

All CAT Systems Are Not Alike

Advertising can make it seem that all Computer-Assisted Transcription systems are alike and that only price matters.

In fact, most CAT programs are passive systems which only match steno with text and leave to reporters the burden of editing out translation errors. Total Eclipse, however, is unique in very specific ways.

Total Eclipse is an active system that applies artificial intelligence to the translation process. The more you use it, the smarter it gets. Many reporters find it gives them the edge they need to pass the Certified Realtime Reporter examination. No wonder Eclipse users are so enthusiastic.

What is the acid test for any CAT system? Readability, how well steno translates into text, especially in realtime transcription. Here are a few sentences written as an average reporter might write them and translated using identical steno-English dictionary entries, first on other CAT systems, then on Total Eclipse. Which would you rather read?

Other CAT systems

Yes/yes,/yes,/yes , I/eye see/sea your/you're article/Article here/hear.
The/it exhibit number/Exhibit No. ? It's/its MA*RK understand/-ed in
exhibit number/Exhibit No. 3 hundred and eighty 2 C. Is
there/they're/there plan a/an PHO*ER up to date/up-to-date version with
it's/its fig/figure/Figure of 1 hundred PH*L sixty 3 thousand forty 5
dollars and eighty THRAO*E cents? AZ createer of the cinematagraphy
program, can you tell/cut? You should have/shove the/it figs/figures/Figures
right/,right ?

Total Eclipse

Yes, I see your article here. The exhibit number? It's marked in Exhibit No. 382C.
Is their plan a more up-to-date version with its figure of \$100,063,045.83? As
creator of the cinematography program, can you tell? You should have the figures,
right?

Total Eclipse

A Higher Form of Intelligence

What Makes Total Eclipse Unique?

1) Grammar-Based Conflict Resolution

Problem: Conflicts like “THR=there/their/they’re” are common for many reporters.

Other CAT systems sometimes claim artificial intelligence when they memorize phrases without learning grammar. Memorizing “is their plan” does not enable them to accurately resolve “there/their/they’re” when preceded by any word other than “is” or followed by any word other than “plan.” The burden of good realtime transcription is placed entirely on the reporter. So-called “**computer-compatible**” **writing** requires countless changes to steno technique, is more stroke-intensive, and harder on the hands.

Total Eclipse: When “their” is selected in our “is their plan” example, Eclipse actively analyzes the underlying grammar. In this case “there/their/they’re” is preceded by a form of the verb “be” (as opposed to several other classes of verbs) and followed by one of several classes of nouns. Each conflict can learn dozens of grammar rules. Each grammar rule can resolve thousands of phrases. This is “**reporter-compatible**” **software** that minimizes the need for changes in steno technique. Total Eclipse’s intelligent conflict resolution is so reliable that even reporters with “conflict-free” writing styles start creating conflicts to reduce editing time and achieve more perfect realtime transcription.

Critical Points:

- ◆ Intelligent Conflict Resolution works in both realtime and deferred translation.
- ◆ Conflicts appear in user-definable color to alert the user.
- ◆ Each conflict can learn an unlimited number of grammar rules, on the fly.
- ◆ Each conflict’s grammar rules can be viewed and modified by the user.
- ◆ Punctuation conflicts like “yes/yes,/ , yes,/ , yes” resolve well.
- ◆ Stacking/shadowing conflicts like “toss/-s to” resolve well.
- ◆ Stylistic conflicts like “up to date/up-to-date” or “number/No.” resolve well.
- ◆ Conflicts involving prefixes/suffixes (e.g., TOD=to do/-ed to) resolve well.
- ◆ Back-to-back conflicts resolve well.
- ◆ Resolves paragraph-straddling conflicts (e.g., WFRPBGTS=with[ANSWER]/[ANSWER]with).

2) Intelligent Word Construction

Problem: Adding prefixes or suffixes often requires spelling adjustments.

Other CAT systems typically do not use a spelling dictionary during translation to verify word construction. Morphological analysis or proximity dictionaries fail because there are so many exceptions to spelling rules. Since it is assumed that spelling errors will be found during the editing process, long after translation, realtime transcription suffers.

Total Eclipse: During the translation process itself, a spelling dictionary of several hundred thousand entries is used to make the proper adjustments to prefix, suffix, or root word. Since speakers often make up words, generic spelling rules are used only if no real word exists, thus ensuring the most logical spelling of made-up words. Eclipse reporters spend less time creating global entries for their steno dictionaries. Even so, steno dictionary size is unlimited.

Critical Points:

- ◆ Intelligent Word Construction works in both realtime and deferred translation.
- ◆ Conflicts involving prefixes or suffixes (e.g., TOD=to do/-ed to) resolve well.
- ◆ Unlimited Prefix/suffix table allows user to tailor program to personal writing style.
- ◆ “Insert Prefix/Suffix” command increases editing efficiency.

