# Animation Graphics

# TAKE 1 ™

# BAUDVILLE ™

# TAKE 1

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# Introduction

## What Is TAKE 1?

Now you can write, produce, and direct your own computer movies with TAKE 1. No programming skills are needed to create superb full-color animation. Easy to use menu-driven programs let you define animation shapes and movements, "shoot" scenes frame-by-frame, add text at any frame, and then combine the scenes to make a complete movie. TAKE 1 is perfect for serious applications like presentations or demos, but you might just want to use it for hours of creative fun!

## Equipment Required For TAKE 1

- Apple IIc, IIe, II+ or compatible computer with at least 64K and Applesoft Basic in ROM.

- One or two disk drives.

- A color monitor or TV is preferred, but a monochrome monitor will work fine.

## Optional Accesories

- The Baudville ANIMATION LIBRARIES have professionally designed animation art that you can use in your own computer movies.

- The Baudville SHAPE and FONT LIBRARIES have a variety of artist drawn shapes with different sizes and styles of hi-res text fonts.

- Other hi-res graphics drawing programs can be used to create original art for backgrounds and actors. Any program that generates standard hi-res picture files can be used with TAKE 1. BLAZING PADDLES and PIXIT from Baudville are highly recommended.

## Learning To Use TAKE 1

It will take some time to learn all of the features available with TAKE 1. You should carefully read through this manual. Chapter 2 defines some basic concepts and tells how the system works. Chapters 3 and 4 are quick tutorials that show you how to make a short animated scene.

Every effort has been made to make TAKE 1 easy to learn and use. The programs are menu-oriented and help screens are available whenever command keys are used. In fact, once you become familiar with the system, you will probably not need to refer back to the manual. Most "wrong" moves have been anticipated in the program design. Occasionaly you will get a "message" at the bottom of the screen telling you that something needs attention or reminding you to save a file so you don't lose it.

In this manual, a user response which reqires a single keypress will be shown as an enclosed letter. For example, (M) will mean press the M key. Some commands require the use of the "Control" key along with another key. When you see (^Z) it means press the CONTROL key and the Z key at the same time.

To make a selection from any of the TAKE 1 menus or sub-menus, simply press the (←) or (→) key until the desired option is displayed in inverse, then press (RETURN) to complete the selection. This same procedure is used to select items on the editing screens.

Loading files from the disk is done similarly. When you select
one of the LOAD options from the menu, TAKE 1 will scan the
files on the disk and then display a list of available filenames at
the bottom of the screen. Use the ⬅ or ➡ keys to
"scroll" through the list until the desired filename is highlighted,
then press RETURN to load that file.

If you accidently select the wrong menu option or decide not to
load a file from the disk, you can press the ESC key to safely
back out of a menu selection. The ESC key is also used to
return to the program menus from the editing screens.

# Don't Skip
# This Chapter!

You may be anxious to start creating you own animated movies, but first we must cover a few basic concepts. As you probably already know, a movie is really just a sequence of individual pictures, each slightly different from the one before. Each picture is called a "frame." When the frames are shown rapidly in sequence, the pictures appear to move.

This is exactly how the animation is created when you use TAKE 1. By using simple keystroke commands, you cut out objects from hi-res pictures to make "actors." Actors are moved around the screen, combined with text and other special effects, to make a series of frames. This process is called "shooting a scene." One or more scenes are then put together with backgrounds to make the movie. These steps are shown in the illustration on the opposite page.

Complete editing is available at every step. If you change your mind or make a mistake, TAKE 1 allows you to back up or easily change any detail. The frame rate can be adjusted for slow or fast action. Actors may have pre-defined movements called "actions" which can be added at any time. Each of the parts of a movie are stored as separate files on the disk so they can be reused in different movies.

