CREST®

NAA Guidelines

for

Classified Advertising

Remote Markup and Transmission

Version 1.0

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Table of Contents

Introduction

In 1986 representatives from newspaper classified advertising departments, classified system vendors, ANCAM, and ANPA began meeting. The purpose of these meetings was to develop a set of guidelines for the entry, markup, and transmission of classified advertising from a remote site. It was assumed that the remote computer system would be a personal computer. However, the guidelines set forth in this document are not implementation dependent.

This document presents the guidelines in two major sections. The first covers the file header and transmission protocol information. The second describes a machine independent markup language.

The protocol section covers the communications between the remote client and the host newspaper. It includes information on how to remotely connect the host, change passwords, send and kill ads, and terminate a session. It also gives a list of status codes that will be returned from the host.

The use of an independent markup language means that the client advertiser needs to know only one coding method to specify composition information. The language section contains basic and advanced coding subsections. There are predefined default conditions if no commands are specified.

Header Format Section

Objective

To support the use of personal computers or other computing hardware with the ability to create, edit and communicate classified advertising to newspapers. This will be accomplished by offering a phone link between client personal computers and newspapers' front-end systems.

Newspapers understand that clients will not want to learn to use multiple headers and markup languages, and will attempt to establish industry standards which are independent of any front-end system.

The newspapers will not be required to place any hardware or software in the client's office. All information will be received over the phone lines in standard ASCII format. The newspapers will place appropriate equipment in their computer rooms to translate this information into a format acceptable to their own front-end systems.

CLIENT REQUIREMENTS

The client should be able to use computer equipment with newspaper independent software and an asynchronous modem.

Should use a common markup language and not require client personnel to be trained on Atex, CSI, SII, and other markup conventions.

Should use a standard header, independent of newspaper's front-end system, and include:
     1. Client's customer account number
     2. Client's ad number
     3. Standard product coding and scheduling syntax

Should receive a confirmation back from the newspaper, including:
     1. Client's ad number
     2. Newspaper's ad number
     3. Ad size (lines and inches)
     4. Price quote estimate

Should be able to send and kill ads and immediately receive confirmation.

NEWSPAPER REQUIREMENTS

Newspapers need a device which does the following:

- Receives ads from clients over phone lines using either a dialup or leased line.

- Converts client standard headers and markup commands into headers and markup commands specific to the newspapers classified front-end system and then transfers those ads into that system.

- Receives ad processing confirmation details from the front-end system and sends them back to the client over phone lines.

- Provides an interactive environment by returning an acknowledgement back to the client for each ad received as it is received. The acknowledgement can include the ad processing details if available, or simply an indication that the ad has been received.

- Provides an interactive ad status function which supplies the ad processing confirmation details for ads that previously had been acknowledged but not processed.

- Provides an ad kill function the use of which is discretionary on the part of the newspaper.

ASSUMPTIONS FOR REMOTE ENTRY SPECIFICATION

1. Not Dictating Policy for Newspapers or Agencies

   It is not the purpose of this specification to dictate policy, either to the newspapers or advertising agencies, on the acceptance or rejection of ads submitted remotely. The newspapers and/or the advertising agencies will still set the criteria needed to be achieved for the publication of advertising material.

2. Ad Scheduling Instructions Required

   It is not the intention of this specification to dictate the requirements for scheduling ads at individual newspapers. What is defined is the minimum header information that this committee believes is required to schedule an ad with a simplified run schedule. It is incumbent on each newspaper to provide their advertising agencies with complete instructions to successfully schedule an ad for publication in that particular newspaper.

3. Ability to Transmit Bill Information

   It is recognized that a minimum requirement must be to transmit enough information with the ad to allow the newspaper's accounting system to correctly generate a bill.

4. New PC Software to Format Ad Into "Standard" Format

   It will be necessary to have software resident in the PC to format the ad header and text into the transmission format as defined by this specification.

5. What is Transmitted

   This specification deals with the format of the data being transmitted between the PC and the front-end system, not how information is displayed or stored on the various PC's or how the front-end will process the information once it has been received.

6. Low-Level Communications Protocol User Determined

   This specification does not define the actual communications protocol used to transmit the information from the PC to the front-end system. The purpose is to define the format of the data that is transmitted so that front-end systems, no matter which vendor's system is used, can expect to see the data in a "standard" format and process the information accordingly to successfully store an ad.

7. Two-Way Communication

   This committee wants to emphasize that this specification is dealing with two-way communications, including returned H&J text. Once an ad is received at the front-end system, the front-end system will return a message text stream to the PC that will indicate various aspects of the ad (ad depth, lines, cost, etc.) including the ad text with line breaks, etc.