3) Automatic Number Conversion

Problem: The unnatural steno strokes and visualization required by “realtime number writing techniques” distract reporters from writing numbers accurately and automatically.

Other CAT systems: So-called “automatic number conversion” tends to be limited to realtime translation only, with very unreliable results. For example, 6 billion 1 hundred dollars 2 cents has been seen to convert to \$61.20. Typically, extra strokes must be written to obtain number conversion. One cannot call such procedures automatic.

Total Eclipse: In both realtime and deferred translation, reporters can relax and write numbers the way they hear them. Regular words like dollars, yen, pounds, grams, o’clock (the list is very long) are understood to imply specific number conversions. For most numbers the process is truly automatic, yet reporters can use extra strokes to force specific conversions. Eclipse automatic number conversion has no equal in the CAT industry.

Critical Points:

- ◆ Automatic Number Conversion works in both realtime and deferred translation.
- ◆ Regular words like million, dollars, o’clock, etc., trigger automatic conversion.
- ◆ No need for dictionary entries like <Num-Convert>[\$nnn,nnn,nnn,nnX.0N].
- ◆ No special strokes required to force conversion of telephone numbers.
- ◆ No special strokes required to force conversion of Social Security numbers.
- ◆ No special strokes required to support any mix of international currencies.
- ◆ Supports number bar, written out numbers (e.g., THRAOE), or any combination.
- ◆ Understands use of “and,” “point,” and other words within number strings.
- ◆ Automatically includes hyphen in singular compounds like “25-gram.”
- ◆ Supports user-defined automatic conversion formats (e.g., gun gauges, heights, etc.)
- ◆ All number conversions are also available as editing commands.
- ◆ Resolves conflicts involving number conversion, e.g., “-ed/dollars,” “am/a.m.”
- ◆ Automatic number conversion works even with translated misstrokes.

4) Intelligent Phonetics and Misstroke Translation

Problem: New words and terms occur all the time, and even the best reporters misstroke common words during heated proceedings. Raw steno is often unreadable.

Other CAT Systems: Typically a very limited phonetic table is used, without regard to any spelling dictionary. If “mile” were misstoked as PHAO*EUL, it would either appear as unreadable steno or as “mil.” Automatic number conversion would not be triggered.

Total Eclipse: Intelligent phonetics automatically consult the spelling checker, looking for a word not yet been entered in the reporter’s steno dictionary. If no match is found, Eclipse sees if a writer has dragged or dropped letters from strokes defined in the reporter’s dictionary. PHAO*EUL would translate as “mile,” and would trigger automatic number conversion.

Critical Points:

- ◆ Intelligent Phonetics consult a spelling dictionary of over 200,000 entries.
- ◆ Phonetics table allows user to tailor the program to personal writing style.
- ◆ Misstroke Translation, a technological breakthrough.
- ◆ For Misstroke Translation, easy setup of keys each reporter drags or drops.
- ◆ Suggested translations appear in user-definable color to alert the user.
- ◆ Suggested translations which are conflicts resolve intelligently.
- ◆ Suggested translations which are number words will trigger automatic conversion.

Again, readability is the acid test, especially when it comes to realtime transcription.

Steno: SKAOERT KO*FTS SKPAOD DZ FO*UR TPHLDZ TPAO*EUF.

Other CAT systems: Skaoert kofts sxaod dz four nldz faoif.

Eclipse: Security costs exceeded \$4,000,000.05.

5) Complete Dictionary Access, Intelligent Globalling Procedures

Problem: A reporter's steno-English dictionary is the heart of any CAT system. It is essential that global entries and variants be easy to create, modify, or remove. Reporters must be able to create or correct entries from the steno writer during realtime proceedings.

Other CAT systems: Highlighting steno and defining its meaning often take unnecessary steps. Variant entries for the common suffixes "ed," "s," and "ing" must be entered separately. Some systems offer limited access access, if any, to main steno-English dictionary during realtime transcription. Dictionary searches are cumbersome. Creating or correcting dictionary entries from the steno writer is so stroke-intensive as to be totally impractical.

Total Eclipse: Pressing a single key just once is all it takes to highlight most steno. Variant entries for tucked-in suffixes "ed," "s," and "ing" are proposed with their proper spelling adjustments. Variants are also offered to handle consonant shifts from the end of one stroke to the beginning of another, e.g., PEUT AOE versus PEU TAOE. Every dictionary is completely accessible during realtime transcription. Instant dictionary searches by many criteria.

Creating or correcting dictionary entries from the steno writer takes minimal strokes, no matter how far back in the transcript. If "under the circumstances" is mistroked, it can be corrected and entered in a dictionary in as little as three strokes (first stroke finds error, second stroke corrects error, third stroke ends process and creates dictionary entry).