Before we get on to making a scene, lets take a closer look at the basic steps and define some of the terms used in TAKE 1 animation:

# TAKE 1 ANIMATION

Snapshots

Pictures &
Backgrounds

Actors

Scenes

Text

Sound

Pauses

Movie
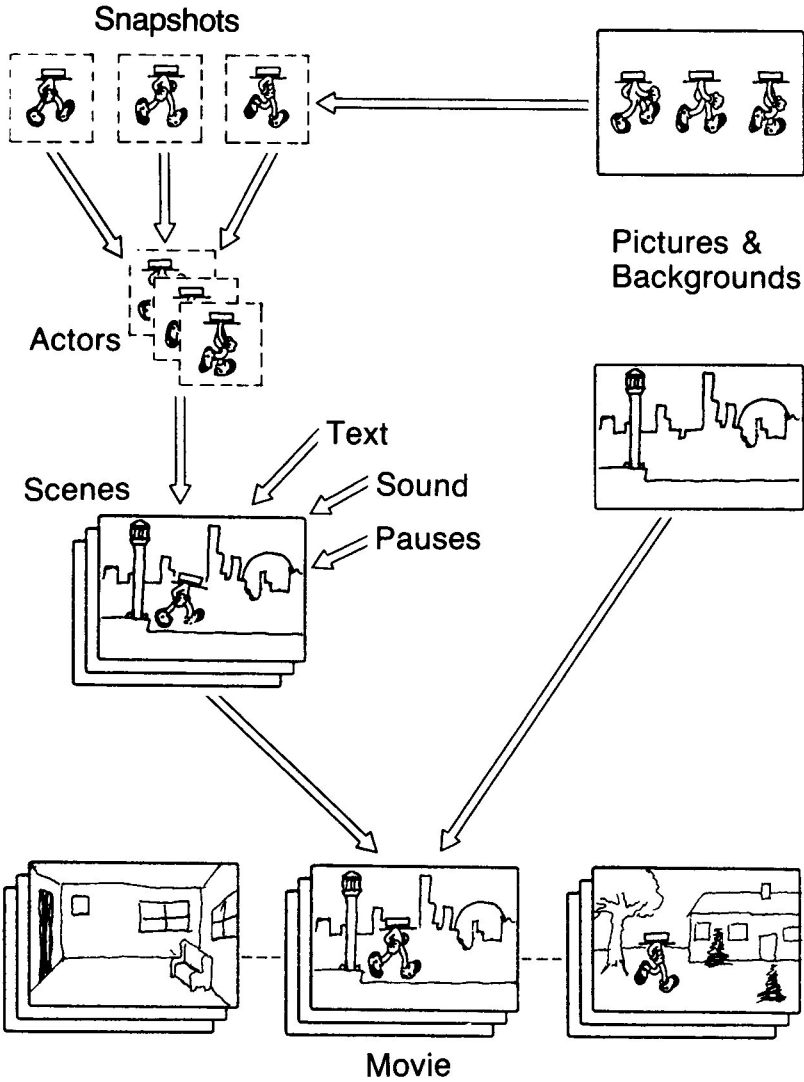
## Pictures and Backgrounds

All of the art used in TAKE 1 starts out as standard hi-res PICTURES. These pictures can be made using TAKE 1 or any other graphics program that produces hi-res pictures. As a result, PICTURE files saved from TAKE 1 can be used in other programs. If you already have a large library of hi-res picturs on disk, you have a good head start in making animated movies.

BACKGROUNDS are just regular pictures that are specially compressed to take up less space on the disk. A hi-res picture is easily converted to a background and vice-versa. In most of the editors PICTURES or BACKGROUNDS may be used inter-changeably, but when the finished movie is edited and run, the backgrounds for the scenes must be compressed BACKGROUND files.

## Actors and Snapshots

Objects that are animated or moved around the screen are called ACTORS. An actor is made by cutting out SNAPSHOTS from hi-res pictures. An actor might be a single snapshot, or several snapshots that define movement (walking, for example) when shown in sequence. These movements may be pre-recorded as ACTIONS that are used often while shooting a scene.

## Scenes and Frames

A SCENE is a series of frames that use a single background (Much like a scene in a play or film). Each FRAME may contain several different elements. In addition to actors, a frame can have TEXT, SOUNDS, and PAUSES. The text in a scene can be animated just like an actor.