8. Communications Interaction

   The system is design to run in an interactive lock step fashion. For each message transmitted, there should be a response from the receiving machine. Upon receipt of an ad, an acknowledgement should be returned even if specifics about the processing of the ad are not available. It is possible to send ads, receiving back only acknowledgement of receipt for each ad, disconnect, and check for processing details at a later time.

9. Order of Data Fields

   There is no required order for the data fields. It will be less of a burden on the receiving system if the transaction code **TC** is first. The system will then be able to make logical assumptions about the data without having to store unprocessed input. Text fields should be transmitted last. This allows the system to build or process the complete header before having to deal with the ad text.

10. Required Fields

   The only required fields are the transaction code and the checksum. All other fields are optional and need be included only if there is data to for that area.

11. Modified Ads

   The system does not support changing of ad text or run dates after an ad has been submitted and run in the newspaper. If it is necessary to change the ad copy or run dates, and it cannot be done with a kill transaction, the newspaper must be contacted directly to have the change effected.

12. Checksums

   The checksum is a method of validating that the data received has not been garbled in transmission. The method used to generate the checksum is to sum the ordinal value of all of the characters starting with the initial record seperator character at the beginning of the record and ending with the element seperator character immediately before the checksum record. The remainder of this number after division by 1000 is used as the checksum. The character equivalent of this number is generated and transmitted as the value in the checksum field. The character string send for a checksum value of 0 is "000". The string for a check of 999 is "999".

REMOTE ENTRY STANDARD GENERAL APPROACH

The approach taken in this standards proposal will be demonstrated by following a typical session. Please bear in mind that this standard dictates only the datastream to and from the paper. What the user sees on his screen is governed by the remote entry software in his PC.

The system is non-interactive to the extent that ads are prepared off-line for later transmission to the paper. Once connected to the paper however, an ad is sent to the paper and is acknowledged by the paper before the next ad is sent. Under normal circumstances, the sender of the ad can consider that the ad will be published once sent to the paper and acknowledged as error free. Naturally, some papers will have ads screened by a copy desk.

Establish Connection

A connection is established with the newspaper front-end through whatever means are appropriate for the session. The method of connection is not specified by this standard since it will vary with circumstances and technology. For example, a local advertiser may access the paper through a direct dial line and a 1200 bps modem. A national advertiser might access a distant paper through a value added x.25 network such as Tymnet. Likewise, an error correcting protocol may or may not be present, though some minimal error checking is included within the standard.

Where direct dial communication is used, it is recommended that the newspapers use 8 bits of data with no parity.

It is assumed in all cases that the ASCII character set will be used.

Login

Upon receiving a "Hello" prompt from the newspaper, the remote entry software will send an account identifier and password. Depending upon policies within an agency, the user of the software may be aware of the password and may be required to enter it manually, or it may be known only to a privileged user and be sent without being seen.

If the account is registered with the paper and the password matches, a successful logon will be acknowledged. If either the account identifier or the password is invalid, an unsuccessfuly login message will be sent. The user may be given the opportunity to try again, but effective security would dictate a small number of retries and some time interval between attempts to defeat exhaustive searching for a valid password.

The account number used for login may be an agency account as opposed to a billing account to be used for a specific ad. Once the user has logged in, requests will be accepted for accounts controlled by the agency. Operations affecting other agencies' accounts will be denied.

Password Change

An important element of password security is that the password be easily and frequently changed. A password change mechanism is included in the standard for this purpose. A password change request can be sent to the paper containing a new password. If the paper accepts the change, acknowledgement of the change will be returned. If the paper does not accept the change for any reason, an error indication will be returned, and the old password will still be in effect.

It is expected that the ability to change a password may be restricted by the agency software. Note that a user has already logged on using the current password before a password change can be effected. This assures that the person changing the password is legitimate.

While the password change request is unlikely to be repeated within a session, it and the new ad kill ad record will be repeated as necessary and may appear in any order.

Sending Ads

Once logged on, new ads may be sent to the paper. An ad request will include the ad text and markup, as well as the classification code, insertion dates, etc. Common options such as multi-column, zones, blind box requests, etc. are supported. Several ads may be sent in one session, but will be sent one at a time, waiting for an acknowledgement of receipt by the paper before sending another. The acknowledgement may also include the ad processing details (paper's ad

number, line count, estimated price, etc.), or this information may be sent in another session in response to an ad status request.

Killing Ad

Ad kill requests may also be sent to the paper, using the paper's ad number to identify the ad to be killed. If a kill request is successful, a confirmation will be returned. If the paper cannot kill the ad for any reason, an error indication will be returned.

Note that the standard does not define a change request record. Changes are effected by killing an ad and transmitting the new version as a new ad.

