



Apple Manuals



Apple ][ Pascal



Macintosh



SwyftCard



Canon Cat

# Jef Raskin Information

*BOB AND DAVID WING  
MISC. CAT NOTES*

*SOURCE: BOB WING      31 pages*

DOCUMENT NO. *50*

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# BOB/DAVID WING MISC. CAT NOTES

1/2/92

" 1992 Workfiles" screensave# "to  
to turn on FORTH  
type the code:

Enable Forth Language

then highlight this and use ANSWER.

To put your own message on the blanked-out screen, in place of 'Canon Cat':  
1. Turn on the FORTH interpreter with 'Enable Forth Language' as described above.

2. then type the FORTH code:

" string you want to put on screen" screensave# "to

3. Note the leading space, then highlight this and use ANSWER.  
example: " Out of Service" screensave# "to

Each disk stores its own 'screensave' message, so you can tell which disk is in the drive even the screen is dark. For a completely blank screen, use a single space (required by FORTH) to place an 'empty string' on the screen.

To turn off FORTH, type:

Forth? off 0 wheel! savesetup  
followed by a RETURN, then highlight and use the ANSWER command.  
(note capital F, spaces and zero)

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To put your own message on the blanked-out screen, in place of the 'Canon Cat' logo:

1. First, turn on the FORTH interpreter with 'Enable Forth Language' as described above.
2. then type the FORTH code:  
" string you want to put on screen" screensave\$ "to
3. Note the leading space, then highlight this and use ANSWER.

example: " Out of Service" screensave\$ "to

Each disk stores its own 'screensave' message, so you can tell which disk is in the drive even the screen is dark. For a completely blank screen, use a single space (required by FORTH) to place an 'empty string' on the screen.

BDWMCN-2

*Common Cat Users Notes  
circa 3/91*

Dad

You can get a list of all the FORTH words used in the Cat by enabling FORTH,  
then

**existing** (use ANSWER)

then you will get a list of 'vocabularies', like 'user', etc.

type one item on the list and 'words', like

**user words** (use ANSWER)

then you will get a huge list, including 'setmodem' and 'set\_modem'.

try them out with ANSWER.

One of these may reset the modem. I am not sure.

If you can, please save Sandy's electric fuel pump, the rubber mounting  
bumpers, and the filter and rubber hoses for me. I will send him something in  
exchange. They only used that pump on one year, and I am anxious to get a  
spare.

Jim Noel is ready to talk wagon, and is already gathering my old spare parts.  
619 460-4708.

more later,

*Bob Wing  
Box 277  
Inverness CA 94937*

*hidden, user,  
arithmetic  
exist - extension of forth  
forth - standard cat  
3 free*

*lower case  
SETMODEM  
SET(HYPHEN) MODEM  
NO\_MODEM  
MODEM.FSK  
" .PSK  
MODEM.ABIS  
INTERNAL\_MODEM*

*-re-set modem*

*of modem  
modem.orig  
waitkey  
disably - let wait*

**BDWMCN-3**

Forth dictionaries

existing function (in forth) arithmetic (in forth) user (in forth) hidden  
 (in forth) forth (in forth) B free

function words

abs average avg int sqrt sum sumdisplay use usedisplay

arithmetic words

user words

forth words

! !char !csp !ptr " "to # #> #s \$char? ' 'beep 'boop ( \* + +! +bit7 +loop  
 +table +to +userounded , - -1 --trailing --userounded . " .r .s / /mod /scan 0  
 0< 0= 1 1+ 1- 1200! 1200? 2\* 2+ 2- 2/ 2drop 2dup 2legalchars? 2swap 3dup : ; is  
 < <" <"to <# <+loop <Obran1 <Obran1 <Oleave <Oleave! <I> <I!p> <?k>> <>  
 <?k> <abort"> <abort> <addto> <avg> <becode> <behead> <behead> <bevoc> <bran> <bran1>  
 <cksum4> <cksum> <csize> <deactivate> <demit> <do> <empty> <eta> <exit>  
 <exit!p> <find> <format> <key> <leave> <leave!> <loc0> <loc1> <local> <locals>  
 <loop> <printc> <purge> <quit> <screen-save> <step> <string> <sum>  
 <sumrounded> <word> = > > r ?auto ?csp ?ctl ?diskerror ?dup ?ev ?k ?keystep  
 ?kval ?lex ?pairs ?panic ?rex ?shift ?sound ?stack ?stackerr ?t @ @k @ph.peek  
 @ptr @ser.peek BL CR DEL ESC TAB [ ['] [compiled] ] aabs abort abort" abs acr!  
 acr@ active addr addto afilter again aint align allot and and! answer! answer?  
 applic arithmetic array ascii ascii.dw asqrt assign auto backelse base  
 baud-rates becomes beep begin behind bevoc blinkruler blit boop bound bticks!  
 bticks@ c! c' c, c@ call carrier? cbuff char char? check checkcarrier  
 clear-auto clr-kbd cls cmove codetoken compport? compile compile, compromise  
 cr create createvoc crlfscroll crt csize csp ctl ctrace cts.off cts.on current  
 current-key cursorimage data-bits deactivate decimal decode demit depth diff?

**BDWMCN-4**

```

digit disk# diskbou diskerr diskerror# diskoffset do do-event doff doit doloc
don down? dpass draw.screen save drive drop dsr.off dsr.on dticks! dticks@
dtr.off dtr.on dump dup edde emit else emit empty emptyvoc encode endtable
energy@ error eta exa execbuf execute existing exit extant ffont field fill
find finish-lex fnderr font format forth forward freetoken from? fsk.dmd@
function ga2opr! ga2opr@ ga3pr.cont! ga3pr.cont@ get( getphrase goto here hex
hidden hld hold home i idblock if immediate in inct inrange into inti int2
int3 int4 int5 int6 int7 int8 int9 inta intb intc intd inte integer interpret
interpretphrase intexecvecs intf invoc ioff ion itx jdn kcodes key kstat
kticks! kticks@ kval largestacksiz last4thline lastexpi lasttok learnstrings
leave len limit lit literal local locals localvoc location loop loops lp lstat
maptable max min mod modem.1200 modem.300 modem.speed! modem.speed? modifiers
move move&adjust ms mticks! mticks@ n' name ncursorimage needforth needtext
negate nest nesting nestype newest next nip ncoop noroom not not! number
numerical oddadjust off offhook? oldisk# on opcr.copy! opcr.copy@ open? or or!
origin outofroom over packforth pad page panicked parity pbuf! pemit ph.?2chrs
ph.?full ph.peek ph.pointers ph.xon.reset playback playback? portugal.dw
print.buf.free print.dev? print.empty print.parallel print.serial print?
psk.dmd@ psk.uscr@ purge qfont quit quit.print qume.dw r> r@ raddr ramchecksum
ramend ramsize ramstart ramtoken0 random? rd/wr recal record recycle
recycledtoken reset-vticks reset.modem restore restore.print retop ringcount!
ringcount@ rings! rings@ ringsound-fast ringsound-med ringsound-slow ringstate
romchecksum rot rp! rpo rstacksize rticks! rticks@ rts.off rts.on rub rw
rxd.disable rxd.enable rxfull? rxpeek rxpointers safety same? save? saveip