## Movies

A MOVIE is made from one or more scenes spliced together with professional fade-ins and fade-outs. Your completed movie

can be up to several minutes long depending on the animation speed and the available space on the disk.

## The Main Menu

The best way to get acquainted with TAKE 1 is to boot the program disk and run through the various program menus. To get started, turn off the computer, place the TAKE 1 disk in drive 1 (label facing up), and turn the computer on. When the drive stops you should see the following display on the monitor screen:



This is a menu of the programs available on TAKE 1. The left and right arrow keys are used to scroll through the menu options. Press the ⟶ key to highlight the next selection on the menu. Press the ⟵ key to move backward through the menu. Try these keys a few times to see how this feature works, you will be using these keys extensively throughout TAKE 1. Now press ⟶ until DISK UTILITIES is highlighted and then press ( RETURN ).

The disk will spin for a few moments and a new menu will appear on the screen. This is the TAKE 1 DISK UTILITIES program. It will take care of all the special disk operations necessary to make a movie. As with the main program menu, the ⟵ and ⟶ keys are used to select the desired

function. Select QUIT DISK UTILITIES to return to the main program menu. We will get back to DISK UTILITIES shortly to format a data disk.

You should now see the main menu on the screen. Each of the programs has a function menu similar to the DISK UTILITIES menu. Try selecting the other programs to get familiar with the various menus. You can always get back to the main menu by choosing the QUIT option. Here is a brief description of each program on the disk:

**PICTURES & BACKGROUNDS**—This is the hi-res picture editor where you create or edit pictures that are used to make actors and backgrounds. Features include colorfill, a zoom pixel-editor, and compatibility with Applesoft shape tables and the Baudville Shape and Font Libraries.

**ACTORS & ACTIONS**—Actors are made by clipping objects from hi-res pictures or taking snapshots from existing actors. This program is used to create and edit the actors, and also add pre-defined actions to the actors.

**SCENE EDITOR**—This is the heart of the animation system. Here is where you "shoot" scenes frame-by-frame.

**MOVIE EDITOR**—This is the "cutting room" where several scenes are spliced together and combined with backgrounds to make a movie. Professional fades and dissolves are used to go from scene to scene.

**MOVIE PROJECTOR**—The completed movies are played back using the projector. For presentations and demos, the projector can be set for continuous rerun of the movies.

## *Formatting Data Disks*

To save your TAKE 1 movie files, you will need some formatted data disks. Formatting the disks prepares them for data storage. If you already have some DOS 3.3 formatted disks they can be used, but it is better to use the TAKE 1 DISK UTILITIES to format disks and set them aside for making movies. It is a good policy to keep several disks on hand and back up the files regularly. Here's how to format disks:

- Select the DISK UTILITIES program from the main menu.

- Remove the TAKE 1 program disk and insert the disk you want to format in Drive 1.

- Select FORMAT DATA DISK from the function menu.

- You will be asked if you really want to format this disk. Press ⓨ for yes.

- Press ⟨RETURN⟩. The disk will spin for a few seconds while it is formatted.

**WARNING**: Formatting a disk will permanently erase any files that were on the disk. Be careful you don't accidently format a valuable disk.
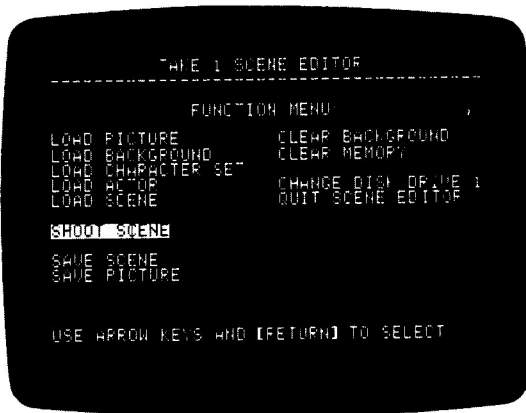
## Using Two Disk Drives

If you have two disk drives, you should keep the TAKE 1 program disk in drive 1 and use drive 2 for your data disk. This will eliminate the need to re-insert the TAKE 1 disk when switching between the various programs.