Terminating the Session

After finishing its business with the paper, the remote entry software will send a logoff request and receive a logoff confirmation from the paper. At that point, the connection will be broken and the session is finished.

RECORD STRUCTURE

The following is a description of all of the possible records being sent from ad agencies (or clients) to newspapers, and vice-versa. Each record element will be separated by a "unit separator" character. The following terms will be used to describe record elements:

Element Label   2 character label which will identify the record element. These 2 characters appear first to identify what data is being sent. By using these labels, we eliminate the need to have the elements appear in the pre-defined order.

Element Descrip.   Description of the data being sent. The data should immediately follow the element label.

Element Type   The type of data being sent. Possibilities include:
- A - Alphanumeric
- N - Numeric
- D - Decimal (number which may include decimal precision such as 12.25)

Recommended Size   The recommended length of the data element. May be used as guide by writers of agency software in developing input screens, etc. There is no actual, physical limitation to the size of any individual header element.

                     The receiving system should truncate any fields that exceed the internal size for that data element.

REQUEST FOR LOG-IN

Sent by newspaper to agency after a connection has been established.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Record separator character. The character to be used is a nonprintable character and has a value of 1E (hex) or 36 (octal). It is always used to indicate beginning or end of record.	–	1
–	HELLO	These 5 characters tell the agency that they should try to log onto the newspaper system.	A	5
–	(RS)	End of record.	–	1

LOG-IN

Sent by agency to newspaper to attempt to log on to the newspaper's front-end system.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
TC	LO	Transaction code to indicate that this is an attempt to log on. Although the order of the record elements is not predefined, the transaction code should always appear first when it is part of a record. It will tell the receiving system what type of transaction is being attempted.	A	2
–	(US)	Element separator character. The character to be used is a nonprintable character and has a value of 1F (hex) or 37 (octal). It is always used to separate elements within a record.	–	1
AC		A valid log-on assigned to the ad agency by the newspaper to allow access to the newspaper's system.	A	–
–	(US)	Element separator character.	–	1
PW		A password. Also needed to gain access to the newspaper's system.	A	–
–	(RS)	End of record.	–	1

RETURN STATUS FROM LOG-IN

Sent by newspaper to agency to indicate whether or not the attempted log-in was successful.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
SC	LA	Status code to indicate successful login.	A	2
	LU	Status code to indicate unsuccessful log-in. If the attempted log-in is unsuccessful, it will be left to the newspaper's discretion to allow further attempts to log-in without reconnecting. Although the order of the record elements is not predefined, the status code should always appear first when it is part of a record.		
–	(RS)	End of record.	–	1

PASSWORD CHANGE

Sent by agency to newspaper to attempt to change the password that it has been assigned by the newspaper.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
TC	CP	Transaction code to indicate that this is an attempt to change the password.	A	2
–	(US)	Element separator character.	–	1
NP		The new password.	A	–
–	(US)	Element separator character.	–	1
CS		Checksum. This is the total value of all of the characters passed in this record (from the initial record separator character to the preceding element separator character). It will be used as a basic check against garbled characters appearing within the record transmission. Whenever a checksum is used, it should appear as the last data item within the record.	N	3
–	(RS)	End of record.	–	1

RETURN STATUS FROM PASSWORD CHANGE

Sent by newspaper to agency to indicate whether or not the password change was successful.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
SC	CA	Status code to indicate successful change.	A	2
	CU	Status code to indicate unsuccessful change.		
	CK	Checksum error. Indicates that the record transmitted by the client or agency was somehow garbled. Consequently, it was ignored and a re-transmission is necessary.		
–	(US)	Element separator character.	–	1
MT		Optional error message text to indicate the for the unsuccessful change.	A	–
–	(RS)	End of record.	–	1

NEW AD

Sent by ageny to newspaper to create a new ad on the newspaper's system.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
TC	NW	Transaction code to indicate that this is an attempt to file a new ad.	A	2
–	(US)	Element separator character.	–	1
BA		Billing account number. Unique identifier of the account being billed.	A	20
–	(US)	Element separator character.	–	1
BS		Billing sub-account number. A further descriptor of the account being billed. May be required by individual newspaper.	A	20
–	(US)	Element separator character.	–	1
AT		Ad type. The possible values are:	A	1
	A	Agate ad. This is the default type.		
	D	Display ad - to be set by newspaper		
	C	Display ad - camera ready copy		
	R	Retail ad		
–	(US)	Element separator character.	–	1
CL		Classification code of the newspaper.	A	5