```

**BDWMCN-5**

```

saveiv savevenet savevr savevstate scancode scanfor screen screen-save
screensize searched sect# seek semit senddelay ser ser.?2chrs ser.?full
ser.peek ser.pointers ser.xon.reset ser.xon.rx.off ser.xon.rx.on
ser.xon.tx.off ser.xon.tx.on set-auto setcodesize setcur shiftstate shl shr
side0 side1 sign sortmap sound-off sound.addr! sound.addr@ sound.on sp! spo
sp@ space spaces special special.dw stacksize state statuslights stepin
stepout stop-bits str string string: strings stub sw swab swap sync-shiftkeys
t#on t#on0 t#on1 targeting temp tempo temp1 tfont then thislearn ticks! ticks@
tier1 tier2 tier3 tier4 tier5 tier6 tier7 tier8 tier9 tiera tierb tiers tierd
tiere tierf time0 time1 tip to toggle toggletrace tokens top traceiling
tracepointer train.ans train.ans.1200 train.ans.300 train.orig trained!
trained? trk# trkbuf trkbufen tx.mark.disable tx.mark.enable txbreak txchr
type u. u.r u< unget unnest unpackforth unstat until user valid.fsk.ans
valid.fsk.orig valid.psk vdelay vfont vocab vocab? vocabulary voff von vopen
vticks! vticks@ w! w, w@ wcursorimage while window wlit word words x xon.reset
xor xor! xplen xplint y (elsethen) {loop} {while}

```

hidden words

```

!# !H !doublechar !id !pocket "hold ##ctrl #>lbuff #>lbuff8 #above #autos
#below #chars #ctrl #defaults #defmsg #halfines #ignorable #indent #ipage
#iprint #itbl #iwide #just #key? #learns #left #ln #ln1 #lock #long #lisp
#nextwr #oldlsp #op+tokens #pctrl #pg #pg1 #prec #recal #reftokens #retry
#sepchars #sort #spr #table #tabs #update #wide #window #wr #wtable $< $>char
$>lbuff $bold $crtadj $dln $end $erase $fddadj $fddclean $fddtest $format
$half $inv $kbttest $l1eap $lock $page $return $rleap $sh $shift $space-bar
$tab $uln $undo $use-front $above %below %cfmt %dfmt %disk %erase %explain
%indent %insert %ipage %iprint %iwide %just %left %lex %ln %ln1 %lock %long
%lisp %oldlsp %pfmt %pg %pg1 %print %pwrap %scroll %seti %setj %setl %setr
%sets %sett %spr %tabs %undo %wide %wr %attr %calc &dln &firstacc &firstcmd
&firsthid &fmt %horiz %lastacc %lastacc %lastchr %lastcmd %lockedcalc %skip
%docbreak %weirdprint %bold" +field +ref +underline" -bold" -expression -field
-oldef -pocket -ref? -refs -reftokens -underline".curtest .diskerr .dpass
.dtest-status .field-info .fixed .kb-row .line .rd .recal .retry .rw .sect#

```

BDWMCN-6

```
.status .stepin .stepin/out .svroms .systemram .trk# .wr 0-cmd 0. 1-cmd
16bitsignex 2-cmd 2nybs 3-cmd 3nybs 4-cmd 5-cmd 6-cmd 7-cmd 8-cmd 9-cmd
<-refs> <<Print>> <<cold>> <Bdisk> <Disk> <Print> <a* >a/> <bonw>
<box> <chksumroms> <choose#> <cold> <cursorimage> <cursoroff> <cursoron>
<dial> <disk-clean> <quit> <explain> <insertcopy> <kcodes> <line> <maptable>
<mbmargin> <mpagelen> <ntmargin> <mults> <point> <prepare> <printline>
<ramsize> <ramtest> <receive> <rel> <relrounded> <remit> <removeselection>
<restore> <rsector> <rtrk> <save> <search<>> <search>> <setline> <sortmap>
<statuslights> <svtest> <swappkt> <trackdump> <uncreeep> <vsector> <vtrk>
<wob> <write55> <wsector> <wtrk> =clause? =name? >ibuff >pack >status ?o
?aflag ?arithmetic ?blinks ?diskrdy ?expanded ?extended ?index ?kb2 ?keytest
?number ?shifted ?shiflock ?split ?svlist ?tab ?textdisk ?trko ?voff ?wprot
@attrib @calctoken? @checksum.Ohigh @checksum.Olow @checksum.lhigh
@checksum.llow @digit? @element @key$ @keypos @keyrow @keyscan @ph.char
@pocket @ser.char AP100 AP3 AP4 AltPrint Ans Answer? BJB0.printer BJP Bdisk
Bdisk1 BdiskB BdiskB1 Bold CAT180 CATdocbreak Calc Caps Copy DW.countries
Defindent Defleft Defright Defsetup Deftabs Disk Disk1 DiskB DiskB1 DocLock
ETWdocbreak Erase Escape Exp1 FX80 Forth Forth? Indent Insert Justify Kb1/2
KillPrint LBP LBP.printer LBPdocbreak LBPmagic LBPpaper Learn Left NON NaN
Phone Print Right Send SendCtr1 SendFswrd Setup Spacing Tabs Titles
UnPanicPrint UnPrint Unformat Uncopy Under Undo ^dfmt ^fmt ^nextcalc
^nextchar ^prevchar ^sk< ^sk> a! a% a& a* at a, a- a/ a< a= a> a@ aSort aaccum
```