# Let's Make A Scene

Put on your director's cap, you are about to "shoot" your first animated scene by taking a quick run through the SCENE EDITOR. In this tutorial you will see how easy it is to create and edit a scene frame-by-frame using only a few of the SCENE EDITOR features. This will also introduce you to some of the commands and procedures that are common to all of the TAKE 1 programs. The first thing to do is select SCENE EDITOR from the main menu. You will see the following screen:



```
          TAKE 1 SCENE EDITOR
---------------------------------------------
            FUNCTION MENU              ,
LOAD PICTURE            CLEAR BACKGROUND
LOAD BACKGROUND         CLEAR MEMORY
LOAD CHARACTER SET
LOAD ACTOR              CHANGE DISK DRIVE 1
LOAD SCENE              QUIT SCENE EDITOR

SHOOT SCENE

SAVE SCENE
SAVE PICTURE


USE ARROW KEYS AND [RETURN] TO SELECT
```

This is the SCENE EDITOR function menu. In order to shoot a scene, we must first load an ACTOR file from the disk so we have something to work with.
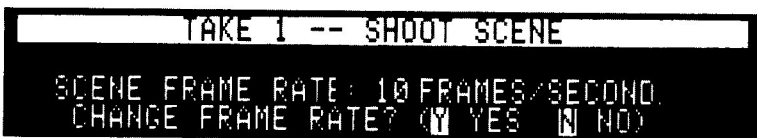
## Loading the Actor

Select the LOAD ACTOR option on the menu. When the disk stops. some new information will appear at the bottom of the screen:

```
LOAD ACTOR: LI'L DOOG'N
            SHUTTLE
            ASTRONAUT
```

This is a scrolling list of all the ACTOR files on this disk. The (◄─) and (─►) keys are used to scroll through the list. Press the arrow keys to view all the names on the list. We are going to use "LI'L DOOG'N" as the actor in our first scene. Select this name and press (RETURN) to load the file.

## Shoot the Scene

Now that the actor is loaded in memory, we are ready to shoot the scene. Select the SHOOT SCENE function with the arrow keys and press (RETURN). This will bring you a mostly blank screen with some text at the bottom:

```
TAKE 1 -- SHOOT SCENE

SCENE FRAME RATE: 10 FRAMES/SECOND.
CHANGE FRAME RATE? (Y YES  N NO)
```

Every time you enter SHOOT SCENE you will have the option to change the "frame rate." This tells how fast the frames will flip by when the scene is played back. For now we will just leave it at 10 frames/second so press (N) for no.

Now you are looking at the SHOOT SCENE editing screen. The text window at the bottom of the screen is the "status window" for this editor:
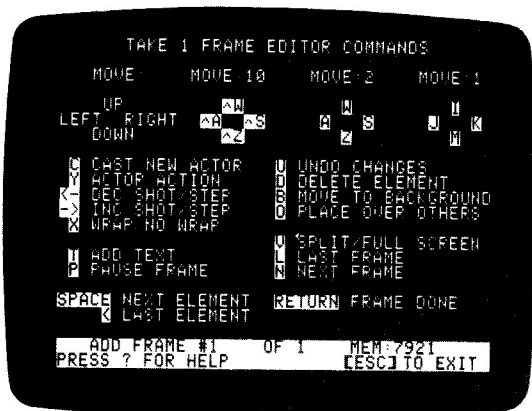
```
┌──────────────────────────────────────────────┐
│        FRAME #0     OF 0      MEM:7921         │
├──────────────────────────────────────────────┤
│ ADD  EDIT    -> INC FRAME   U  FULL SCREEN     │
│ DEL  INSERT  <- DEC RUN     ESC TO EXIT        │
└──────────────────────────────────────────────┘
```

The top line of the status window is the frame status line. This line tells us the current frame number and the total number of frames in the scene. So far there are no frames in the scene. The number at the right is the amount of free memory available. This number will decrease as frames are added to the scene.