–	(US)	Element separator character.	–	1
SU		Sub-classification code of the newspaper	A	25
–	(US)	Element separator character.	–	1
BE		Newspaper specific billing request code. This is used by the client to indicate requests for special billing categories such as add-ons, etc.	A	20
–	(US)	Element separator character.	–	1

IS		Insertion schedule. This is the syntax to specify publishing dates. Months and days are separated by slashes. Ranges of dates are separated by dashes. "Skipped" dates are denoted by commas.
		    eg. 9/1-2,5-10,13,10/4
		Start date and number of run times are denoted by mm/dd NNx.
		    eg. 9/30 7x
			A	25

–	(US)	Element separator character.	–	1
PU		Publication code. The code to uniquely identify the publication(s) that the ad will appear in. The default is newspaper dependent.	A	5
–	(US)	Element separator character.	–	1
ZO		Zone code. The code to uniquely establish the zone(s) for run. The default is full run. Multiple zones should be separated by commas.	A	30
–	(US)	Element separator character.	–	1
OB		Ordered by. The name of the person to contact if there are questions about the ad.	A	20

–	(US)	Element separator character.	–	1
OP		Ordered by phone. The phone number of the person to contact if there are questions about the ad. (nn-nnn-nnn-nnnnXnnnn)	A	20
–	(US)	Element separator character.	–	1
PO		Purchase order number. This is the unique agency/advertiser identifier for the ad.	A	15
–	(US)	Element separator character.	–	1

BB		Blind box request. Possible values are:
		  M - Mail
		  H - Hold
		  Blank - no box
			A	1

–	(US)	Element separator character.	–	1
BN		Box mail name. Used for mailing box replies.	A	30
–	(US)	Element separator character.	–	1
BC		Box mail company. Used for mailing box replies.	A	30
–	(US)	Element separator character.	–	1
AD		Box mail company. Used for mailing box replies.	A	30
–	(US)	Element separator character.	–	1
BD		Box mail address 2. Used for mailing box replies.	A	30
–	(US)	Element separator character.	–	1
CI		Box mail city. Used for mailing box replies.	A	40

–	(US)	Element separator character.	–	1
ST		Box mail state. Used for mailing box replies.	A	4
–	(US)	Element separator character.	–	1
ZP		Box mail zip code. Used for mailing box replies.	A	10
–	(US)	Element separator character.	–	1
CT		Box mail country code. Used for mailing box replies.	A	20
–	(US)	Element separator character.	–	1

TS		Tear sheet request. Possible values:
		  N - no tear sheet requested (default)
		  Y - mail to address of record for billing
		  S - mail to address included in elements below
			A	1

–	(US)	Element separator character.	–	1
TN		Tear sheet mail name.	A	30
–	(US)	Element separator character.	–	1
TM		Tear sheet mail company.	A	30
–	(US)	Element separator character.	–	1
TA		Tear sheet mail address 1.	A	30
–	(US)	Element separator character.	–	1
TD		Tear sheet mail address 2.	A	30
–	(US)	Element separator character.	–	1
TI		Tear sheet mail city.	A	30
–	(US)	Element separator character.	–	1

TT		Tear sheet mail state.	A	4
–	(US)	Element separator character.	–	1
TZ		Tear sheet mail zip.	A	10
–	(US)	Element separator character.	–	1
TY		Tear sheet mail country.	A	20
–	(US)	Element separator character.	–	1
CO		Number of columns for the ad. Naturally, the default is one.	N	2
–	(US)	Element separator character.	–	1
SA		SAU(tm) size for retail ad space reservation. The space reservation uses SAU numbers of the form cxdd.dd, where c is the number of columns, x is a separator, and dd.dd is the depth of the ad with an optional fraction. FD (full depth) is also allowed for the depth.	N	8
–	(US)	Element separator character.	–	1

DI		Depth indicator. Indicates the unit of measure of the requested ad depth. Possible values are:
		  L - Lines - This is the default
		  I - Inches
		  C - Centimeters
			A	1

–	(US)	Element separator character.	–	1
DP		Ad depth. Decimal number to indicate the depth of the ad.	D	5
–	(US)	Element separator character.	–	1

HD		Headline. This is the reference data for a space reservation.	A	30
–	(US)	Element separator character.	–	1
SO		Sort key override. miS entry will override normal sort criteria within a classification.	A	20
–	(US)	Element separator character.	–	1
NO		Comments or notes about the ad that need to be reviewed by newspaper personnel. If anything is present here, the ad should be routed to a blocking queue.	A	60
–	(US)	Element separator character.	–	1
NA		Client name. Needed for identification purposes.	A	30
–	(US)	Element separator character.	–	1

PR		Proof requested. Possible values are:
		  N - No - This is the default
		  Y - Yes
		