**BDWMCN-7**



abuffer accent accentable? accenterror accompare accompile aconvert acreate  
 addpopsep addspell addspelling addspellmsg addtab adecode adeep adjust  
 adjustformats adjustleadingbrks adjustleaprange adjusttrailingbrks  
 adjustsortlist adrop adup advanceptr aencode aerror# aexec afalse afrikaans.dw  
 aftercalc aftererase aintlen alast alen alit allot# allselected altptr  
 ambiguity analog.loop.off analog.loop.on aneg anew answerback answerback?  
 aover ap100setup ap300setup ap400setup aprinter apsetup aptroff aresult arot  
 around ascan1 ascan2 asp astack astring aswap atemp atranscribe attrib atrue  
 attribute? attribregion attribute auto-answer? autopush autopushedaccent  
 awhole awide a\~ backspace backspace" backup backupdisk? backwards badivl  
 badname badname? badnamerror? badtransmit bare? beepblink beepflag  
 begincompile beot beotivl bj80docbreak bj80setup bjsecond.dw bl# blackruler  
 blackscreen blank-lbuff blankdisk blink blinkct blinks blinktime bold-line  
 boldbit bolded boldfont boldmsg boldtbluf bonw bor bos bosl bosptr bot bou  
 boustrophedon braindamaged break? brk+ btable build buildbody buildlist  
 buildnumber buildtable builduplinks bytes/image calcmg canada.dw capregion  
 capsmsg carrierlost carriertimeout catl80setup cattocat? cflag cformat1  
 cformat2 cformat3 changetone char/inch char>ibuff char>pulses char>tone  
 checkanswer checkbattery checkgaug checkline# checklocallight checknumber  
 checksigns chksum+chksum chksum<> chksumbyte choicecode choicedisp choicelimit  
 clause clausep? cleanedde cleantext? clear-shifts clearlearn clearlines  
 clearundo clippage#to clr-keytest clis-dtest cmds codetrace cold collapse  
 commapun commas comparenumbers comparestrings compileop compiler compress  
 connectone continueinsert? controlmsg copymsg copypkt copypocket copypopped  
 copypushed copyup copyuplock countlist countries country.list country.name  
 cpos crc creatorror crt-test csho cstate ctocreceive curlearn currop cursor?  
 cursorblock cursorline cursoroff cursoron cursorstate cut-ans cutlines  
 cutpages cwides cwidth cx cy dSort daisy.printer daisyoverstrike  
 deepsend defaultmsg defindent defleft defmsg defspace deftabs deletespell

**BDWMCN-8**

```

deletespelling delta# deltab descending diabolical dialchar differs?
digital.loop.off digital.loop.on digits digiterror direction dirtytext?
disk-adjust disk-clean disk-id disk>mem diskaddr diskadj-keywait diskadj-menu
diskcmd? diskmsg disktest disktest-menu disktext disp dispbjgutter
dispcmgutter dispngutter display displaybos displaycodetrace displaydisk
displaygroup displaytrace diinebit dm1 dm2 dm3 dm4 dm5 dm6 do-cmd do-lex
dopage dospelling dot dpktbytes dpktsize dpoint drag drag-backward
dray-forward drive# drive0 drive1 driveA driveB ds dtest# dtest-status-msg
dtmp eggmsg emptycheck emptytext? encalc end-drag end-search endline"
endprint" endrel? endspellcheck endsum? endtext endtextivi enoughforth
enoughtext eor eos-eos-display eos1 eosline eosptr eot eou equit erase
eraselist erasemsg esize evenhalfspace" eventlist exitsc exitsetup expand
explainmsg exponential extbos extend extendedcursor extexpl extradigits
extramods factor fcalc fedmsg field0-msg field1-msg field2-msg field3-msg
field4-msg field5-msg fill-disktest filter.high filter.low findcalc findchar
findds findfield findline findmarker findnarrow findpkt findsplit findtoken
findwide findwidth firstbreak firstseen fit-display fixcalcs fixcursor
fixed-data fixed-test fixindent fixivi fixjustify fixleft fixright fixspacing
fixtabs flen fmtchrs focal foffset footpos forceop formattedsend formfeed
forwarderror forwardrefs? fpkt? france.dw fte fullcrtime funkydisk
fx80.printer fx80magic fx80setup gap gapivi gapline gaugesize german.dw
get#error get#s getdata getdocpak getdpkt getforward getfwdmsg getkey getpkt
getremains getselect getsetupspell getstring getwidth go gobble goldenbytes
goodivi gpdaddr group# groupstartl# gutter gutters halfdisp halfduplex?
halfline" halfspace halfwide? hangup happycat hardpage hidebyte hideivi
hlabove hlbelow hline hllong hmi" hmiseek holland.dw hpi idadvance idtable

```

3DWMCN-9

ignoretable immediacy indentsize indicate init-lex initbuffers initcalc  
 initdictionary initdede initialize initinterruptvecs initkey initkeyboard  
 initnumbers initpocket initprint" initprinter initruler initset initsetup  
 initstate initstrings initstram initssystem inittables initvocab inresult?  
 insertblock insertcopy insertrec internalmodem interruption intext? intlen  
 invbit inverse-line invert-screen invert.chars inwindow ipage# iposit iprint#  
 isize italy.dw japan.dw justmovetext kb-row1 kb-row2 kb-row3 kb-row4 kb-row5  
 kb-row6 kbmsg key# keyboard-test killdisk killivls knowplace knowsbold?  
 knowshmi? knowsos? knowstof? knowsul? largestrec lastbreak lastcalc lastexpi  
 lastkey lastknownline lastline lastop lastseen latin.dw lbound lbp8setup  
 lbpSMARTS lbuffer lbuffer lbufwide lbufwidth leapmsg learn0 learn1  
 learn2 learn3 learn4 learn5 learn6 learn7 learn8 learn9 learnbuff learnerror  
 learning? learnmsg learnop learnpos learnsize leave-extended ledge leftfoot"  
 leftfrill" leftlex? lex-scroll lex-tap lexerr lexop lexxing line#pos line>ivl  
 lines lines/screen linkcalc loadbasis loadline local/global localmsg lockbar  
 lockedrange? lockedsel lockedtext lockedtext? lockend lockmsg locktop lok  
 longname lopage lowercase lpl lpp lrncmd m#punct m#sortb m1.5b m10p m110 m1200  
 m12p m15m m15p m16.3p m16.8p m180 m1805 m18csf m18d m18dw m18g m18pbs m18pitch  
 m19200 m1b m1m m1rg m1rt m2/4 m2400 m2b m2rt m25 m3/4 m300 m30m m30s m38400  
 m3m m3rg m3rt m4/4 m4800 m5/4 m5m m5rg m6/4 m600 m60m m60s m7/4 m7b m7rg m8/4  
 m8b m9600 mA mA+B mA4 mA5 MAB MABK MAP MAP1 MAP3 MAP4 MAPP MAPS MAS MAUTO MB  
 MB5 MB6 MBJ MBM MBMS mBR mBav mBid mBow mBP mCA MCC mCCat mCF mCH mCL mCR  
 mCRSS mCSF mCSM mCT mChp mChs mCcu mD mD/N mDA mDEL mDDS mDN mDNP mDPX mDS mDV  
 mDW mDWchoice mDIO mEI mEli mEve mF mFD mFP# mFX mGot mHD mHL mI mIB mIMS  
 mITLC mInf mJ mKbd mL2 mL3 mL4 mL5 mL6 mL7 mL8 mL9 mL10 mL11 mL12 mL13 mL14  
 mNAP mNCT mNL mNW mNo mNon mOdd mPBS mPER mPL mPM mPP mPP# mPT mPic mPty mRA  
 mRING mS mSA mSB mSBT mSC mSP mSPC mSPS mSRS mSSU mSec mSta mStd mTM mTS mUK  
 mUS mUnid mV mWob mYes mYes1 mad magic#1 magic#2 main-menu main-test mainptr

