

CP-642B UTILITY PACKAGE FUNCTION REPERTOIRE  
FOR USE WITH NAVSHIPS 0967-011-2030

FUNCTION	Q <sub>U</sub> **	Q <sub>L</sub> *	A <sub>U</sub>	A <sub>L</sub>	REMARKS	UPAK SEGMENT
NTDS FORMAT MAGNETIC TAPE FUNCTIONS						
Read Magnetic Tape	Position Factor	T03CN	None	None		Basic
Write Magnetic Tape	Position Factor	T02CN	Last Address	Base Address		Basic
Magnetic Tape Checkread	Position Factor	T01CN	Last Address	Base Address	***	Basic
Rewind Magnetic Tape	None	T0400	None	None		Basic
Pass N Blocks	Position Factor	T0500	None	None		Basic
Write Utility Package on Magnetic Tape	None	T1300	None	None	T=Transport With New Tape	Basic
Duplicate Magnetic Tape	Position Factor	T14CN	Number of Blocks	None	T=Transport With New Tape	Basic
Magnetic Tape Checkread	Position Factor	U0710	Last Address	Base Address	***	3
Discrepancies on Paper Tape (TTY)	Position Factor	U0714	Last Address	Base Address		3
Magnetic Tape Checkread on Other Transport	Position Factor	U0730	Last Address	Base Address		3
Discrepancies on Paper Tape (TTY)	Position Factor	U0734	Last Address	Base Address		3
PAPER TAPE FUNCTIONS						
Load Paper Tape	None	U1000	None	None	Biocital, Flex, TTY	2
Relative Biocital	None	U1000	None	Base Address		2
Absolute Biocital Paper Tape Dump	None	U0760	Last Address	Base Address		3
Zero Suppression	None	U0765	Last Address	Base Address		3
TTY Paper Tape Dump	None	U0640	Last Address	Base Address		1
Zero Suppression	None	U0645	Last Address	Base Address		1
Duplicate Paper Tape	None	U1050	Last Address	Base Address	4000-77000 if B.A. and L.A. Zero	2
Absolute Biocital Paper Tape Checkread	None	U0720	None	None	***	3
Discrepancies on Paper Tape (TTY)	None	U0724	None	None		3
TELETYPE FUNCTIONS						
Online TTY Dump Zero Suppression	None	U0650	Last Address	Base Address		1

FUNCTION	Q <sub>U</sub> **	Q <sub>L</sub> *	A <sub>U</sub>	A <sub>L</sub>	REMARKS	UPAK SEGMENT
UNIVAC FORMAT MAGNETIC TAPE FUNCTIONS						
Read Magnetic Tape	Position Factor	U111T	None	None		4
Write Magnetic Tape	Position Factor	U112T	Last Address	Base Address		4
Magnetic Tape Checkread	Position Factor	U113T	Last Address	Base Address	***	4
Pass N Blocks	Position Factor	U114T	None	None		4
COMPUTER MEMORY FUNCTIONS						
Basic Inspect and Change	Inspection Address	Set P=1760	Changes	Changes	Q <sub>U</sub> = Address +1 A = Inspection Contents (Put changes in A) Set Q <sub>L</sub> =00001 to Terminate Dump Options	Basic
Inspect and Change	Inspection Address	U0610	Changes	Changes		1
Online Dump of Changes	Inspection Address	U0611	Changes	Changes		1
Paper Tape Dump of Changes (TTY)	Inspection Address	U0612	Changes	Changes		1
Memory Search (POOCH)	None	U0620	Last Address	Base Address	Q = Mask A = Search Value RESULT: A = Contents of Find U <sub>L</sub> = Address of Find	1
Paper Tape Dump of Finds (TTY)	None	U0624	Last Address	Base Address		1
Store Data	None	U0630	Last Address	Base Address	Enter Word to be Stored in Q	1

\*Set P = 00001 for all functions except Basic Inspect and Change.

T = The number of the tape transport on which the magnetic tape to be acted upon is mounted.

U = The number of the tape transport on which the UPAK is mounted.

CN = Call number of the block on magnetic tape at which the operation begins; if CN=00 Position Factor is used.

\*\*Position Factor = 000NN - Move tape NN records forward.

400NN - Move tape NN records backward.

\*\*\*For checkread functions; A = Tape word; Q = Memory word; U<sub>L</sub> = Address discrepancy (Put changes in Q)

#### UTILITY PACKAGE ERROR CODES

Q <sub>U</sub> CODE	ERROR
00700	No starting address for relative tape load
07700	Illegal Q <sub>L</sub> entry or B.A. > L.A.
77700	Improper beginning code on tape for load function selected
77000	Checksum error
70700	Magnetic Tape Unit error

#### UTILITY PACKAGE BOOTSTRAP LOAD MODES

KEY SETTING	DESIRED LOAD MODE
No Keys Set	Load UPAK & Block 6 Program
Key 3 only	Load UPAK; await SMP Entry
Key 1 only	Load UPAK; then 4-Stop

#### SMP LOAD MAGNETIC TAPE ENTRY

COMPUTER	0	T	0	3	C	N
A						