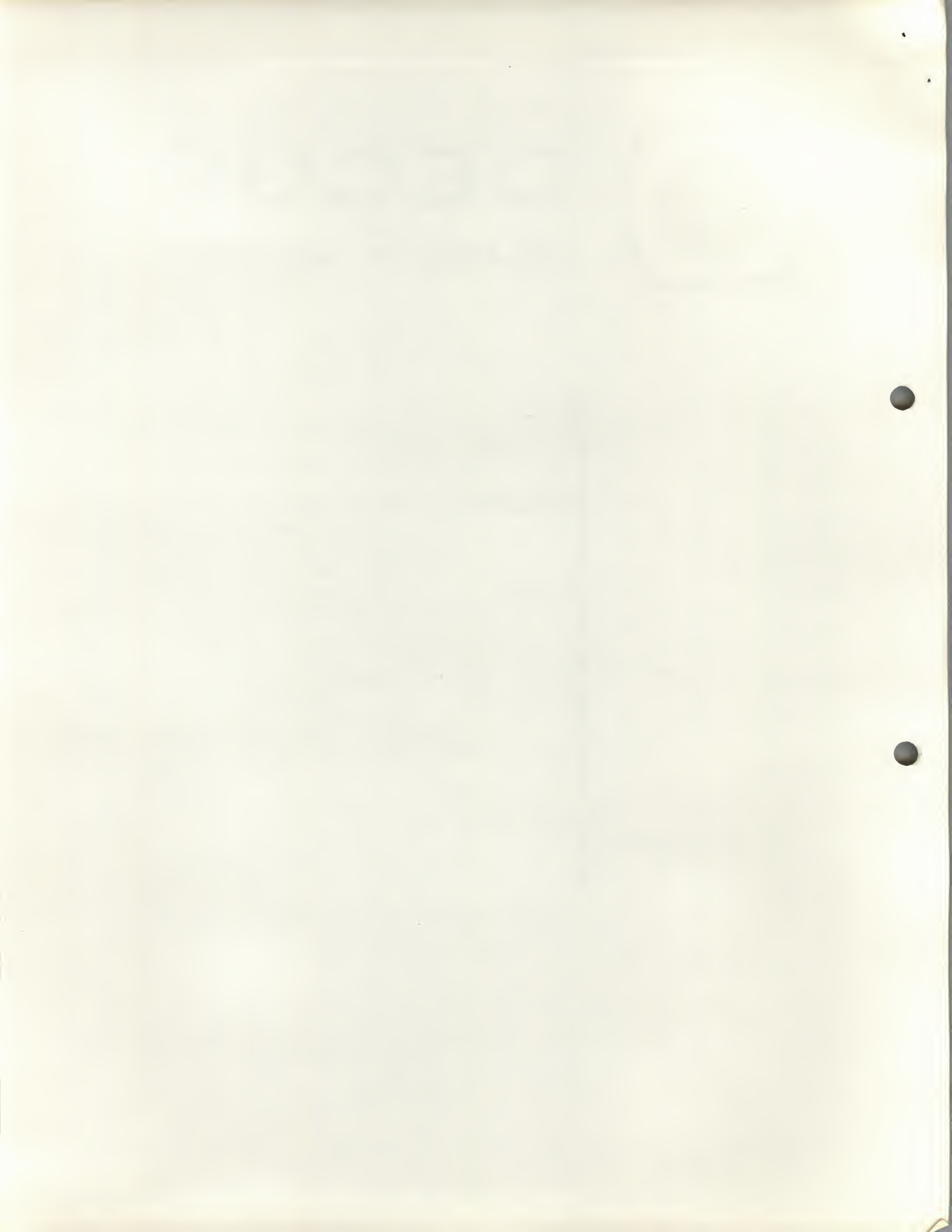




DECUS

PROGRAM LIBRARY

DECUS NO.	8-295
TITLE	COMBIN
AUTHOR	A. Moses
COMPANY	Computer Application Engineering Company El Paso, Texas
DATE	August 15, 1970
SOURCE LANGUAGE	PAL



COMBIN

DECUS Program Library Write-up

DECUS No. 8-295

DESCRIPTION

COMBIN is a combined loader for BIN and CBL paper tapes. The CBL format tapes described in DECUS No. 8-26 can be loaded in about 75% of the time required to load equivalent BIN tapes. Therefore, many installations now have most of their tapes converted into CBL format. The problem was to have both a BIN and a CBL loader on the last page of memory so that they could be protected. As a sacrifice, the RIM loader is no longer on the protected last page of memory.

EQUIPMENT

PDP-8/L

STORAGE

7600-7772

LIMITATIONS

1. For 4K memory only
2. No high speed reader

RELATED PROGRAMS

DECUS No. 8-26 family

STARTING ADDRESSES

7600 for BIN loader
7700 for CBL loader

USAGE

The low speed Rim loader is placed in memory starting at address 7556 instead of 7756. The RIM loader (SA is now 7556) is used to load COMBIN. COMBIN can then load either BIN or CBL format tapes by using the correct starting address given above.



```

*7600
  KCC
  JMS BEG
  JMP .-1
GO, DCA CHK
  TAD CHAR
  DCA W1
  JMS READ
  DCA W2
  JMS BEG
  JMP END
  JMS ASS
  SNL
  JMP MEM
  DCA OR
CHEX, TAD W1
  TAD W2
  TAD CHK
  JMP GO
MEM, DCA I OR
  ISZ OR
M200, 7600
  JMP CHEX
END, JMS ASS
  CIA
  TAD CHK
M376, FLT
ASS, 0
  TAD W1
  CLL RTL
  RTL
  RTL
  TAD W2
  JMP I ASS
BEG, 0
  DCA SW
  JMS READ
  TAD M376
  SPA SNA CLA
  JMP .+4
  ISZ SW
  CMA
  JMP BEG+1
  TAD SW
  SZA CLA
  JMP BEG+2
  TAD CHAR
  AND MASK
  TAD M200
  SPA
  ISZ BEG
  SPA SNA CLA
  JMP I BEG
  JMP BEG+2
READ, 0
  KSF
  JMP .-1
  KRB
  DCA CHAR
  TAD CHAR
  JMP I READ

```

```

MASK, 0300
CHK, 0
OR, 0
CHAR, 0
START, KCC
    JMS READ
    SZA
    JMP .-2
    JMS READ
    DCA SW
H, JMS C
W1, 0
W2, 0
STOP, TAD W2
    SZA CLA
    JMP N
    TAD SW
    ISZ SW
    HLT
    JMP START
Sw, 0
A, 0
    TAD I C
    DCA I C
    TAD I C
    TAD SW
    SZL
    CLL IAC
    DCA SW
    ISZ C
    JMP I A
C, 0
    JMS READ
    CLL RTL
    RTL
    DCA I C
    JMS READ
    AND E
    JMS A
    KRB
    CLL RTL
    RTL
    AND M376
    DCA I C
    TAD W1
    JMS READ
    JMS A
    JMP I C
B, 0
    DCA I W1
    ISZ W1
E, 0017
    ISZ W2
    JMP I R
    JMP H
N, JMS C
J, 0
K, 0
    TAD J
    JMS B
    TAD K
    JMS B
    JMP STOP

```