAN 4 LOADED PROGRAM
220				;)RH=FIRST LOC AFTER FIRST FORTRAN 4 BLOCK DATA
221				;)TO BE USED FOR JOB CHAINING
222	000132	M	JOBFOV,LOC,1*	JOBFOV=LOC
223				;)DEV. DATA BLOCK ADR. FOR FINISH COMMAND



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249 ; HIGH SEGMENT DATA AREA
250 ; LOCATIONS ARE RELATIVE TO BEGINNING OF HIGH SEGMENT, SINCE
251 ; THE HIGH SEGMENT CAN BEGIN AT 400000 OR HIGHER
252 ; THIS AREA IS USED TO INITIALIZE CERTAIN LOCATIONS IN THE LOW SEG JOB DATA AREA
253 ; IN CASE THERE WAS NO LOW SEG SAVED.(LH JOBCOR 137 OR LESS AS SET BY LOADER)
254 ; LOW SEG JOB DATA AREA LOCATIONS SET FROM HIGH SEG DATA AREA ARE INDICATED ABOVE BY:
255 ;(SET FROM HIGH SEG IF NEC)
256 ; THESE LOCATIONS ARE SET FROM LOW JOB DATA AREA ONLY IF HIGH SEG IS NON-SHARABLE
257 ; AT THE TIME THE SAVE IS PERFORMED (SHRSEG=3 IN JBTSTS)
258
259 000000 XP JOBHSA,0+          JOBHSA==0
260                                ;USED TO RESTORE JOBHSA
261 000001 XP JOBH41,1+        JOBH41==1
262                                ;USED TO RESTORE JOB41
263 000002 XP JOBHCP,2+        JOBHCR==2
264                                ;USED TO RESTORE JOBCOR(BOTH HALVES)
265 000003 XP JOBHRRN,3+       JOBHRRN==3
266                                ;LH RESTORES LH OF JOBHRL(FIRST REL, FREE LOC, IN HIGH)
267                                ;RH RESTORES JOBRER,LH SET TO 0 FOR FUTURE
268
269 000004 XP JOBHVR,4+        JOBHVR==4
270                                ;RESTORE BOTH HALVES OF JOBVER
271                                JOBPOP==4
272                                ;HIGHEST LOC TO BE RESTORED(POPPED) BY GET
273 000010 XP JOBHDA,10+       JOBHDA==10
274                                ;FIRST LOC NOT USED BY HIGH SEG DATA AREA
275                                ;LOADER WILL LOAD FIRST WORD HERE
276                                ;VALUE CANNOT BE CHANGED WITHOUT
277                                ;CHANGING LOADER AND RELOADING TO MAKE NEW SAVE FILES
                                END
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NO ERRORS DETECTED

PROGRAM BREAK IS 000000

DATJOB	000000	INT	JOP41	000041	INT	JORAC	000000	INT
JORAPR	000125	INT	JOBBLT	000045	INT	JORCHN	000131	INT
JORCN6	000106	INT	JORCNI	000126	INT	JORCOR	000133	INT
JORD14	000034	INT	JCRD15	000035	INT	JOB016	000036	INT
JORD17	000037	INT	JORDA	000140	INT	JOB0AC	000020	INT
JOPD0T	000074	INT	JOR0PD	000023	INT	JOR0PG	000027	INT
JORENB	000043	INT	JORERR	000042	INT	JOREXM	000123	INT
JORFDV	000132	INT	JORFF	000121	INT	JORH41	000001	INT
JORHCR	000002	INT	JORHCU	000072	INT	JORHDA	000010	INT
JORHPL	000115	INT	JORHRN	000003	INT	JORHSA	000000	INT
JORHVR	000004	INT	JORJDA	000075	INT	JORJMH	777777	777775
JOROPC	000130	INT	JORPC	000073	INT	JORPD1	000045	INT
JORPD3	000047	INT	JORPOL	000044	INT	JORPFI	000114	INT
JORPD4	000004	INT	JORPR1	000073	INT	JORPRT	000072	INT
JORREL	000044	INT	JORREN	000124	INT	JORS41	000122	INT
JORS4	000120	INT	JORS4V	000073	INT	JOBSD1	000113	INT
JORS00	000114	INT	JORS0P	000003	INT	JORSV	000076	INT
JORSV3	000101	INT	JORSVD	000002	INT	JORSVM	000075	INT
JORSYM	000116	INT	JORTPC	000127	INT	JORBUSY	000117	INT
JORU00	000040	INT	JORVFR	000137	INT	LOC	000140	
MJOBCK	777777	777704	MJOBP1	777753	INT	MJOBPD	777777	777752
PDP	000003		PR0G	000007		VJOB0T	000407	INT