Below the frame status line are the command keys that can be used. Note that the (ESC) key will get you back to the SCENE EDITOR function menu. The other keys will not do much until some frames have been added to the scene, so press the (A) key for ADD. The status window will now look like this:

```
┌──────────────────────────────────────────────┐
│     ADD FRAME #1    OF 1      MEM:7921         │
│ PRESS ? FOR HELP            [ESC] TO EXIT      │
└──────────────────────────────────────────────┘
```
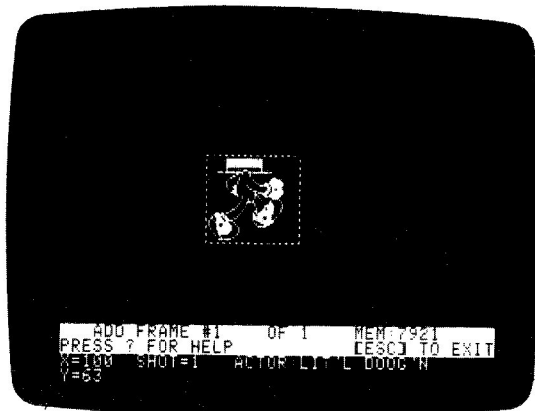
We are now in the ADD frames mode of the frame editor. The top status line is the same except that ADD appears at the left and we are now looking at FRAME #1 (still a blank screen). The second line tells us that the (ESC) key will exit back to the SHOOT SCENE screen we just left, and the (?) key will get help. We could use a little help right here so go ahead and press the (?) key. The blank screen will be replaced by a help screen with all of the frame editing commands:

```
        TAKE 1 FRAME EDITOR COMMANDS
     MOVE       MOVE 10    MOVE 2    MOVE 1
        UP          ↑W                W          W
  LEFT  RIGHT   ←A   →S        A   S      J   K
       DOWN         ↓Z                Z          M

  C CAST NEW ACTOR    U UNDO CHANGES
  Y ACTOR ACTION      D DELETE ELEMENT
  <- DEC SHOT/STEP    B MOVE TO BACKGROUND
  -> INC SHOT/STEP    O PLACE OVER OTHERS
  X WRAP/NO WRAP
                      V SPLIT/FULL SCREEN
  U ADD TEXT          L LAST FRAME
  P PAUSE FRAME       N NEXT FRAME

  SPACE NEXT ELEMENT  RETURN FRAME DONE
      K LAST ELEMENT

  ADD FRAME #1    OF 1     MEM:7921
 PRESS ? FOR HELP          [ESC] TO EXIT
```

Rather than trying to learn all the commands at once, you will be using just a few of them to shoot your first scene. Press ⑦ again to get back to the blank frame.

## Casting An Actor

Press the Ⓒ key to "cast" an actor into the scene. What you see at the bottom of the screen is a scrolling menu of the actors that have been loaded for this scene. In this case, the only actor loaded is "LIT'L DOOG'N," so there are no other choices to scroll through, just press (RETURN) and the frame will begin to come to life!



```
  ADD FRAME #1    OF 1     MEM:7921
 PRESS ? FOR HELP          [ESC] TO EXIT
 X=100  SHOT=1   ACTOR:LIT'L DOOG'N
 Y=63
```

**Let's Make A Scene  3-4**

Now you have an actor element on the screen. The shimmering box around the actor is used to locate a single actor when you have many objects on the screen at one time. The new information in the status window tells the screen location, snapshot number, and name of the actor in the shimmering box.
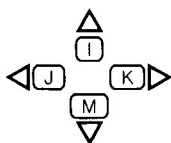
Many different actors can be cast in a scene and the same actor can be cast more than once. For now, to keep things simple, we will just use one actor for the scene.

## The Move Commands

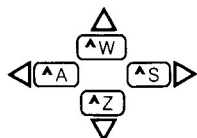There are three sets of keys that move objects around the screen:
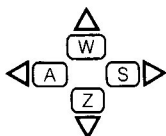
These keys move the actor 2 pixels (or dots) in the direction of the arrow.

These keys move the actor 1 pixel (or dot) in the direction of the arrow.