Critical Points:

- ◆ No limit to dictionary size.
- ◆ *Complete* access to any dictionary at any time, even during realtime transcription.
- ◆ All dictionary search and maintenance features available even in realtime transcription.
- ◆ System proposes variant entries for tucked-in endings and stroke normalization.

Reporter's global: OBG AOU PAOEU = occupy

Eclipse proposes: OBG AOU PAOEU = occupied
OBG AOU PAOEU = occupies
OBG AOU PAOEU = occupying
OBG AOUP AOEU = occupy (and 3 variants)
O KAOUP AOEU = occupy (and 3 variants)
O KAOU PAOEU = occupy (and 3 variants)

In this example, the Eclipse user can select only useful variants, press Escape to reject all variants or press one button to accept all 15 proposed globals. This is perfect for technical words that can be stroked in many ways.

- ◆ One-stroke application of phrase capitalization rules (e.g., Bank of the South).
- ◆ Easy to create or modify dictionary entries for editing from steno writer.
- ◆ Correct dictionary entry from writer, no matter how far back in document.
- ◆ Creation of long dictionary entry from writer in as few as three strokes.
- ◆ Spell in chunks for fast editing from writer, e.g., swirl ing (2 strokes instead of 8).
- ◆ Automatic spellcheck before globals are placed in dictionary.
- ◆ No "update" procedures required to incorporate globals into main dictionary.
- ◆ Impossible to accidentally create nonsense conflicts such as your/your/your/your.

6) Automatic Indexing

Problem: Indexing of court transcripts is a complex and time-consuming task. Some state formats defy automation by most CAT systems. Master Indexes for multi-volume transcripts are required. Meeting index requirements often delays transcript production.

Other CAT systems: Limited flexibility. Some systems place index pages at the end of transcripts; they must then be moved to their proper place. Others are thrown off by exhibits that are introduced out of order. Master indexes are a particular challenge.

Total Eclipse: To my knowledge, Eclipse is the only CAT system whose automatic indexing features can fully comply with the new Texas format, including the production of master indexes. I have created all files necessary to comply with the new format and need only insert each reporter's name, certification number, etc.

Critical Points:

- ◆ Automatic production of master index of multiple volumes.
- ◆ Automatic detection of examining attorneys.
- ◆ Sorts alphabetically for easy production of witness index.
- ◆ Sorts numerically since exhibits are often presented out of order.
- ◆ Index pages can be placed at any point in document or automatically separated.
- ◆ Index preview.
- ◆ Easy editing, correction or regeneration of index pages, if necessary.
- ◆ Form fields expedite description of exhibits for automatic indexing.

7) Form Fields (Fill in the Blanks)

Problem: Filling in title pages, appearance pages, and certificate pages can be unnecessarily time-consuming.

Other CAT systems: After names are typed, spaces must be inserted or removed to maintain column alignment in case captions. Unused lines do not automatically delete. Many systems do not provide for "pick lists" to automate insertion of months, attorney names, firm addresses, etc.

Total Eclipse: Form fields simplify production of title pages, etc. Alignment is maintained where necessary. Unused lines or spaces can delete automatically. Fields can be set to right justify, capitalize automatically, or remember information like names and dates. Fields can point to automatically sorted "pick lists" of unlimited size.

Critical Points:

- ◆ Form fields can be set to preserve alignment or delete extra space or unused lines.
- ◆ Form fields can be set to right justify entered text.
- ◆ Form fields can be set to fully capitalize entered text.
- ◆ Form fields can bring up sorted "pick lists" of unlimited size.
- ◆ "Pick lists" simplify including information like client names and addresses.
- ◆ Form fields can remember information like names or dates.

8) Editing Efficiency

Problem: Taking testimony is just the beginning of a reporter's job. Each hour of testimony typically requires more than an hour of editing. This does not include proofreading time. Logical, efficient editing features promote rapid transcript production.

Other CAT systems: Speedkeys for menu commands tend to be hard-coded. Some systems require the use of a mouse to activate functions when a key command would be much faster. Limited slots for rolling multiple steps into one-button macro commands. Magic Keys or their equivalent typically require use of spacebar and are not case sensitive. Typically, documents are saved at timer-dependent intervals. In the event of a power failure, many pages of editing can be lost.

Total Eclipse: Every function is accessible by speedkeys, by menus, or by mouse. Eclipse comes with an excellent set of Hyperkeys which users are free to customize. Macros are unlimited in number. Eclipse has a long list of editing conveniences that simply do not exist on other CAT systems. RTF/CRE conversion utilities facilitate working with reporters and scopists on other CAT systems. High fidelity audio/video synchronization is standard with Eclipse; there are no hidden charges.

