

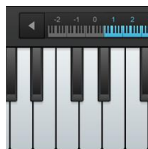
SONAR Membership “Cambridge” Release

It’s been another busy month at the Bakery, and we’re back with another Membership release. Now that we’ve had the chance to sift through a month of requests from the community, this release

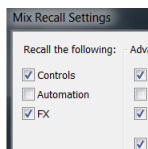
concentrates on fixes and workflow enhancements. And for content fans, we've included a brand new Les Paul Gold Top expansion pack for Dimension Pro from Craig Anderton. We hope you find this release helpful to your music making, and once again, we greatly appreciate your ongoing support for the Membership program. — *Bill Jackson and the Cakewalk Team*



Workflow enhancements and fixes: One of our main reasons for wanting to do monthly releases was so that fixes could be queued, implemented, and distributed rapidly. This month we’ve raised the bar to 50 improvements for the Piano Roll View, User Interface, and other core workflows in SONAR Artist, Professional, and Platinum. Thanks again for your suggestions and feature requests...we’re listening.



Onscreen Virtual Controller: No MIDI controller? No problem! The Onscreen Virtual Controller lets you compose using all of your favorite virtual instruments with absolutely no MIDI hardware connected to your computer. It supports multi-touch, mouse input, and QWERTY keyboards so you can type MIDI compositions right into SONAR, jump octaves, and even adjust velocity if you don’t have a touch screen.



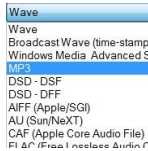
Track/Bus Output Routing Recall: Mix Recall, which has proven to be especially popular for pros who need to generate multiple mixes for clients, continues to develop into an increasingly “universal” feature. Now you can recall all track and bus output routing inside your SONAR session, so you can switch out those complex mixing architectures in a flash—and recall them with a few clicks.



New ProChannel module from Boz Digital Labs: Since you liked Bark of the Dog, we figured it was time for an encore—so let’s welcome Boz Digital Labs’ Panipulator plug-in, a utility which helps you hear what your mix will sound like in the real world of crossed channels, out-of-phase speaker connections, stereo mixes summed to mono, and more. Put this baby in your master channel, and you’re a click away from a real-world reality check.



Phasor Constructor FX Chain: And now, for something different in a phase shifter effect. This latest addition to the Anderton Collection can do 4- or 8-stage shifting, but also includes a few twists like positive/negative phasing, automatable “motion” control, and tone-shaping. What you *won’t* find is an LFO—this is designed as a complement to SONAR’s waveform drawing tool, or for manual automation control.



Audio Import/Export Improvements: Everyone loves more options. So, Platinum, Professional, and Artist users can now import/export Ogg Vorbis, RF64, and over 20 other audio formats for compatibility with the very latest (as well as some legacy) audio formats. In addition, there have been several encoding enhancements for MP3 Export with the optional encoder.



Gibson Les Paul Gold Top Expansion Pack: For legendary sounds and some futuristic variations, this Dimension Pro Expansion Pack includes 50 individual note samples from a Les Paul Gold Top’s neck pickup—then packs them into 30 programs that range from standard guitars, to virtual 12-strings, to complex and beautiful synth sounds. Try them, and be amazed.

How to Download Cambridge

Open the **Cakewalk Command Center**, then download from the following locations.

Panipulator: Boz Digital Labs ProChannel Collection

Gibson Gold Top Expansion Pack and **Phasor Constructor:** Anderton Collection

Everything else: The core SONAR Artist, Professional, or Platinum category

Fixes and Workflow Enhancements

Artist, Professional, Platinum

You talk, we listen...most of these are a direct response to reports and feature requests from the community. We greatly appreciate your partnering with us in the SONAR development process, and you can look forward to even more improvements in the months to come.