For faster moves the (CONTROL) key is pressed at the same time:

These keys move the actor 10 pixels (or dots) in the direction of the arrow.

Try pressing each of these keys a few times and watch what happens to the actor on the screen. Press the (A) key repeatedly a few times and notice how the value of "X" changes in the status window. X is the current horizontal screen position of the actor: X = 0 is the extreme left edge of the screen and X = 279 is the extreme right edge. Y is the vertical

position: Y = 0 is the top and Y = 191 is the bottom of the screen. If you move far enough to the left, the actor will disappear off the edge of the screen and the value of X will be negative. The actor is still an element of the frame but not a visible part of the screen (much like an actor walking off stage).

So far, the bottom four lines of the screen have been displaying the current frame status (unless you accidentally hit the ⒱ key). Go ahead and press the ⒱ key now. The status window will disappear and the entire screen will become visible for moving actors around in the frame. To get the status window back, press the ⒱ key again. The ⒱ key is the command to switch back and forth between the "split-screen" and "full-screen" modes.

NOTE: When you move an actor that has color in it, the colors will change when you move left or right one pixel. This is because the horizontal color resolution on the Apple is two dots wide. You should usually try to make horizontal movements in multiples of two pixels. This one-pixel color shift, however, can be used creatively for special effects.

## Changing Snapshots

Using the move keys, move the actor to the screen location X = 10 and Y = 85. Now press the ⭢ key. The actor will appear to be walking in place with each press of the ⭢ key. This actor has several "snapshots" of the different images that make up an animated walk. The current snapshot number is displayed at SHOT = in the status window. The ⭢ key is used to increment the current snapshot and the ⭠ key is used to decrement the snapshot number. When you press ⭠ repeatedly, the actor will appear to walk backwards. Set the SHOT number back to 1.

## "Canned Actions"

At this point, you know how to cast an actor, move it around the screen, and change its snapshot number. Since animation

usually involves a lot of repeated sequences, TAKE 1 allows the
use of pre-recorded "canned" movements called ACTIONS.
Press the ⓨ key. The status window will present a scrolling list
of ACTIONS that have been defined for this actor. Use ⟮←⟯ or
⟮→⟯ until "WALK RIGHT" is highlighted and press ⟮RETURN⟯ to
select this action. The status window should look like this:

```
   ADD FRAME #1    OF 1      MEM:7921
PRESS ? FOR HELP            [ESC] TO EXIT
X=100   SHOT=1    ACTOR:LIT'L DOOG'N
Y=63    STEP=1    ACTION:WALK RIGHT
```

This tells you that the actor in the shimmering box is "LIT'L
DOOG'N" and the action for this part of the scene is "WALK
RIGHT." The STEP number is the current step of the action
sequence (STEP and SHOT numbers are not always the same).

## On To The Next Frame

Once the actor and action are set, the animation process is
very simple. You are looking at FRAME #1 with the actor
positioned where you want him in the frame. Press ⟮RETURN⟯
when you are done composing a frame and want to move on
to the next one. The status window will show FRAME #2 and
the actor will move right and change to the next snapshot in
the action sequence. Press ⟮RETURN⟯ again to move on the
FRAME #3. Each time you press ⟮RETURN⟯, a new frame will be
added to the scene and the pre-defined action will update the
snapshot number and screen position automatically. Keep
pressing ⟮RETURN⟯ until you get to FRAME #15.

It might seem that the computer is doing everything (and it is)
but you can override the automatic actions at any frame with
the move keys and other frame editor commands. This gives
you complete creative flexibility while leaving the repetitious
tasks to the computer. Press ⟮W⟯ once to move the actor up in
this frame and then press ⟮RETURN⟯ to move to the next frame.

Repeat this process, (W) and then (RETURN) until you get to FRAME #35. Your actor will now be walking up a slope because you have added your own movements to the pre-defined action.

## Preview The Scene

If you have been following directions carefully, you should be at FRAME #35 with your actor near the right side of the screen. Congratulations! You have just completed your first animated scene using TAKE 1. Of course, there are many other features to learn about the SCENE EDITOR but these will be covered later.

