BᴀsɪC Cᴏɴᴄᴇᴘᴛ   The BravoX format recovery feature assists the user
in the transmission or acquisition of text from
terminals or workstations that do not use the Xerox
Document System text editor (BravoX).
Traditionally, this task has been difficult since there
is little or no consistancy between various vendors
or equipment generations. The format recovery
feature is not an exact process, but rather a best
effort, based on anticipated user needs.

IF THE RECEIVING DEVICE IS AN ALTO WORKSTATION

The text entry device may be an 850, an 860,
another word processor, or a time-sharing system.
The format recovery software does not have special
knowledge about the formatting codes used by a
specific system. It relies on certain universal file
properties coded according to the ASCII Standard
to "recover" or translate some of the formatting
properties on the foreign device to BRAVOX internal
format. Format recovery uses the American
National Standard X3.4-1977 code for information
interchange as a set of translation rules.

The process is not perfect. Formattng characteris-
tics of foreign devices that are not ANS compatible
are unknown to the format recovery process. This
usually requires specific manual editing actions in
BRAVOX to obtain desired results.   In general, the
program will make a best effort to do the conver-
sion. For this reason, it is important that the
original text entry avoid complex formatting codes.
Should this not be possible, the user should be
aware that these unknown and untranslated codes
will require additional manual effort to remove and

replace them with valid BRAVOX functions. Once transferred, the documents may be formatted, edited, and updated by BRAVOX.

New files that are intended for the Xerox Document System Editor, but typed on the Xerox 850 should be entered without complex formatting. The final formatting should be developed using BRAVOX; perhaps in the form of a style sheet, if the application justifies it.

The format recovery is quite effective with single spaced plain text (fixed pitch, i.e. 10 or 12) with two returns delimiting paragraphs, but will function well with proportional spacing. In previous systems, even simple files of this sort had to be painfully edited after transmission. In particular, "extra" carriage returns at the end of every line, line feeds and other "invisible" characters had to be removed by hand. All this is no longer necessary. In addition, an attempt is made to recover the format of boldface headings, underlined headings, centered headings, and plain tabs.

Formatting features that can cause problems are: special characters, special tables, boldface and underlining in PS (proportional space) text. The best strategy is to avoid entering these properties on the 850 when the file is intended for eventual transfer to the Xerox Document System Editor.

To summarize, when preparing text on a foreign system, the "do's" are:

- Type single spaced text in 10 or 12 pitch

- Separate paragraphs with two returns

- Use plain tabs in tables

- Furnish final formatting on the Alto

The "don't's" are:

- Do not use complex formatting during initial input

- Avoid complex table formats

- Avoid boldface and underlining in the middle of text

- Avoid PS (proportional space) during initial input.   Final output can still be PS!

IF THE SENDING DEVICE IS AN ALTO WORKSTATION

In this mode there are two basic alternatives: the receiver is a Xerox 850 or a Teletype (TTY) type device.

Format recovery presumes that a TTY device is not very smart and only provides a minimum of assistance.

- Format Recovery will provide blank padding to   simulate margins and tabs

- One carriarge return will be provided at the end of   every line

- Two carriage returns will be provided at the end of a paragraph

4

- The font pitch should be consistant between the sending and receiving devices

- Do not use special characters during initial input. Special characters are interperted as characters that do not appear on the Alto workstation keyboard

If the receiving device is a Xerox 850, format recovery will attempt to emulate the characteristics of that device.

- Carriage returns, left flush tabs and margin descriptors are transmitted to the 850.

- All other BRAVOX properties will not be transmitted

Our experience indicates that the sender should have a working knowledge of the receiving device and should prepare the document with those limitations in mind. Should the document contain complex BRAVOX format, font or other features, they will be stripped during the transmission process. The user should keep in mind that BRAVOX formatting properties cannot be maintained during the transmission process. The transmitted document can contain little more than the plain text allowed by the ANS convention.