**BDWMCN-10**

makedefpkt makedpkt makepkt makeprinttable makespace manswer map map100dw  
 map100g map100pbs map100pitch map3csf map3d map3dw map3g map3pbs map3pitch  
 map3tray map4csf map4d map4dw map4g map4pbs map4pitch map4tray mapc mapct mapp  
 mappc mappct marginloop marginng markbl marker markerchar markerspace  
 markpoint mask matchanswerback matched maxgpline maxlearn maxundo mbjpc mbjpd  
 mbjpd mbjpps mbjppitch mbotmgn mcd mdbotmgn mdc mdecimals mdfirstpage#  
 mdirection mdisplay mdpagelen mdpagelen# mdpagelen# mdtopmgn memit merror mfirstpage#  
 mfxd mfxg mfxpbs mfxpitch mfxpl middle mimab mimbpw mimct mimdpx mimlt mimpty  
 mims mims mingpline mkeyboad mlbpcf mlbpg mlbp1 mlbppitch mlineterm  
 mmp mmpc mmpcon mmpct mnewapcsf mnewapd mnewapdw mnewapg mnewappps mnewappitch  
 mnewaptray modem.ans modem.fsk modem.orig modem.psk modm moreclause? motion  
 move&adjusttext movegap movenotwith movepkt mover moverecord moverecords  
 movetext moveunsorted movewith mpagelen mpb mpc0 mpc1 mpc2 mpc3 mpc4 mpc5 mpc6  
 mpcc mpcn mpitch mprintpage# mrgf mrgm mrgo mrgs mring msdpdx msgtbl mspbps  
 msbbpw mscon mspty mspbs mspcb mssetup msspell mtab mtable mtimeou mlt  
 mtopmgn multipop multipush mute myesno namedclause? namefunction narrowcursor  
 narrowcursor? nbuff nbuffer nearinterval nearivl needsglobal needsglobal?  
 new-display newAP newapset newauge? newauge? newhalfline newlearn newlex newline  
 newname newnode newpage? newpiece newplayback newtab nextab nextbrk nextcalc  
 nextcalc? nextchar nextdoc nextdsorcalc nextfield nextivl nextkey nextmatch  
 nextnousep nextpage nextrecord nextsep nextsep? noanswer noconnect nocopy  
 nocopyuproom nodial nodisk nodiskroom nolearnroom nomodem nonblankdisk none  
 nontextdisk nontextdisk? noprinter noprinter noprinter setup norefresh normal-screen  
 noroomcalc noroomcalc? norway.dw nosort notanswer notcalculated notepointers  
 noteramsize notimplemented notokens notsorted notyet numberdisp numberkeys  
 numbr oddhalfspace oddhalfspace" offhook offtime old0 old1 oldbos oldbos2  
 oldcountry oldcstate oldcstate2 oldcursor oldend oldeos oldeos2 oldgauge

**BDWMCN-11**

oldin1 oldop oldop2 oldpiece oldpocket oldpop oldpop2 oldpuns oldrxptrs  
oldsetdata oldshiftlock oldtopline oldtopline2 oldvoc olink onhook onimplicit  
ontime op optokens opchars optable overscanwidth overstrike overstrike" p  
pack packstring packtext page#string page? pagebase pagebreak pagebreak?  
pageprint pages pagesfull panicmaybe? paperlength paperpos papershort parallel  
parksafe parsed parsenext partknown pass pastresult pat1 pat2 pat2even pat2odd  
pat3 pat4 patchforward patchprint patlen pattadd pattdel pattern patternsize  
pattlen pb pbbpat pchoicecode pcwidth pe periodicevents perusecode pformat1  
pformat2 pgchrs pgs ph.?rxrdy ph.?txrdy ph.rx phoneligh phonemsg phonetest  
phonetimer pickprinter pktbytes pktsize placeanswer placemaker pll.fast  
pll.slow po pocket? pocketname pop popped? popsep popsep? popirecalc posit  
postpkt postshuffe pp pprr pps pr\bold/ pr\dline/ pr\uline/ prchar prcol  
precalc precis precision preform preimmediate prepare prepkt prepup prescan  
preset presetglines preshuffle presort prevnonsep prevpage prevpkt? prevrec prevrecsep  
prevdoc previv1 prevmatch prevnonsep prevpage prevpkt? prevrec prevrecsep  
prevsep prevwrap print print" printblanks printc printed? printer printercode  
printerinfo printerport printerror printers printertable printfooter  
printforward" printify printlimit prinline printmsg printnext printposition  
printreverse" prline product proldflags prsmall? prwhite? pulses pushclause  
pushpocket pushpos push!multipop push!pop put" putiv1 query quicksort rambasis  
rbound rcursor rdepth re ready real? realign recaddr recalc receivable?  
receive receive token reclen recursing redef redef fine redefinerror  
redefinerror? redefpopped redefpopsep? redge redisplay redoc redosort redraw  
references reform refresh regobbla relative remove-body remove-word  
removecalc removeselection render repos research reservedname reset.hardware  
resetcalc resetcursor resetphoneligh resetselection? restoreselection  
resultchars? retp! retp@ reverse rewind rheader rightfoot" rightfrill"  
rightstop ringsound riskytext rnar rnd rom>svsetup! rom>svsetup? romanfont  
romcopyup rotatepkts rp@ rptemp rsector rsize rsplit rtn rtrk rule ruleblink