When you are finished adding frames to the scene, press (ESC) to return to the SHOOT SCENE command mode. Now you can use the other SHOOT SCENE commands to examine the scene frame-by-frame and do a preview run to see how the scene will look in a completed movie. Did you accidently press (ESC) twice and wind up at the SCENE EDITOR function menu? If you did, nothing is lost, just select SHOOT SCENE again and you will be in the right place.

In this mode, the (←) and (→) keys are used to "flip" backward and forward through the frames of the scene. Press (←) repeatedly to back up all the way to FRAME #1. The actor will walk backwards through the frames to his starting point. Try flipping forward and backward through the frames to see how this works. A faster way to get to a particular frame is to press the (F) key and then type in the frame number and press (RETURN). This is extremely useful in editing a very long scene.

Now we are going to do a preview "run" of the scene you just created. Move back to FRAME #1 and press (R) for RUN. The status window will prompt you to press (RETURN) to start. The scene will run all the way to the end and then wait for you to press (RETURN) again. When you use the (R) command, the scene will run from the current frame showing to the end. You can interrupt during the middle of a run by pressing (ESC).

# Editing A Scene

Before we end this session, lets make some simple changes to the scene you just made. Suppose you wanted the actor to do a little hop in the middle of his walk across the screen. Go to FRAME #6 using either the arrow keys or the (F) command. Press (E) to get into the EDIT frames mode. This is the same frame editor as the ADD mode except that you are editing existing frames instead of adding new frames to the scene. The help screen and commands are identical.

Using the move commands, move the actor up 10 pixels. If you have forgotten the commands, use the help screen. What you are doing is changing the screen position of the actor for this frame. Press (RETURN) to go on to the next frame. This time move the actor up 20 pixels and press (RETURN). In the next frame, move the actor up only 10 pixels. You have now changed 3 of the 35 frames in the scene. Press (ESC) to get out of the EDIT mode and run the scene from the beginning. Notice the little hop!

OK, now it's time for you to experiment on your own. Add some more frames to the scene using different ACTIONS. How about trying some frames with no pre-defined actions, you choose the snapshot and screen location for each frame. Try anything that comes to mind. Sometimes the most creative results come from "accidents." You can remove a frame you don't want by moving to that frame in the SHOOT SCENE mode and pressing (D) for delete. The INSERT command will add frames to the middle of an existing scene. Try changing the frame rate by ESCaping back to the function menu and selecting SHOOT SCENE again.

If you want to see how your scene looks with a background, exit to the SCENE EDITOR function menu and select LOAD BACKGROUND. Load one of the backgrounds from the disk and return to the SHOOT SCENE mode to run the scene. It is usually helpful to load a background before shooting the scene so you can see how the actors interact with the background.

## Saving Your Scene

When you are finished "shooting" your first scene, you may want to save it to disk. Place a formatted data disk in the drive, select the SAVE SCENE option from the SCENE EDITOR function menu, type a name for the scene, and press [RETURN].

IMPORTANT: Always be sure to save any work that you don't want to lose before starting something else. It is also a good idea to make backup copies of your files on a second disk. If a disk gets damaged or accidently erased, it is nice to know that your efforts have not been lost.
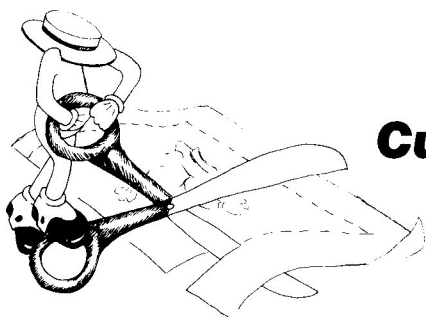
# Cut That Out

The last chapter showed how to use actors in a scene. Now you will learn how to create an actor file by clipping individual snapshots from a hi-res picture. The process can be thought of as "animated clip-art." Once the snapshots are defined, they can be modified with the zoom Pixel Editor or even color filled. You will also learn how to add pre-recorded actions to the actor file.