The hyphenation algorithm used for the hyphenation function in the Xerox Document System was borrowed from Donald E. Knuth and may be reviewed in his publication, *TEX and METAFONT: New Directions in Typesetting*. The algorithm tested to be 97% accurate. Following is a list of words that may occasionally be hyphenated incorrectly:

absorbent	blastoff	coneflower
acceptable	boarder	conformity
acceptor	bomber	consultant
accordance	bouncer	contestant
accountant	boundary	controllable
acknowledge	buffer	conundrum
adaptable	bullish	convertible
adapter	buzzer	costar
affirmative	bystander	countess
algorithm	candlestick	courthouse
announcer	carbon	courtyard
antacid	castaway	crescendo
anteater	castoff	crestfallen
anthill	cation	crossover
antiquity	cavernous	cryptanalysis
anything	center	crystallize
apartheid	changeover	curlicue
archangel	childish	dampen
archery	chordal	dampest
armistice	civilize	darling
artist	classify	debtor
askance	classroom	declaration
astigmatism	climber	decrescendo
astir	clincher	deductible
astonishment	coarsen	deformity
atmosphere	cognac	degree
balding	coleslaw	dependable
baroness	combative	dependent
beachcomer	comeback	descendent
beckon	comedian	descent
bestial	commendatory	detestable
between	comotose	digestible
bibliography	comptroller	discernible
bindery	computability	dismissal
binomial	condescend	distillery

dumpling	immobilize	minister
earthenware	impassable	ministry
eastern	imperturbable	mobilize
egghead	inchworm	modernize
eggnog	inclement	monopolize
eldest	incontestable	morgue
elsewhere	independent	needlework
equable	indigestible	negligible
equipped	inequity	negotiable
erring	inexactitude	nervous
establish	inexhaustible	nestling
eulogy	informant	nonconformist
evening	iniquity	nonetheless
everything	inkblot	nonexistent
exactitude	inkling	nonmetal
existence	innkeeper	northeast
expendable	insatiable	northern
expressible	interior	nursemaid
fallout	interruptible	nursery
falsehood	irreversible	observable
farthing	jeopardize	observer
fencer	kibitzer	offbeat
fiendish	landowner	offhand
foreigner	launcher	offprint
foreshorten	leftist	offshoot
forestall	leftover	offshore
foundling	lessen	offspring
generator	lifestyle	orangeade
golden	liftoff	outlandish
handlebar	limestone	palate
hangout	lioness	passable
hangover	liquefy	pedagogy
haphazard	liquid	penthouse
harangue	liquidate	percentage
harden	liquidation	periodic
hardest	liquor	perservative
harpist	livestock	persistent
hazardous	lullaby	petal
heartache	luncheon	photostat
heartily	luscious	plaything
henceforth	mainspring	plebiscite
herbal	masthead	plumber
hogshead	meringue	polynomial
holdout	metabolize	porthole
holdover	metal	postal
holdup	milestone	posthumous
idler	mincement	predictable

prerequisite	senseless	trenchant
preschool	server	turnabout
previous	serviceable	turnover
priesthood	sharpen	turntable
probability	shoestring	ubiquitious
probable	shorten	unanimity
procedure	shyster	unanimous
psalmist	sibling	uncivilized
publication	sidestep	unclassified
publish	sideswipe	uncontrollable
quadrille	silencer	unctuous
rancher	smokestack	understandable
rattlesnake	snakeskin	unerring
recorder	sociable	ungovernable
rehearsal	softhearted	unpredictable
rental	solvable	unsearchable
replacement	somersault	unsociable
representative	something	unsolvable
requisition	stabilize	upswing
rescind	standardize	vengeance
researcher	standout	victual
resolvable	starling	vignette
respectable	stature	voltage
restarted	sterling	walleye
restatement	stewardess	wastebasket
restore	stiffen	wasteland
reversible	subsequence	wattmeter
revolver	suffer	weakling
rollaway	suggestible	westernize
roundabout	superior	whenever
sapling	tantalize	whisker
seascape	thermostat	worsen
selfish	tongue	yardage
sellout	torque	yearling
sendoff	tossup	

4

THIS PAGE LEFT INTENTIONALLY BLANK

BASIC CONCEPT   The ability to perform calculation is provided in the
                               Systems menu. You may add, subtract, multiply,
                               and divide to calculate figures using the commands
                               in the Systems menu.

TO GET CALCULATOR FUNCTIONS
                               MARK **Detail** in the Systems menu.

Detail COMMAND   Marking the **Detail** command on the Systems menu
                               will open the menu to display all available
                               commands and functions. *Calculator:* is one of
                               these functions.

PROCEDURE   To utilize the Calculator:

                               1.   Insert a number in the brackets after
                                       Calculator: .

                               2.   MARK **Enter.** The number will appear in the
                                       bracket and after Result.

                               3.   Insert another number in the brackets.

                               4.   MARK **Add, Sub, Mul,** or **Div.** The result of the
                                       calculation will appear after Result.

                               To Clear the field for a different calculation:

                               1.   MARK **Clear**.