		If a proof is requested, the return record from the front-end system should include the H+J'ed ad text showing line breaks. However, it is a newspaper option to not return the H+J'ed text even if requested.
			A	1

–	(US)	Element separator character.	–	1
TX		Ad text. Includes text and markup.	A	–
–	(US)	Element separator character.	–	1

| CS | | Checksum. This is the total value of all of the characters passed in this record (from the initial record separator character to the preceding element separator character) divided by 1000. It will be used as a basic check against garbled characters appearing within the record transmission. Whenever a checksum is used, it should appear as the last data item within the record. | N | 3 |
| – | (RS) | End of record. | – | 1 |

KILL AD

Sent by agency to newspaper to kill an ad on the newspaper's system.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
TC	KL	Transaction code to indicate that this is an attempt to kill an ad.	A	2
–	(US)	Element separator character.	–	1
AN		Newspaper's ad number. Needed to uniquely identify the ad on the front-end system.	N	–
–	(US)	Element separator character.	–	1
PO		Agency/advertiser assigned ad no. Used to ensure the correct ad is being killed.	A	15
–	(US)	Element separator character.	–	1
BA		Billing account number. Used to ensure the correct ad is being killed.	A	20
–	(US)	Element separator character.	–	1

CS		Checksum. This is the total value of all of the characters passed in this record (from the initial record separator character to the preceding element separator character). It will be used as a basic check against garbled characters appearing within the record transmission. Whenever a checksum is used, it should appear as the last data item within the record.	N	3
–	(RS)	End of record.	–	1

AD STATUS REQUEST

Sent by agency to newspaper to request processing details of an ad that was sent and acknowledged without processing details. This request is only valid for ads that were sent by the same login account.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
TC	ST	Transaction code to indicate that this is a request for status of ad processing details for an ad that was previously submitted by this login account.	A	2
–	(US)	Element separator character.	–	1
AN		Newspaper's ad number. This is the number returned with the acknowledgement that was received when the ad was sent. If this field is blank, or omitted then the request is for the next available ad status that has not previously been sent.	A	10
–	(RS)	End of record.	–	1

RETURN STATUS

Return status for a New Ad record, a Kill Ad record or an Ad Status Request record, indicating whether or not the ad was filed or killed successfully.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
SC		Status of the ad filing or kill operation. Possible values are:	A	2
	AA	New ad filed successfully.		
	AW	New ad filed with a warning. Used to indicate that one or more of the markup commands in the ad text was changed automatically by the front-end system to conform to existing system parameters (i.e. - 12 pt type changed to 10 pt.). Barring further manual intervention, it will publish as scheduled.		
	AR	New ad held for review. This happens when the new ad record had data passed in the comments/notes field.		
	AE	New ad filed with errors.		
	RE	New ad could not be filed and was rejected (ignored). Reason may be given in the message field. There is some problem with the ad that cannot be resolved by the front-end system and must be corrected before re-submitting.		

DP   New ad received but not yet processed. Use Ad Status Request record at later time to get processing details.

NF   This status is only used to respond to an Ad State Request record when the requested ad could not be found.

KA   Ad kill executed successfully.

KE   Ad kill was not successful.

CK   Checksum error. Indicates that the record transmission by the client or agency was somehow garbled. Consequently, it was ignored and a re-transmlssion IS necessary.

–	(US)	Element separator character.	–	1
AN		Newspaper's ad number.	A	10
–	(US)	Element separator character.	–	1
PO		Agency/advertiser assigned ad number.	A	15
–	(US)	Element separator character.	–	1
CE		Cost estimate. The price of the ad as computed on the newspaper's system.	D	9
–	(US)	Element separator character.	–	1
AL		The size of the ad in lines.	N	5
–	(US)	Element separator character.	–	1
AI		The size of the ad in inches.	D	7
–	(US)	Element separator character.	–	1

BL		The number of billable lines. May be different than the number of actual lines (due to minimums, etc.)	N	5
–	(US)	Element separator character.	–	1
BX		Box number. Assigned by the newspaper's system.	N	5
–	(US)	Element separator character.	–	1
IN		Number of ad insertions.	N	2
–	(US)	Element separator character.	–	1
SD		Start date of the ad.	N	6
–	(US)	Element separator character.	–	1
CO		Number of columns for the ad.	N	2
–	(US)	Element separator character.	–	1
KN		Kill number (if one is generated by the newspaper's system).	N	6
–	(US)	Element separator character.	–	1
DT		Creation date of the ad for new ads. Kill date of the ad for killed ads.	N	6
–	(US)	Element separator character.	–	1
TM		Creation time of the ad for new ads. Kill time of the ad for killed ads (format is HH:MM).	A	5
–	(US)	Element separator character.	–	1
NC		Newspaper assigned classification code.	A	5
–	(US)	Element separator character.	–	1