Eclipse saves to disk each time the cursor moves out of a paragraph. In case of a power failure, the current paragraph is not lost, only the few changes that were "just in memory."

Multiple scopists can work on the same realtime proceedings simultaneously, as is done at the Canadian Senate. Every 10 minutes (or any interval a user prefers), a copy of the last segment of realtime proceedings is automatically placed on the network where it is available for the scoping team. In the Oklahoma City bombing trials, Eclipse more than proved its mettle, never crashing in more than 35,000 pages of realtime transcription.

Critical Points:

- ◆ Paragraph-based autosave, not timer-dependent.
- ◆ If power fails, the only thing not saved are the **changes** to current paragraph.
- ◆ All functions accessible by menus, mouse, speedkeys, or Hyperkeys.
- ◆ Extensive default setup of Speedkeys and Hyperkeys, fully customizable.
- ◆ 96 case-sensitive Hyperkey slots available.
- ◆ No spacebar or activation key necessary to engage Hyperkey functions.
- ◆ Unlimited macro commands.
- ◆ Create or modify macro commands anytime, even during realtime transcription.
- ◆ Editing can begin as soon as first steno stroke translates.
- ◆ Even last stroke of realtime steno can be globalled, without need for "flush" stroke.
- ◆ Speaker Table instantly corrects misidentified speakers from anywhere in transcript.
- ◆ Automatic by-lines (e.g., "Q. (By Mr. Jones)" or "QUESTIONS BY MR. SMITH")
- ◆ Conditional page breaks (e.g., keep EXAMINATION and first question together).
- ◆ "Insert Prefix/Suffix" command.
- ◆ Centered paragraphs automatically re-center if text is added or deleted.
- ◆ Autoreplacements for fast, accurate typing (e.g., hte=the, tlc=The Light Company).
- ◆ High fidelity audio/video synchronization is standard. No hidden charges.
- ◆ Complete control of automatic timestamping.
- ◆ RTF/CRE conversions for working with reporters/scopists on other CAT systems.
- ◆ Read-along spellcheck allows online proofreading.
- ◆ Spellcheck finds both spelling errors and transcript anomalies in one pass, not two.
- ◆ Automatic copying of realtime transcript segments for networked team of scopists.

What Makes Advantage Software Unique?

1) Continuity of Ownership

Since 1987, Advantage Software, the maker of Eclipse, has always been reporter-owned, debt-free, and enjoyed ever-increasing sales. There are now over 12,000 Eclipse users in the United States, Canada, and other parts of the world. Greg Seely and Portia Seely, the founders of Advantage Software, are themselves Registered Professional Reporters. Greg comes from a family of reporters and has been designing PC-based CAT programs since 1980.

Advantage Software's solidity is particularly impressive in view of CAT industry trends. Since 1987 Stenograph has had at least seven presidents and three different development groups. When Heico Holdings purchased the troubled Stenograph and Xscribe operations, it was in order to achieve a monopoly on steno machines (even ProCAT's Flash writer depends on Stenograph parts). These same years also saw a distressed StenoCAT acquired by Gigatron. Total Eclipse is the industry's leading CAT system continuously owned and managed by American court reporters.

2) Continuity of Programming

Few products have the long development and enhancement history that Eclipse has enjoyed. Jeremy Thorne has been director of design and development of Eclipse since its inception more than 15 years ago, a long time in the world of PC software. Continuity is fundamental to Eclipse's success. Some companies make each new edition of their software look and feel fundamentally different in order to justify the practice of reselling to their existing customer base. Eclipse has taken the opposite approach and gives all updates and upgrades as part of software support.

Again, industry practice is revealing. Since 1989, at least four Stenograph systems and three ProCAT systems have succeeded each other. Despite such facelifts, there is often very little innovation in many companies' products. Customers must relearn software but may not gain much in productivity. In these same years, Eclipse users have had to learn the program only once and have received more than ten major upgrades, with many technological breakthroughs like automatic number conversion and mistroke translation. Even total rewrites of Eclipse are fully covered by the support program and preserve familiar key commands.

3) Continuity of Support

Dave Seibert has been director of technical support at Eclipse since 1987. The technical staff have a deep understanding of the product right back to its early versions. Again, this is remarkable in an industry known for high turnover.

Eclipse takes pride in its responsiveness to customers. There is only one level of support: 24 hours a day, 7 days a week. Customers' calls are answered by a receptionist, not a cascade of phone mail prompts. Typical response time ranges from immediate to a few minutes, rather than a few hours. Court officials calling during breaks receive priority response. The Internet is used to supplement unlimited toll-free telephone support, not replace it. Each month sees new features added and available for downloading.

Total Eclipse

Believe in Magic

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