**BDWMCN-12**

```

rulerblink? rulerfont rulersmarts rwide rxch? rxget samedisk? samepkt? save
save&backup savebasis savebos savedpkts savenew savepkts savepos savepos2
saveregs savesetup savesp savespell scan scanbot scanner scans/image
scansublist schoiccode scode scrambler.disable scrambler.enable screensave$
screenstart scroll-dtest-window scrollbar scrolltime scrollfwd scrollup
search< search> searching see$ seed seekrate seektime seenlines selected
selected? selectionsort selen selsize send.tone sendcommand sendend$ sending
sendline sendmsg sendstring sendtable sepchar? sepchars ser.?rxrdy ser.?txrdy
ser.rx serialport set-modem set-serial setblanks setcountry setdata@ setupcat
setkey setkey$ setlearn setline setmodem setprinter setuf setup>temp setupcat
setupcs setupmsg setx shadow shadow-t/s shadowsize shiftkey? sho short?
showaftercalc showcalc showdisk showlearn showmove? showpage showpocket
showredef showselen shuffle si<>#h1 side# signed? skippage smallbit softpage
sort sortbot sortbreaks sortmsg sorttop spi.off sp1.on sp2.off sp2.on
spacingmsg spain.dw sparepkt spc specialctrl spellaccents spellchars
spellcheck spellcheck- spellcheck< spellcheck> spellcheckagain spellcheckgap
spellcheckgap- spellcheckleap spellcode spellcs spellcs apellop splitcursor sprt
sptemp stack! start-drag start-search start-test startline startline" statbuff
stepahead stepback stepin-test stepin/out-test steps/inch steps/line stop
stopbit stopprint storeline stripattr stripattr stripattr stripshifts stylemsg stype
sumcount svbuf svcorrupt svid svid! svid@ svramsetup>temp svramspell>temp
svsetups! svsetups@ svspells! svspells@ svwork swapdpts swaplinks swappkt
swappkts swappos swappos2 swapuns sweden.dw swiss.dw syntaxerr syntaxerror
syserror system.status t. tab# tab0 tab1 tabcount tabloop tabmsg tabsize
tabspace talk tapmove tb telconnect temp-rp temp-sp temp>setup temp>svramsetup
temp>svramspell temptabs test1 test2 test3 test4 test5 test6 testline text

```

**BDWMCN-13**

textify textify? thisdocdata thiskey thres.43 thres.48 ticks/min titlemsg  
 tocol tohyphen tolbuf toline tomanyrefs tophalf topline topmsg toppform"  
 toshiftlock totab tracenest tracenext traceoff tracetier1 tracetier2  
 tracetier3 tracetier4 tracetier5 tracetier6 tracetier7 tracetier8 tracetier9  
 tracetiera tracetierb tracetierc tracetierd tracetiery tracetiery trackdump  
 trainanswer translategap translatespell triggernext triggernext trim1 trim2  
 trim3 trim4 trimline trimselection trycattocat? trykillagain tscan tt.disable  
 tt.enable txcr.disable txcr.enable txenable txenablen? uNaN ubufsize ucreate ufrpressed?  
 uk.dw ulinebit ulinehack? ulink ultype unbuild unbuildtable uncreep underlined  
 underlinemsg undling? undo undoclock undolist undolocal/global undomsg undop  
 undosort undospell undrag unexpand unformat unformattedsend ungobble  
 unhidebyte unimplement unlinkealc unmove unop unoverstrike" unpackageup  
 unpackage unreceive unscroll unvline update! update-field update-field0  
 update-field1 update-field2 update-field3 update-field4 update-field5 update?  
 upkey? upp uppercase uraniumregs usa.dw usedname userinit" userounded?  
 usetoken valid.tone.table value vanilla.unbuild vheight verify&erase  
 verifyaccentable verifybreak verifycalc verifychar verifydoc verifyerror  
 verifyfmtpkt verifynonaccentable version# visible? vline vvector vtline vtrk  
 waitkey we wheel! wheel!>country wheel!>iso wheel!>whichprinter white?  
 widecursor widecursor? w1 wonb wordbuff wordlen workpkt wrap wrapdone wraplim  
 wrapthru write55 writeprotect wsector wtrk ww wws xcur xnar xpintbl xpos  
 xsplit ycur ynar ypos ysplit ~disp ^showrule ^showstatus

**BDWMCN-14**

*Sandy*

*LAP TOP*

I see we are connected.

Mom and Dad from Dave, January 29 *89*

We had a nice low tide at Pt. Loma last Sunday, with great herds of hermit crabs scampering around, which delighted Alex. The offshore fog bank crashed right in while our backs were turned, and changed summer into winter in just a few seconds.

I learned quite a bit at IAI, and was able to view the 'appearance prototype' of the portable. They have the software working on modified Cats in the lab, and are in the process of getting everything scaled down to fit in the box. The circuit boards are done, at it seems to be just a matter of money.

*20 lines  
→  
How many lines?*

The new unit does not fold, but is about 12 x 12 x 1-1/2 inches with a bright, flat LCD that reads right when on the table. They have two models planned:

*Jef Raskin*

a. \$600, 128K, no modem, no drive port. Just the thing for you at the beach, or Pat in class. You can then upload through a serial port to the Cat and print or send, or save.

b. \$1000, 512K, modem, and external drive for another \$200. This unit is fully portable but forms a complete office system when hooked up to drive and printer on the desk.

Both units will have the clock you want, with a little alarm you can set with CALC. LEAP and CALC have been enhanced considerably. They run off AC or 9-14V DC, so you can use it while recharging if you have a nearby car or 300ma solar array. Jef was unable to work out a way to distinguish between NiCads and alkalines, as they mimic each other at various stages of charge, so there will be a switch for one type of cell or the other.

I am visualizing a wooden carrying case with a solar array, so I can stay out 4 or 5 days and get some manuscripts done. I seem to have plenty of pictures.

Delivery: a, June; b, July. With luck. Jef is getting very tired (his wonderful simple Mac is coming out this year in a 73-pound floor model), but his group is very enthusiastic and tenacious. They have gotten rid of the problem investors, but are left with very little cash to go into manufacturing. I have placed orders for us; which one for you?

*BDWMCN-15*



" 1992 Workfiles" screensave# "to

to turn on FORTH

type the code:

Enable Forth Language

then highlight this and use ANSWER.

To put your own message on the blanked-out screen, in place of 'Canon Cat':

1. Turn on the FORTH interpreter with 'Enable Forth Language' as described above.

2. then type the FORTH code:

" string you want to put on screen" screensave# "to

3. Note the leading space, then highlight this and use ANSWER.

example: " Out of Service" screensave# "to

Each disk stores its own 'screensave' message, so you can tell which disk is in the drive even the screen is dark. For a completely blank screen, use a single space (required by FORTH) to place an 'empty string' on the screen.

To turn off FORTH, type:

Forth? off 0 wheel! savesetup

followed by a RETURN, then highlight and use the ANSWER command.