NS		Newspaper assigned subclassification code.	A	5
–	(US)	Element separator character.	–	1
TX		H+J'ed ad text showing line breaks. Returned if a proof is requested, and if the newspaper supports the return of H+J'ed text.	A	–
–	(US)	Element separator character.	–	1
MT		Optional message text. Would normally be used to indicate the type or source of an error. The wording of the error message will be left to the discretion of the newspaper's front-end system.	A	–
–	(RS)	End of record.	–	1

LOG-OFF

Sent by agency to newspaper to attempt to log off of the newspaper's front-end system.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
TC	OF	Transaction code to indicate that this is an attempt to log off.	A	2
–	(RS)	End of record.	–	1

RETURN STATUS FROM LOG-OFF

Sent by newspaper to agency to confirm log-off.

Element Label	Element Description		Element Type	Rec. Size
–	(RS)	Beginning of record.	–	1
SC	OA	Status code to confirm log-off.	A	2
–	(US)	Element separator character.	–	1
MT		Optional message text. Could possibly be used to summarize number of successful and unsuccessful transactions, etc.	A	–
–	(RS)	End of record.	–	1

Markup Section

The purpose of this section is to describe a set of simple markup commands to allow remote insertion of Classified text in a standard format.

While there are a large number of commands available, the system lets you be as basic or as comprehensive as you wish, from simple insertion instructions, to complex ad composition.

All commands require a beginning and an ending command character. Each command consists of a two letter code. These characters can be in upper or lower case. Some commands can be modified or enhanced with the use of additional data within the brackets.

Multiple commands are separated by commas or semicolons, which are interchangeable.

These command characters will be separated from text by the open and close square brackets as follows:
      [- Begin command.
      ] - End command.

Each newspaper has a basic style or format. If no commands are specified, then the transmitted ad will be set in that basic style. If a style or format is requested that the newspaper does not recognize, then the newspaper's system will default to the closest possible command match.

General Markup Commands

Marking the Ad Copy

Marking copy follows a pattern. Type sizes and body copy commands must precede the line or body copy paragraph to which they pertain. Commands remain in effect until a replacement command is introduced.

STARTING COMMANDS

[ST]   Standard Text

This command will cause the ad to be set in agate type, one column in width, in paragraph format, with the last line flush left.

The [ST] command is not required to set default values prior to the ad body. It will cause the return to the standard values anytime it is encountered.

LINE TERMINATORS

[FL]   Flush Left

            Causes immediate termination of the line, sets to the left margin.

[FR]   Flush Right

            Causes immediate termination of the line, sets to the margin.

[CN]   Center

            Causes immediate termination of the line, centers text.

[JU]   Justify

            Causes the text in the line to fill the column measure.

LINE FILLERS

The fill command may be entered multiple times within a line and will divide the remaining space to fill proportionately. Any line with a fill command may be terminated with any line terminator and the line will justify to full measure.

[LF]   Leader Fill

Will cause the line to be filled with the newspaper's default fill character, unless preceded by a leader character command.

[WF]   White Space Fill

Will cause the line to be filled with white space.

[LCx]   Where x specified the leader character to use.

[LCxx]   Where xx specified the PI character to use.

COLUMN MEASURES

These commands are used to specify the number of columns an ad will occupy. If none are specified, the ad will be set in one column measure.

[CWxx]   Change columns.

Where xx is up to a two digit number of columns.

[CWF]   Set at full page width.

[CWH]   Set a half page width.

[CWD]   Set at double truck width.

FACE TYPE

Orders ad to be set in other than standard type face. When a type face is not available, default is to the newspaper's standard type.

[FTR]   Roman

[FTI]   Italic

[FTL]   Light Face

[FTB]   Bold Face

POINT SIZE

To change the size of the type. If not specified, newspaper's standard agate is used. If point size requested cannot be set, then the newspaper will size down to the next available one.

[PSxxy]   Specify Point Size.

xxx - Up to three digit point size.
y - Character width attribute. (Optional)
   C - Condensed.
   X - Extra condensed.
   W - Wide.
   E - Extended.

INDENT5

Calls for indented text. Where xx is the number of en spaces that the text will be indented. Indents are cumulative and will stay in effect until cancelled.

[LIxx]   Left Indent.

[RIxx]   Right Indent.

[BIxx]   Indent Right and Left.

[HI]   Hang Indent.

[HIyy]   Hang Indent, where yy = a pi character which sets and establishes a hanging indent the width of the pi character and an en space.

[XI]   Cancels all indents.