- Fixed clicks during looped MIDI playback with large buffer sizes when a note extended past the loop end
- Encoding enhancements to variable bit rate MP3 encoding and improved compatibility with Windows Media Player
- AudioSnap edits saved in X3 were not recognized by SONAR Platinum
- Custom Control Bar layout no longer resets after personalization or installing Cakewalk Sound Center
- In some cases Clip FX Envelopes were inaccessible
- Note events would occasionally not play immediately after a tempo change when using drum maps
- ProChannel Modules are scanned first on initial launch to avoid missing plugin errors in project templates
- Browser search text size has been increased
- Browser audition with Loop Preview disabled no longer behaves unexpectedly
- Optimized redistribution package installation conditions to improve install time
- Show/Hide Track state in PRV Track Pane did not persist
- Switching tracks no longer resets PRV Controller Pane height
- Unnecessary/redundant menu items removed
- Mix Recall scenes did not populate when using CTRL+N to open the default project template
- Expansion packs would install to the incorrect location when installed in a particular order in relation to Rapture
- Boz Digital Labs Bark of Dog ProChannel module would hang under certain conditions
- Various documentation inaccuracies repaired
- Improved support for VST3 plug-ins, particularly for FabFilter and Slate Digital
- Various VST Scan crashes addressed
- Drag and drop to SONAR from the browser or Windows Explorer now works for all supported import audio file types.
- An error was shown in the About screen when the system time zone differed from Eastern Standard Time (note: in some cases, it might take one more release cycle for this fix to be applied)

- Installer would mark updated file version numbers incorrectly
- Installer could place multiple SONAR shortcuts in the Start menu
- SONAR Platinum online help paths were formatted incorrectly
- SONAR Professional Installer requested a serial number when run outside of Command Center.
- Japanese online documentation did not display correctly
- CWAf tool would track .asset files unnecessarily
- Various Mix Recall improvements
- MIDI Input meters would sometimes show incorrect values
- Aim Assist was offset at certain PRV zoom levels
- Inserting FX chains into ProChannel would sometimes draw a blank strip
- High and Low bands on QuadCurve EQ were not always working correctly
- Updated VST Channel info improvements to support Softube Console 1
- Instrument tracks now display proper track names in Console 1
- Splitting an instrument track now shows correct track names
- Media browser now shows status bar info for all supported file types, not just WAV files
- Media browser status bar displays the proper count of audio plug-ins
- Media browser status bar resets properly when switching tabs
- Double-clicking MIDI clips in Track View failed to switch between Notes and Drum panes in PRV
- Drum Pane was not persisting in PRV when re-opening the view
- Vertical keyboard would collapse when PRV was maximized
- At some zoom levels it would be difficult to lasso select audio transients
- Drag and drop area of MIDI clip to browser would include unselected leading data from source clip
- Fixed various crashes related to opening views in new projects
- Extracting FX chains on Instrument Tracks would remove plug-ins
- Drag re-order of Control Bar modules didn't work correctly on multi-monitor systems
- FX racks were not visible in older projects where "Vertical FX Bin" was set
- Various inaccurate text references corrected
- 32-bit VST plug-ins were not displayed correctly when selected in the browser
- Many issues addressed through updates of import/export libraries (libsndfile & LAME)

Onscreen Virtual Touch/Mouse/QWERTY MIDI Controller

Artist, Professional, Platinum

You know the story: you're on the go with your laptop, and inspiration strikes. But you don't have a controller or MIDI interface! Well, now you do.

SONAR actually offers two virtual controllers, a multi-point, polyphonic touch model you can play directly on your screen...



...and one you can control with your mouse or a QWERTY keyboard. Note that the physical key positions are always the same, regardless of your keyboard layout (QWERTY, QWERTZ, AZERTY, Dvorak, etc.).



SONAR automatically detects whether or not you are using a touchscreen, and sizes the Virtual Controller accordingly. The optimum size is displayed for either touch or mouse input, regardless of screen resolution. Both don't just generate notes, but also let you control velocity,

modulation, sustain, and jump octaves to cover the entire 88-note range of standard keyboards.

Of course, mobile use isn't the only application. Sometimes when auditioning synth patches it's easier to hit a few keys on your computer compared to running over to a keyboard, setting up its USB connection, and so on. The touch experience is particular handy for those with touch screens; for songwriters, the onscreen keyboard is a great way to record a melody line (or chord progression) before the inspiration vanishes.