[note capital F, spaces and zero]

Enable Forth Language

David from Dad

12/15/90

Unlocking the CAT modem.

I think the modem locks up when I accidentally hit the send command when the phone line is on hook, the the wait sign comes on until a touch another key to turn off send.

Today I was able to get on MELVYL when the CAT would not handshake after only 10 minutes by:

1. Removing the floppy from the CAT.
2. Turning off the power for 10 minutes.
3. Without a floppy installed dialing up MELVYL and the handshake occurs.

Do most or all of your searches, highlight, put the old floppy in, copy up, and when ready logoff. Now that floppy and the CAT setup memory have a disconnect and the next modem callup works fine.

**BDWMCN-16**

Turning off FORTH  
type:

Forth? off 0 wheel! savesetup

[note capital F, spaces and zero]

followed by a RETURN, then highlight this including the RETURN, and use the ANSWER command.

your msg had " at the beginning.

To disable Forth type:

Forth? <space> OFF < > Ø < > WHEEL! < > SAVESETUP < CR >

← highlight →

USERFRONT ANSWER → get beep (EXPLAIN says can't use)

I then go back to 2+2 & get 4 → Forth still active

? any ideas on how to disable?

2/12

"can't use" means FORTH statement not legal syntax.

"Answer command not turned on" means FORTH successfully disabled.

To enable forth —

SRAM:  
65256 = CMOS

BDWMCN-17

Serial Communications from Apple IIc(Swyft) to Canon Cat  
28 October 1987 [can't communicate other way yet]

set SE%=7689 (9600 baud)  
set LE%=-1 (no line end)

set null modem switch on back of Cat main board toward PARALLEL port, not the  
serial, as I wrote on the disk.

Robert Wing  
Box 277  
Inverness CA 94937

12/2/87

BDWMCN-18

almost  
 except  
 DISABLE FORTN  
 TYPE "FORTN?" OFF ^ ^ A  
 WHCOL! ^ SAME SETUP ^  
 HIGHLIGHT  
 2\_2\_+--(CR)  
 JUST ANS  
 if 2 3 4 5 6 7 8 9 10  
 11 12 13 14 15 16 17 18 19 20  
 21 22 23 24 25 26 27 28 29 30  
 31 32 33 34 35 36 37 38 39 40  
 41 42 43 44 45 46 47 48 49 50

BDWMCN-19

David Wing  
239-4874 ←  
236-9319

Dec 18-Jan 5

After they are erased, all the bits may not be set to "1" (the unprogrammed default state), some may still be at "0". If this is the case, try putting them into another socket (use them with another of the 4 firmware combinations), where they might work ok, where the bad bit will be in the appropriate (50% chance) place, or might check ok anyway the second time.

Cat ROM checksums:

|        |          |
|--------|----------|
| 0 high | 005375A6 |
| 0 low  | 0061C18C |
| 1 high | 008D3C37 |
| 1 low  | 0094C8A3 |

3DWMCN-20

//JEF'S ROLODEX 1 September 1987---check the utility of this model  
Dad: set record separator to 2 breaks

-----  
SORTING KEY  
-----

| Field | What's in it                       |
|-------|------------------------------------|
| 1     | First names                        |
| 2     | Last names                         |
| 3     | Titles (such as "Pres.," or "CEO") |
| 4     | Company name                       |
| 5     | Street address                     |
| 6     | City                               |
| 7     | State                              |
| 8     | Zip code                           |
| 9     | Country                            |
| 10    | Phone number(s)                    |
| 11    | Notes and miscellaneous info       |

HOW TO ADD A NEW ADDRESS TO YOUR ADDRESS LIST:

- A Use the COPY command to copy the dummy address below.
- B Leap to each category in the dummy address and replace it with the requested information. If there is no information, erase the category and type a tab character. Make sure there is one and only one tab character for each field, even when there is no information. For example, if you don't fill in the country, you must have a tab character after the zip code. If you don't have an address, you need a tab for each field in the address. If the first line or lines is empty, use tabs and end with a return. That way your first printing line will be flush left (see B&B Saab below):

```
(field 1 - no first)(tab)(field 2 - no last)(tab)(field 3 - no title)(return)
B&B Saab
9,408/247-3444
```

The above becomes:

```
(tab)(tab)(return)
B&B Saab
9,408/247-3444
```

- C Proof your work by highlighting the entire address and counting tab characters and returns. Make sure you have 11 fields!
- D Drag the new address to a location within the ROLODEX and SORT!

```
FIRST NAME, LAST NAME
TITLE
COMPANY NAME
STREET ADDRESS
CITY STATE ZIP
COUNTRY
PHONE NUMBERS (USE SPACES BETWEEN NUMBERS - DON'T USE RETURNS OR TABS)
```

*BDWMCN-21*

Dad from Dave, 5-25-88 7:50pm

Just missed each of your messages today by 2 minutes, as I have the Cat pick up after one ring, and hardly ever notice the incoming messages unless I am at the screen.

Good news on the new wagon, and that it's newer yet. That seems to be a very good price for an '84.

I called on your trailer towbar, and will pick it up tomorrow. The exact price will depend on what parts I can find to go with it in the back room, as I stated last week. I will look in the hubcap box at that time.

I will ask Paul Chernofsky to go in with his dealer discount and see about the manual and cruise.

*Bob* Try setting up your internal modem screen to line terminator: none, which will let your text flow into the margins I have set here. I am getting many extraneous returns in your messages, and have to remove them with a LEARN.

Speaking of LEARNs, have you made a simple one yet to print the current document: leap backward to DOCUMENT, leap forward to same target, highlight, print. Then when ever you want to print the document the cursor is in, it's just USE FRONT-n!

Rolodex: here is a sample, with my arrangement of 7 fields. Note that there are 2 returns between records, so to sort them, you need to set the SORT record separator (in screen two) to 2 breaks. What I do is start a new address between 2 others, with a tab between first and last name, and a tab for each of the empty fields (like no business name). That way you have the every-space tab fields already in place.

Just type the first name, TAB, last name, return, etc.

After you have finished the entry, highlight the entire entry to check for the correct number of fields. To sort by last name, just highlight from the beginning of the list to a cursor position anywhere in the last name of the bottom entry, and SORT.

Note that the comment field (#7) can be any length, as long as you have no returns in it, except at the end.

