## Continuous Play From Disk "Tape player" capability

The enhanced <u>Sound Manager</u> provides the ability to play a sampled sound continuously from disk while other tasks execute. You might think of the **play-from-disk** routines as providing you with the ability to install a "tape player" in a sound channel. Once the sound begins to play, it continues uninterrupted unless an application pauses or stops it.

A new function, <u>SndStartFilePlay</u>, allows you to play sounds stored in AIFF format or AIFF-C format, as well as 'snd' resources, continuously from disk. <u>SndStartFilePlay</u> works like <u>SndPlay</u> but does not require that the entire sound be in RAM at one time. Hence, <u>SndStartFilePlay</u> is ideal for playing very large sounds. The continuous play-from-disk routines use a buffer area that is smaller than the sampled sound, and they update the buffer from disk by using a double-buffering scheme. This technique minimizes RAM usage at the expense of additional disk overhead. The disk overhead is relatively light, however, and most mass-storage devices currently available for Macintosh computers have response times good enough that <u>SndStartFilePlay</u> can retrieve audio data from disk and play the sound without gaps.

There are no limits on the number of concurrent disk-based sampled sound playbacks other than those imposed by processor speed. On machines with sufficient CPU resources, several continuous playbacks may occur at once. Disk fragmentation can also affect the performance of playing sampled sound files from disk. It is recommended that no more than one file per hard disk be played at any time.

When multiple disk-based sampled sounds are playing, the **Sound Manager** automatically mixes the playbacks for output on the available sound hardware. Note, however, that the **Sound Manager** supports continuous play from disk only on machines equipped with an Apple Sound Chip. Also, if a sound channel is being used for continuous play from disk, then no other sound commands can be sent to that channel.