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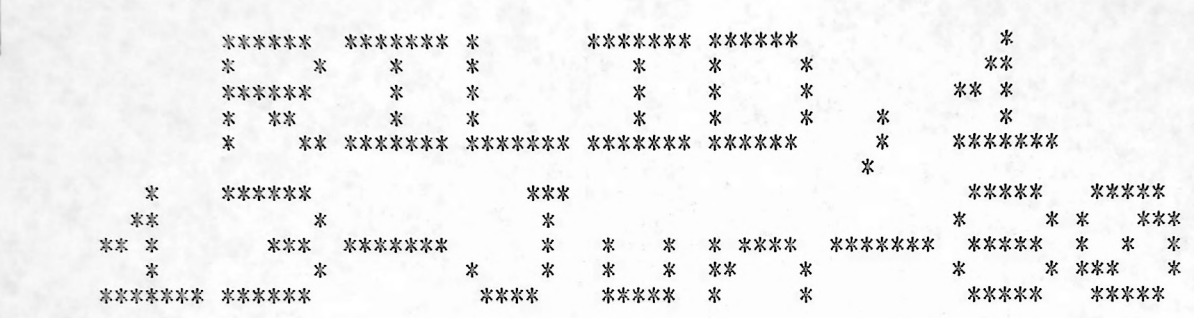

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```
10 'Design and structure for RILID
20 'RANDOM INDEXED LARGE ITEM DATABASE
30 'At this time the device is designed to operate
40 'on a computer with 128 bytes/sector disks, but
50 'this is modifyable.
60 'Random file structure does not need to be
70 'arranged in a virtual mapped manner.
80 'File will contain 3 types of linked records
90 '
100 'DIRECTORY record, found in the totaly contiguous
110 '       directory table, for binary search.
120 '
130 'DATA record, is for all data contained in the
140 '       database, it contains packed ascii or similar +
 , data.
150 '
160 'FREE record, is a record that has been deleted and
170 '       is therefore eligable to be used again, this  +
 list
180 '       eliminates most of the need for a garbage col +
 lector
190 '
200 'The file contains a header, on record 1, which is fo +
 rmatted
210 'thusly:
220 '     2 - Contains pointer to the last record of the d +
 irectory table
230 '     2 - Contains pointer the head of the free records
240 '     2 - Contains the next available word at the end  +
 of the file
250 '     40 - Contains the title for the file
260 '     4 - Contains the creation date
270 '     4 - Contains the last update date
280 '     2 - Contains the total number of updates
290 '     24 - Contains a mask to match an encoded password
300 '
310 'Each other record has it's own particular style, but +
  each
320 'also has things that are similar.
330 '
340 'Each record starts out with a 4 byte code that tells
350 'What kind of record it is.  These 3 different codes
360 'Are built by the password for the file and the datab +
 ases
370 'Structure will be incoherent without this code.  Since
380 'the list structure would still be usable, thence the +
  whole
390 'readable, each pointer in the file is also encoded b +
 aised
400 'on a portion of the 24 byte password.  If the file i +
 s accessed
410 'without the correct password, the files internal stu +
 cture is
```

```
420 'complete database.  Due the the partial random disper +
 sal of
430 'data records throughout the file, the data, which is +
  still
440 'coherent in each data line, is totally out of order. +
   To
450 'Solve the problem, the data itself will be encoded.  +
  Thusly
460 'the database structure is unusable unless the right  +
 password
470 'is given.  The datafile may be deleted, but it may n +
 ot be
480 'read or modified, therefore attaining high data secu +
 rity
490 '
500 'The directory table of the file is capable of holding
510 'as many keys as the disk will allow.  The keys are
520 'kept contiguous starting at word 2 and following till
530 'the number kept in the header word.  The keys are
540 '64 characters long, allowing a very large number of  +
 subkeys
550 'and subdatasets to be created.
560 '
570 'The directory table looks like this:
580 '
590 ' 4 - Encoded directory descrimination word
600 ' 2 - Encoded pointer to top data record
610 ' 2 - Encoded pointer to bottom data record
620 ' 2 - Number of data records therein
630 ' 2 - Number of subdatum total therein
640 ' 64 - Key, encoded
650 ' 4 - Create date
660 ' 2 - Number of Opens with no writes (Read only)
670 ' 2 - Number of Opens with writes (Read/Modify)
680 ' 20 - Program use word (for status or notes)
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Total of 2 pages + 2 banner
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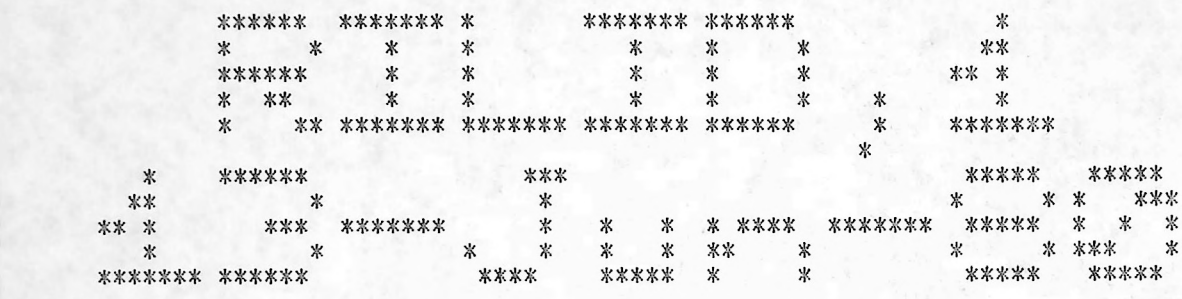

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