*BDWMCN-22*

-----  
Wing's abbreviated Rolodex: 7 fields  
firstlast  
company  
address  
citystatezip  
phones  
comments  
-----

Alan & Karen Nephew  
11775 Highridge Road  
Lakeside, CA 92040  
561-9563

Her Cat is hooked up to 443-7910, and her dictation machine is 443-0381

Margaret Wing & Mike Tassano  
40165 Leslie Street  
Fremont, CA 94538  
1 415 770-0289

Margaret Wing & Mike Tassano  
40165 Leslie Street  
Fremont, CA 94538  
1 415 770-0289

Jerry Burchfield  
1 714 857-6193  
Suda's CIBA printer, uses CAP-40 processor

-----  
Note that there are two nearly identical entries for if you have  
all the TABS.

Marg and Mike: one has the name-separating TAB before Wing, and  
the other has it before Tassano (instead of a space). When you  
sort these, one goes under 'W' and the other under 'T'.

. . . .

I don't know about getting into the tile area, but I will let  
you know if there is a chance before the cool season.

In the address area only.

**BDWMCN-23**



A LITTLE MENTAL OMELETTE, or under what circumstances 34 eggs will cost you 2.95.

If 14 eggs cost \$1.14 then 34 eggs will cost \$2.77. But, to be realistic, with 6.50% tax, they will set you back \$2.95.

FORTH DISK

## GRAPHIC DEMO

Highlight and use the ANSWER command to execute Forth.

```
0 <= y < 340 (reverse direction from Cartesian coordinates)
2 <= y <= 308 (to use text area only, leaving nice borders)
0 <= x < 672
2 <= x <= 669 (to use text area only, leaving nice borders)
c=  0 black
    -1 white
    1 xor
```

```
x y x y c <line>
x y c <point>
x y x y c <box>
```

<?k> returns -1 when a key is available  
n rnd random integer between 0 and n-1 inclusive.

<key> drop

The first two words pick up the USE FRONT key up from using the ANSWER command.

---

**Caution:** If the cursor is left in a LOCKED document, text sent to the machine from another machine may be lost, with no notice to the sender or the sendee!

**The Cat is a Computer:** Type and highlight 'Enable Forth Language', then the [ANSWER] command, and the Cat will run FORTH and 68000 assembly language via the [ANSWER] key. At the same time the disk read/write verification is disabled, which Jef thinks is unnecessary, and disk operations are done at double speed.

---

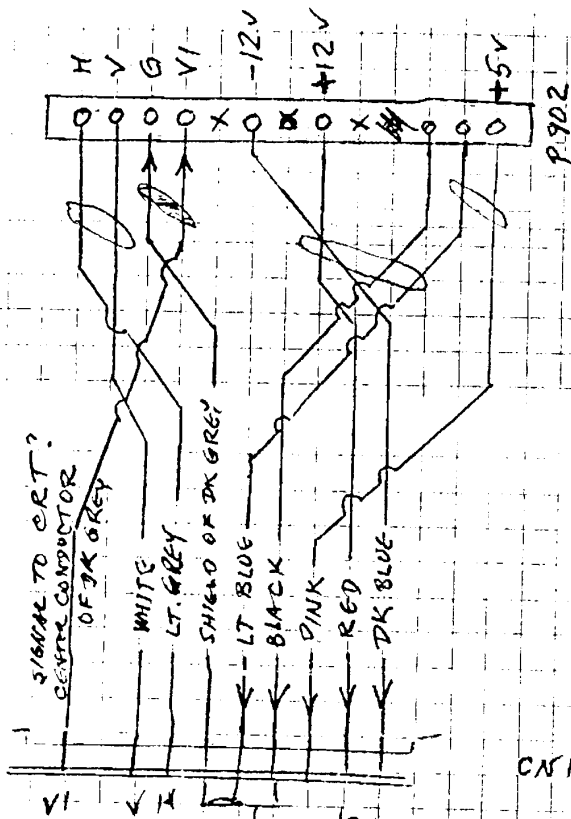
January 10

Dad, in addition to your transferred files, I have added some of Jef's demos (above), including a FORTH graphics program. You can view the program text by leaping around in it and you can run it after typing 'Enable FORTH Language', highlighting the phrase, and using the [ANSWER] command. **Already done on this disk!** (This command will persist until your onboard battery dies, or you cancel it, maybe with 'disable', or 'cancel'—I don't know yet) Then type and highlight 'demo', then use [ANSWER] to go; hit any key to stop.

BDWMCN-24

CANON CAT POWER SUPPLY CONNECTIONS TO MOTHER BOARD

CRT GOLDSTAR TYPE 240AST34(M) 9"



← POWER SUPPLY BOARD LABELS

X = NO CONNECTION

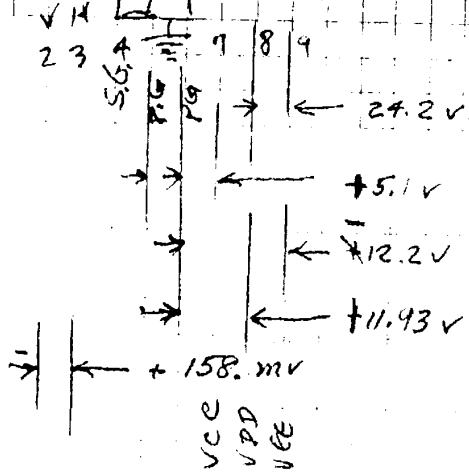
= TWISTED

= SHIELDED CONDUCTOR

= ASSUMED DIRECTION OF SIGNAL OR VOLTAGE

H & V UNKNOWN PURPOSE

CRT MOTHER BOARD PINS



DAVID

I would bring the 5 pin power wires out to an external connector. Use an external power supply to the mother board for the Black, Lt Blue, Pink, Red, & dark blue, leave P.S. wire open and protected from shorts.

rw

Other ways Floppy requires +5v, +12v.

R/W 9/15/92

BDWMCN-25

Jef's on-line editing conventions:

technique: [delete][insert][comment]

examples:

|           |                                                         |
|-----------|---------------------------------------------------------|
| [x]       | delete x                                                |
| [ ][y]    | insert y here                                           |
| [x][y]    | delete x and insert y in its place                      |
| [ ][ ][z] | make comment z to the author                            |
| [x][ ][z] | delete x; z tells why editor wants to delete it         |
| [ ][y][z] | insert y here; z tells why editor thinks it is needed   |
| [x][y][z] | delete x; insert y; z tells why editor wants the change |

BDWMCN-26

Dear GrandmamaMargo, How are you? The yearbook went to press last week so now we are awaiting the proofs. We already got the endsheets back and they look really good except for one little. Luckily, we fixed that right up. Catalina last weekend was great. See you soon. Love, Emily

'demo': have you moved the FORTH graphics program to another disk, and is this disk FORTH-enabled? Rember, to do this, type Enable Forth Language [note caps and lower case] and then highlight and use answer. If it's already done and saved on that disk, you will get a beep and EXPLAIN will say 'can't use', which means you're already in FORTH. All FORTH words after that including the program name 'demo' should be in lower case, and make sure that you take out your disk when fiddling around with FORTH, as weird things may cause a crash and erase the disk!