USING THE VIRTUAL KEYBOARD

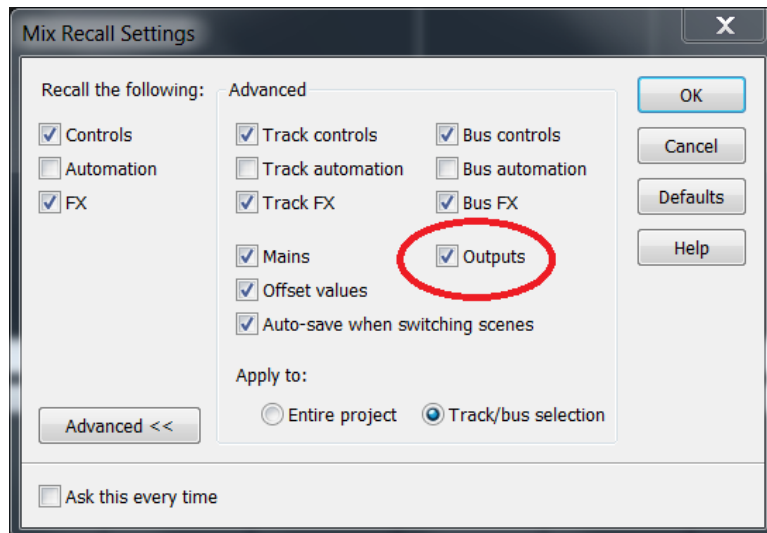
It's easy to open the keyboard: look under the Views menu for Virtual Controller/Keyboard, or call it up by typing Alt + Shift + 0. To use the touch screen's "virtual mod wheel," tap a key and while holding slide up for more modulation, or down for less. The mod wheel value latches to the last state when you remove your finger from the key.

For the touch keyboard, velocity works in a way similar to piano keys—the closer you touch to the bottom of the key, the higher the velocity. Tapping at the top of the key gives lower velocity. For the QWERTY keyboard, you can set velocity manually.

Mix Recall Track/Bus Output Routing

Artist, Professional, Platinum

See that new check box in Mix Recall? It may be small, but it's powerful.



By checking Outputs, Mix Recall will now save and recall all your track and bus output settings, making it easy to recall complex mixes involving multiple sends and outs. And don't forget that in conjunction with last month's addition of Mix Recall templates, it's now easier than ever to recall what's essentially a ready-to-go mixer setup.

CONFIGURING THE MIX RECALL OUTPUTS SETTING

To configure Mix Recall settings, either:

- In the Control Bar's Mix Recall module, click the Mix Recall drop-down menu, then click Mix Recall Settings.
- In the Control Bar's Mix Recall module, right-click the Recall Previous Scene button.

In the Mix Recall Settings dialog box, click the Advanced button to show all options, then select the Outputs check box. When selected (default), a Mix Scene recalls track and bus outputs. Otherwise, a Mix Scene ignores these assignments.

Boz Digital Labs “Panipulator” ProChannel Plug-In Professional, Platinum

As Boz Millar says, “Even though you spent considerable time and effort getting your mix to sound amazing on your monitors, there’s still one very important question: What will it sound like playing at a theme park? Or at the dentist’s office? Or on your old radio? What if they wired one of the speakers backwards, or out of phase, or are even missing a channel?



“As much as we’d like to think that everyone is listening to our music in stereo, the truth is that many people are listening in less than ideal environments. Panipulator lets you emulate what your mix will sound like in those environments so you can be sure that your mixes will translate across a wide variety of systems.

“What will your mix sound like summed to mono? Flip a switch to find out. What if someone wires their system so that they can hear only the left channel? Flip a switch to hear what that sounds like. What if they reverse the wiring on one of their speakers? Flip a switch to find out to hear how that will affect your song. These are all common scenarios, and the last thing you want to do is find out is that your mom’s voice, that you thought was buried in the mix, pops out when played over the loudspeakers at Nordstrom.

“Panipulator will barely make a dent in your CPU usage, so there is no reason that this plug-in should not be a default on every single song you mix.”

THE CONTROLS

Flip LR reverses the left and right channels.

L Polarity reverses the left channel’s polarity—no soldering iron or re-wiring required.

R Polarity reverses the right channel’s polarity.