BOX NUMBERS

[BX]   Box Number call.

            Will cause the newspaper's standard box number format to appear here.

SPACING COMMANDS

[ASxxx]   Where xxx = number of lines of white space to be inserted, based on agate line measurement.

[LSxxx]   Where xxx = number of lines of white space to be inserted, based on current point size measurement.

PI CSARACTER5

Used to insert special characters.

[PIxx]   Immediate pi character call.

Where xx signified the pi character desired. If not available at the newspaper, the command is ignored. Values for xx:

CB = Closed bullet.
OB = Open bullet.
BB = Ballot box.
KB = Checked box.
XB = X'ed ballot box.
OS = Open star.
CS = Closed star.
RA = Right arrow.
LA = Left arrow.
UA = Up arrow.
DA = Down arrow.
FM = Foot mark.
IM = Inch mark.
TM = Trade mark.
CR = Copyright.
CA = Commercial at sign.
CM = Check mark.
CC = Cent sign.
NS = Number sign.
GT = Greater than.
LT = Less than.

Special pi characters may be available to particular newspaper, advertiser pairs. For these relationships xx may take the values 00 to 99 inclusive. The pi character generated is then specific to that relationship and cannot be assumed for any other.

FRACTIONS

[FNx/y]   Where x = numerator, y = denominator.

FIXED SPACES

Immediately inserts fixed space characters.

[EM]   Em space

[EN]   En space

[TH]   Thin space

[FS]   Figure space

An em space takes a measure of width equal to the full value for the particular type face in use. Generally, this is the width of of the character M or W. An en space is one half the value of an em space. A thin space is one third the value of an em space. A figure space is the same width as the digits 0 through 9. It is used for alignment of numbers in columns.

LOGOS AND SIGNATURES

Where xxx indicates the number of agate lines to block for the logo or signature and y..y contains up to 25 character descriptor of a logo or signature to insert. If the descriptor matches exactly the logo or sig that the paper has available, it is typeset. A non-match results in the descriptor itself being set in the defined space.

[LOxxx,y...y]   Set Logo

[SGxxx,y...y]   Set Signature

A signature is text only in nature. A logo is graphic but may have text as part of the graphic.

Advanced Mark Up Commands

Mark up commands allow extensive specialized styling of ads. Due to the differences in processing in the individual newspaper, use of these commands require cooperation between the newspaper and user.

The standard default for commands relating to width will be interpreted in picas and points, and depth related commands will assume agate lines, with the exception of leading commands which are defined in points.

Within the definition of a command, it is possible to use the same basic command and have the definition interpretation in inches, picas and points, lines, ems, ens, or centimeters. When specifying width spacing, it is permissible to express the amount of Ems (M), Ens (N), picas and points (P). For specifying depth, it is permissible to specify inches (I), picas and points (P), lines (L), and centimeters (C).

SET-UP COMMANDS

[CCxx.xx]   Change Column Measure

Will cause the type following to be set in a measure xx.xx picas and points in width.

[CFxxx]   Change Font

Will cause a call for font xxx.

[CPxxx.x]   Change point size

Will change to point set size, where xxx.x = points and tenths.

[CSxxx]   Change Set Width

Where xxx = percentage to expand or condense the point size. Amounts are not cumulative. If no set width command is given, the default is equal to the point size.

[CLxxx]   Change Leading

Where xxx = number of points to lead the line from the previous base line.

Multiple commands can be compressed within single command set by specifying a command code, its modifier, and then only the modifiers for subsequent commands in sequence. The strict sequence is CC, CF, CP, CS, CL. Note that CC follows CL if CC is not the first command.

RULE DRAWING

[DRxxx.xx.yyy.yy]   Draw Rule

Will cause a rule to be drawn where xxx.xx is the width of the rule in picas and points, and yy.yy is height of the rule in picas and points.

[DBxxx.x]   Draw Box Rule

Will draw a box rule where specified, where xx.x - thickness of the rule. Will be drawn to the width of current column measure.

[EB]   To be placed at the point where the bottom rule of the box is to be set.

VERTICAL JUSTIFICATION

Vertical justification include a depth specification to which the ad is to be vertically justified. The ad will be leaded at the points at which vertical spacebands [VB] commands are specified.

[VJxxx.xx]   Vertical Justification (picas and points)

[VJIxx.xx]   Vertical Justification (inches and tenths)

[VJCxx.xx]   Vertical Justification (centimeters)

[VBx] Vertical Band

> Where x is a digit defining the number of vertical bands to be used to expand the ad that point.