BDWMCN-27

Dec 2

Dad,

were fortunately able to squeeze in your order at the bigger discount, which has since been made a somewhat stricter. I have asked IAI to forward your unit directly from Palo Alto, since they have just moved, and several days of non-essential business were deferred during the move.

I am sending under separate cover your transferred diskfiles and the printer cable (still waiting for <sup>new</sup> Apple-box). I will keep the 5 1/4" disks until I hear that you have received the 3 1/2"s and read them ok. I hope that everything arrives at about the right time.

| Expenses:         |                | .06              | .07      |                 |
|-------------------|----------------|------------------|----------|-----------------|
|                   |                | price            | tax      | total           |
| <i>Calc this:</i> | Cat            | \$897.00         | 62.79    | use(-1)*bigtax_ |
|                   | 959.79         | use(-2)+use(-1)_ | (7% tax) |                 |
|                   | Cable          | 19.00            | 1.14     | use(-1)*tax_    |
|                   | 20.14          | use(-2)+use(-1)_ |          |                 |
|                   | Disks          | 17.50            | 17.50    | 1.05            |
|                   | 18.55          | use(-2)+use(-1)_ |          |                 |
|                   | Shipping       |                  |          | 6.51            |
|                   | Your payment   |                  |          | (1100.00)       |
|                   | Check enclosed | -95.01           | sum_     |                 |

← the fractions were on the screen but didn't go thru!

| Expenditures:    |                |          |       |                 |
|------------------|----------------|----------|-------|-----------------|
|                  |                | price    | tax   | total           |
| <i>Get this:</i> | Cat            | \$897.00 | 62.79 | 959.79 (7% tax) |
|                  | Cable          | 19.00    | 1.14  | 20.14           |
|                  | Disks          | 17.50    | 1.05  | 18.55           |
|                  | Shipping       |          |       | 6.51            |
|                  | Your payment   |          |       | (1100.00)       |
|                  | Check enclosed |          |       | \$95.01         |

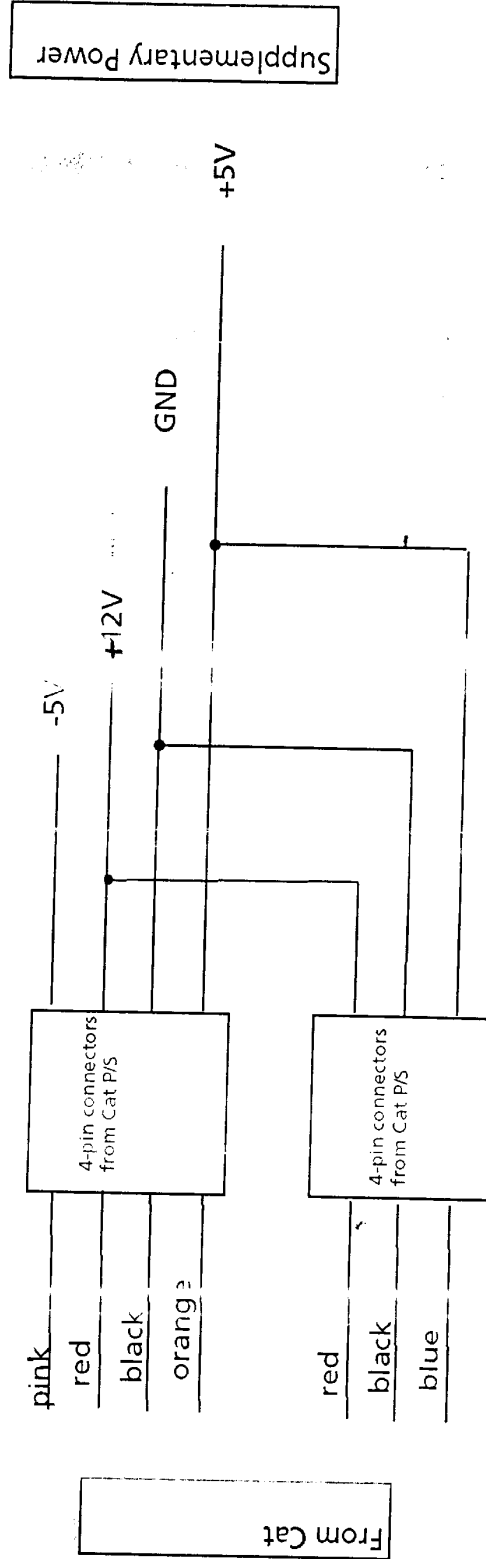
BDWMCN-28

CHAGE: Enable Forth language (NO RETURN) USE ANSWER  
 ↑ HEADLIGHT      ↘ NEW MSG      — THEN ANSWER  
 " New 89-90" screensave# "to  
 " Bob's Cat" answerback "to  
 (TO HAVE SCREEN REFLECT DSK NAME)

INVERNESS  
 Furnished for house with Bay view  
 1000 Leased \$550 mo + \$111  
 669-7402 or POB 277, 94937.

BDWMCN-29

Canon Cat Power Supply Leads  
(for retrofitting supplementary internal or  
external placement)  
D. Wing M. Jankowski 9-26-93



BDWM CN-30

David Wing 1538 Granada Avenue San Diego, CA 92102 (619) 239-4874

December 19, 1989

Robert Kroninger  
P. O. Box 500  
Inverness, CA 94937

Dear Judge Kroninger:

I hope that you will receive your Cat180 printer by the time you read this letter. The cut sheet feeder will come from another location, and may take a few more days.

My research on the laser printers is encouraging. I looked at the H-P Laserjet IIP, which is an excellent unit, but not very compatible with the Cat. The Canon LBP-4, however, is an excellent match, and sells in the San Diego area for \$1099. You may be able to find even lower prices. My Canon contacts may be able to obtain one directly for you, but would not be able to deliver until January.

I have enclosed some print samples from the LBP-4. I was only able to get to the Courier font in my first tests, but I have some ideas on getting the Cat to drive the Times Roman and Helvetica fonts as well. This printer works at 4 pages per minute, rather than the 8ppm of the more expensive models, but this speed is more than adequate for individual workers. I am very pleased with the printer, and may end up with one myself.

I hope this information is useful to you. I look forward to getting everything running for you next week.

Sincerely,

BDWMCN-31 of 31