Mono provides the same signal over both speakers, but is extremely flexible thanks to a virtual rotary control that chooses among:

L+R 0 dB = no center channel output drop

L+R -3 dB = -3 dB center channel drop

L+R -6 dB = -6 dB center channel drop

L only = sends the Left channel to both speakers

R only = sends the Right channel to both speakers

APPLICATIONS

- In addition to real-world scenarios that might mess with your sound, a lot of club systems sum to mono on purpose—so if you’re doing EDM, it’s crucial to check for mono compatibility.
- Many engineers like to start off a mix in mono knowing that if they can create an open-sounding mix in mono, it will sound even more spacious in stereo. This is especially true when you need to do a “reality check” on bass.
- Anything done for TV or radio should definitely be checked for mono compatibility.
- The ability to reverse left and right channels makes it easy to hear the difference between a drum kit from the player’s position (hi-hat on left, toms on right) or audience position (hi-hat on right, toms on left).
- Panipulator is also useful for processing. For example, does a kick drum hit push your speaker out, or pull it in? Some engineers swear they can hear the difference, so simply reverse the polarity if the speaker pulls in.

Anderton Collection “Phasor Constructor” Effect

Artist, Professional, Platinum

This avoids the stereotyped whoosh-whoosh-whoosh of conventional phasers, because the world has enough of those already. In fact there isn’t even an LFO—this is designed for manual automation, or drawing a periodic automation pattern to drive it (as described at the end).

The controls are a bit unusual, but you’ll be able to obtain sounds you haven’t heard before from other phase shifters.



THE CONTROLS

4/8 Stages chooses either four- or eight-stage phase shifting, in conjunction with the Timbre control.

Timbre is a multipurpose control.

With 4 stages selected:

- Full counter-clockwise gives the deepest negative notches.
- Turning clockwise makes shallower notches until at center, there are no notches.
- Continuing to turn clockwise makes sharper peaks with very broad notches.

With 8 stages selected:

- Full counter-clockwise gives the deepest negative notches.
- Turning clockwise makes two of the notches shallower until at center, Phasor Constructor becomes a four-stage phaser.
- Continuing to turn clockwise increases the amplitude of two sharp peaks while increasing the depth of two sharp notches.

Motion produces subtle stereo placement changes; the lower the Stereo control, the greater the effect. (With Stereo up full, Motion has no effect.) This is most noticeable on headphones, and is fun to vary with a periodic waveform.

Resonance overlays a resonant effect. It does not make the notches or peaks more resonant.

Stereo adds width to the imaging when you turn it clockwise.

Freq varies the phase shifter's center frequency.

Tame Peaks is a unique feature. Phase shifters tend to accentuate certain frequencies during their travel, which can be cool but can also be problematic if the peaks line up with a percussive sound. This button reduces peak levels, which can also make the phasing effect seem more prominent.

Tone Freq sets the frequency range affected by Tone Boost over a range of approximately 70 Hz to 4.2 kHz.

Tone Boost boosts at the Tone Freq frequency. Full counter-clockwise is a flat response, maximum boost is + 9 dB. The action is very gentle—almost “Pultec-like”—but can help a track stand out a bit while mixing.

MODULATING THE FREQUENCY MANUALLY

1. Click the W button for the track with the Phasor Constructor.
2. When the W button background is red and the transport is playing or recording, SONAR will record any changes you make to the Phasor Constructor's controls.

MODULATING THE FREQUENCY WITH A PERIODIC WAVEFORM

1. Right-click on the Draw button in the toolbar and choose the waveform.
2. Choose the desired Snap value to create a curve that syncs to the tempo. Snap doesn't actually have to be enabled.
3. Open an Automation Lane. From the drop-down menu, choose **Phasor Constructor > Freq.**
4. Click on the automation with the Draw tool. Drag up or down to set the amplitude. Drag across to draw the waveform. You can change the amplitude while you draw by dragging up or down.