TYPOGRAPHIC ENHANCEMENTS

[AH]   Allow Hyphenation

[XH]   Cancel Hypenation

[AL]   Allow Letterspacing

[XL]   Cancel Letterspacing

[AK]   Allow Kerning

[XK]   Cancel Kerning

[AG]   Permit Ligature Pairs

[XG]   Cancel Ligatures

VARIABLE SPACING INDENT COMMANDS

Indent commands allow the specification of left and right margins. Both the left and right indent amounts must be indicated. If there is no indentation on one of the sides, the indent amount is entered as zero.

[ITxx.xx,yy.yy]   Indent Take

A command used to indent both left and right margins. xx.xx is the amount the text will be indented on the left and yy.yy is the amount on the right. The amount of left and right indentaiton remains in effect until the end of the take, or either an IT or Cancel Indent command is encountered.

[IPxx.xx,yy.yy]   Indent Paragraph

A command used to indent both left and right margins. xx.xx is the amount the text will be indented on the left and yy.yy is the amount on the right. The amount of left and right indentation remains in effect until the end of the paragraph, or either an IP or Cancel Indent command is encountered. The indentation is in addition to any indentations from an [IT]. A flush Left terminates the [IP].

[IHxx.xx,yy.yy]   Indent Hang

Sets the first line full measure, and applies the indents to all succeeding lines in the take. A Flush Left re-activates the command for the succeeding paragraph.

[IFxx.xx,yy.yy]   Indent First

Caused the first line after a Flush Left to be indented by xx.xx space. The first character of the line must be a space band to cause the indent to take place.

[ILxx.xx,dd.d]   Indent Left

Causes a left indent of xx.xx for a depth of dd.d. When the depth dd.d has been reached, the indent is cancelled.

[IRxx.xx,dd.d]   Indent Right

>   Causes a right indent of xx.xx for a depth of dd.d. When the depth dd.d has been reached, the indent is cancelled.

[XI]   Cancel Indent

>   Cancels all indents which are in effect at the time the command is encountered.

NOTE: For Indent commands, the amounts of indentation is cumulative. Multiple appearance of the same command causes the value associated with that command to be replaced.

RAGGED TEXT

[RRxx.x]   Ragged Right

Causes the text following to be set without hyphenation and justification. The text is set flush to the left margin. The value xx.x defines the minimum difference between the length of the current line and the preceding line.

[RLxx.x]   Ragged Left

Causes the text following to be set without hyphenation and justification the text is set flush to the right margin. The value xx.x defines the minimum difference between the length of the current line and the preceding line.

[XR]   Cancel Ragged

Cancels ragged style, enables Hyphenation and Justification.

TABULAR MATTER

All tabular matter is columar, rather than fixed point. After tab columns have been established, it is assumed all following text is to be set within those columns until a tab ending command is encountered. When setting in tabular mode, all line ending is encountered. When setting a tabular mode, all line ending commands relate to the tab column rather than the overall measure. A [TO] command causes a move to the next tab column.

[TNxx]   Tab Number

Where xx is a 2 digit number of columns in which you divide the overall measure evenly.

[TPx,...,x]   Tab Proportionate

Where x is a one or two digit number defining the proportionate relationship of tab columns.

[TWxx.xx,...,xx.xx]   Tab width

Where xx.xx defines a specific width in picas and points to assign to the width of a tab column. Multlple columns of varying width may be specified.

[XT]   Tab End

Cancels tabular matter.

[TO]   Tab Over

Moves set position to beginning of the next tab field.

LEADING COMMANDS

[ELxx.x]   Extra Leading

Where xx.x is amount to vertically space. Default is in points.

[ELxx.x]   Reverse Leading

Where xx.x is the amount to reverse vertically space. Default is in points.

[MP]   Mark Point

Marks a vertical point to which you may return with a return or mark command.

[RM]   Return to Mark

Returns to the point previously specified by the [MP].

FORMAT COMMANDS

[UF]   Use Format

   Get the predefined command for execution at the point the format call is
   encountered.

[DExx.x]   Delay Execution

   xx.x is the depth for which the use format command immediately
   following the command is to be delayed prior to execution.

[MC]   Merge Copy

   Defines a breakpoint in a format. When it is encountered in text it
   merges into the format at the point of exit to pick up the next sequential
   command string.

[FM]   Format Mark

   Mark a point within a format.

[MB]   Merge Backward

   Merges backward to the point marked by [FM].

PASS THROUGH COMMANDS

[PT...]   Pass Through

Where ... is any character(s) up to the end delimiter which are to be passed through to the output device without processing by the front end.

[DDx]   Define Delimiter

Where x is a character to be used as the end delimiter in a pass through command if the normal end delimiter happens to be included within the command. This character is only in effect for the following pass through command then reverts to the <u>right square</u> standard and delimiter.

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