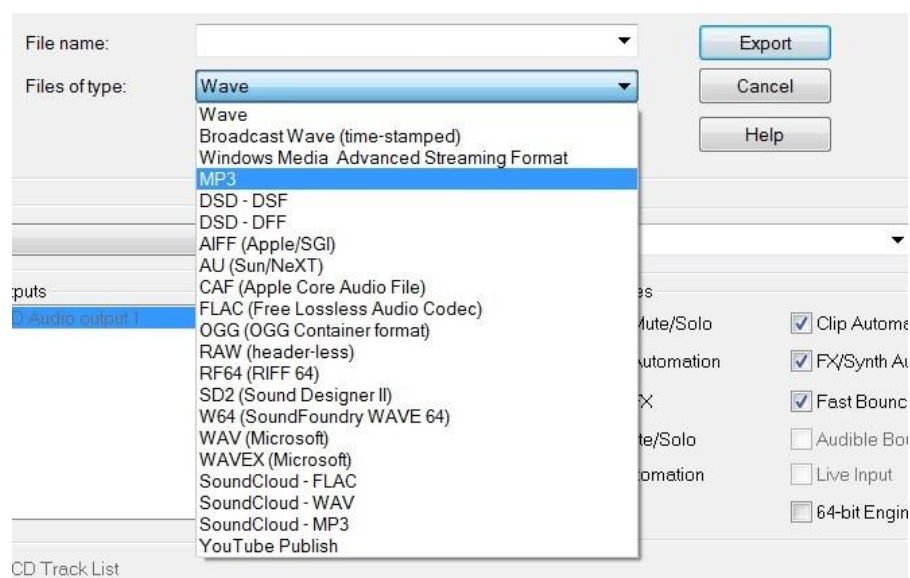
Audio Import and Export Improvements

Artist, Professional, Platinum

As SONAR continues to gain ground in pro studios, the ability to import and export both the latest file formats as well as legacy formats becomes more important. With this release, SONAR has more import and export options than ever before—and more than most other DAWs.

EXPORT OPTIONS

Here are the default file format export choices:



Three of these defaults are new to SONAR.

RF64: The traditional WAV format does not allow file sizes that exceed 4 GB. SONAR already included Sony's W64 format, which removes this limit. The European Broadcast Union specifies the BWF-compatible RF64 format for use with large file sizes (up to approximately 16 Exabytes). The format can also store up to 18 surround channels along with a stereo mix channel and various bit streams of non-PCM-coded data such as Dolby AC3, DTS, MPEG-1, etc.

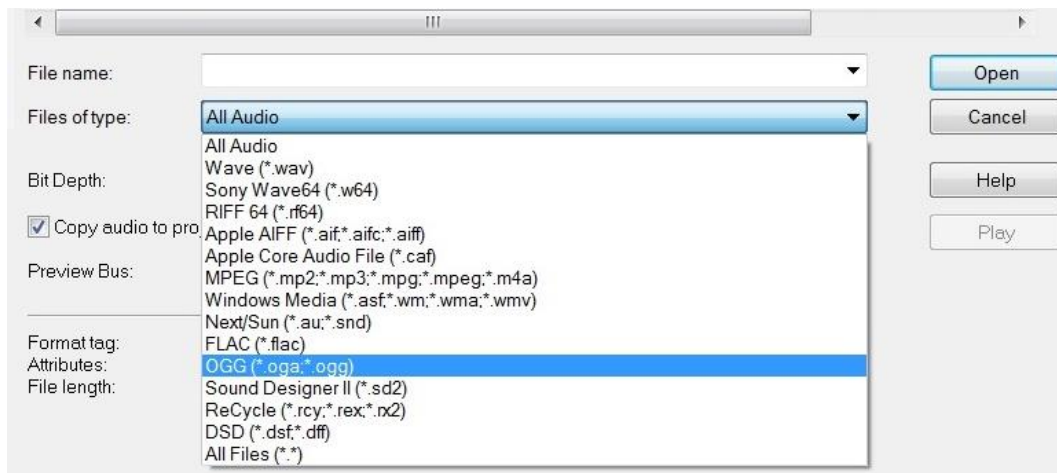
Ogg Vorbis: This lossy data compression format is a royalty-free alternative to the MP3 format, and is generally considered to give higher quality than MP3 files using the same bit rate. Ogg Vorbis defaults to variable bit rate encoding, can support up to 254 channels, and works with sampling rates from 64 kbits to 500 kbits per second.

WaveX: This stands for WAV extensible, and includes headers that can be used to specify various surround specifications and formats.

Also, for those who own the optional MP3 encoder, the MP3 export capabilities have now been enhanced to include variable bit rate operation.

IMPORT OPTIONS

Here are the current default file format import choices:



ADDITIONAL FORMATS, TOO

SONAR now supports not just the default file formats, but *all* the file formats available in the **libsndfile** library (mega-nerd.com/libsndfile).

Libsndfile provides a large list of file formats, some of which are relatively obscure and not useful to most SONAR users. As a result, although SONAR intentionally excludes various formats from being listed in the Import Audio and Export Audio dialog boxes, SONAR installs a file named **libsndfile-exclude.txt** that lets you specify which audio file formats should be visible in SONAR.

To add formats, locate the **libsndfile-exclude.txt** file in C:\ProgramData\Cakewalk\SONAR <Artist/Professional/Platinum>. Simply “uncomment” any items in the exclusion list, and SONAR will list them the next time you open the Import Audio or Export Audio dialog box. However, note that SONAR has been tested only with the default formats listed in the Import Audio or Export Audio dialog boxes. Some excluded formats may or may not work properly, especially on import.

Tip: Instead of editing the **libsndfile-exclude.txt** file in C:\ProgramData\Cakewalk\SONAR <Artist/Professional/Platinum>, copy the file to %APPDATA%\Cakewalk\SONAR <Artist/Professional/Platinum> and edit it there. SONAR will then use the per-user app data version of the file to ensure your changes are preserved the next time you update SONAR.

Dimension Pro Expansion Pack: Gibson Les Paul Gold Top Platinum



The Gibson Gold Top Expansion Pack derives its programs from 50 samples of individual notes, played through the neck pickup of a '57 re-issue Les Paul Gold Top guitar. In addition to capturing the guitar's rich neck pickup tone, additional programs take advantage of Dimension Pro's processing options to go beyond guitar.

To cover "dropped D" tunings, the guitar's low E string was tuned down to D, thus allowing for samples at D and D# without electronic transposition.

The samples are unlooped and presented as naturally as possible. However, they're not only suitable for playing with MIDI guitar or for obtaining guitar voicings; when played with keyboard voicings, you'll hear tones that you won't hear from other synths or samplers.

30 programs showcase the potential of this expansion pack. Three 12-string guitars result from mapping samples to create a virtual Les Paul Gold Top 12-string, with one emulating a classic 12-string sound from the 60s. In addition to basic, unadorned guitar tones there are various versions with chorus, mutes, jazz guitar, mod wheel wah, fifths, and power chords. Bonus

programs include ten keyboard synth sounds, and eight basses derived from transposing guitar notes downward.

For most guitar-oriented programs the mod wheel serves as a tone control, although for some programs it provides a wah effect and for one, brings in a slapback echo. For programs with the "Synth" prefix, the mod wheel controls vibrato except for HarpsiBright (alters tone) and Wurly Piano (controls tremolo). Note that if a program name contains **MW**, that means the mod wheel does something more than just tone or vibrato. Wiggle the wheel—or slide your fingers along the keys of your new on-screen touch keyboard controller—to hear what it does.

SELECTING AND PLAYING THE PROGRAMS

Open Dimension Pro. Click in the Program Browser field to open the browser, then press **F5** to refresh the program list. This can take a while if you have lots of programs; be patient.

In the "Gibson Gold Top" category, you'll now find the 30 related programs. Click on a program to play it.

Furthermore, these programs can acquire an extra aura of authenticity when played through the CA-X Series amp sims. The clean amps are particularly appropriate for the 12-String programs, but also try running the synth sounds through various amps—you might be pleasantly surprised. Remember that amps and processing are a large part of a guitar's sound, so give your sims and plug-ins some exercise with these programs.

SPECIFICATIONS

- 63.4 MB of 44.1kHz/24-bit mono samples
- All samples unlooped (except for one used for special effects)
- Each note sampled individually, and recorded direct into a TASCAM US-4x4 audio interface
- Covers the full Les Paul note range, as well as dropped D
- 30 programs, including guitar, bass, and keyboard sounds
- Mod wheel serves as a "tone control" for most guitar programs, or controls vibrato for most synth programs
- Recording, editing, and sound design by Craig Anderton
- '57 re-issue Les Paul Gold Top made by Gibson's Custom Shop division

TROUBLESHOOTING

If your Dimension Pro folders are not in the default locations or have been moved, you might receive an error message saying one or more .sfz files can't be found. Note the .sfz file name(s) shown in the error message(s), then dismiss any error messages.

After the program has loaded, click the E1 (Element 1 select) button, then click in the Load Multisample field (just below the four Element select buttons), navigate to the folder containing the multisamples, click on the missing .sfz file, then click open.

If there's more than one missing file, the first error message shows the .sfz file that should be in Element 1, the second error message shows the .sfz file that should be in Element 2, and so on.

Save the program so it will remember the correct .sfz file location in the future.

SONAR Membership
“Cambridge” Release eZine

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