## Actors & Actions

Go to the TAKE 1 MAIN MENU and select the ACTORS & ACTIONS program. You will see the following screen:

```
              TAKE 1 ACTORS & ACTIONS
 --------------------------------------------------
                   FUNCTION MENU

LOAD BACKGROUND      CHANGE DISK DRIVE 2
LOAD PICTURE         QUIT ACTORS & ACTIONS
LOAD ACTOR

NEW ACTOR
EDIT ACTOR
RECORD ACTIONS

SAVE ACTOR
SAVE PICTURE

USE ARROW KEYS AND [RETURN] TO SELECT
```
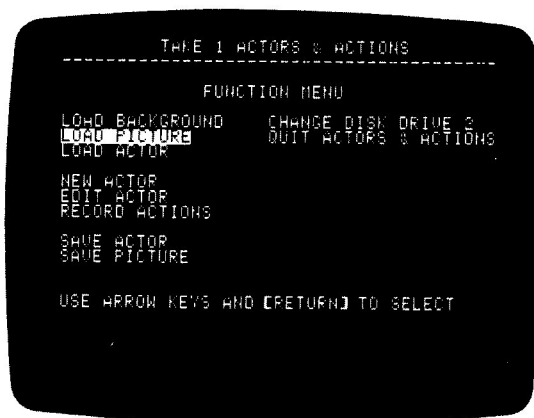
By now. you should be familiar with menu selections and
loading files from the disk. Select LOAD PICTURE and load the
picture named "CAT & FIDDLE" from the program disk. When
the picture is loaded, select the NEW ACTOR option from the
menu. This will bring you to the EDIT ACTOR command
screen:



The status window tells you that there are no snapshots in the
table yet, and lots of memory available. The help screen of
commands at the bottom of the window looks very much like
the SHOOT SCENE commands. Press the Ⓐkey to get to the
ADD SNAPSHOTS mode:



You are now ready to add SNAPSHOT #1 to the actor file. At
the bottom of the screen, you are prompted to select where
you will get the snapshot. The three choices are: (1) Cutout
from the picture or background that was loaded. (2) Take a
snapshot from a different actor file. (3) Duplicate a snapshot
from the current actor. The last option is very handy when you
want to make several identical snapshots and then modify parts
of each one.

## Cutouts From Pictures

Select the CUTOUT FROM PICTURE option and you will see
the picture that was loaded and the CUTOUT status window at
the bottom of the screen:
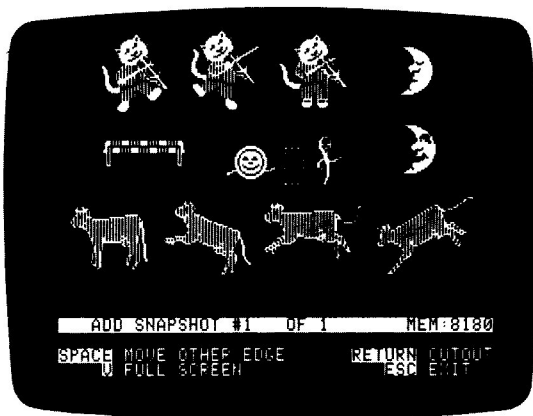
Near the center of the screen is a shimmering box (like the one in the Frame Editor). The move commands are used to "stretch" the box so that it completely surrounds the shape you want to clip out from the screen. These are the same move keys that you used to move actors around while shooting the scene. The move commands only act on one corner of the box at a time. To switch to the opposite corner of the box, press the (SPACE) bar. See if you can stretch the box around the cat shape in the upper-left corner of the screen like this:



It is really quite easy. First press the (A) key until one side of the box is just left of the shape, then press (W) until the top edge of the box is right above the top of the shape. Next press the (SPACE) bar to switch to the bottom-right corner and use the move keys to stretch the bottom and right sides of the box so that it encloses the shape. Make sure the box does not touch

any objects on the screen that you don't want included in the snapshot. When you have the box outline set correctly, press [RETURN].

## Sprites and Blocks

At this point, everything except the area inside the box will disappear from the screen and you will have three choices for processing the snapshot. Let's take a look at the options available:
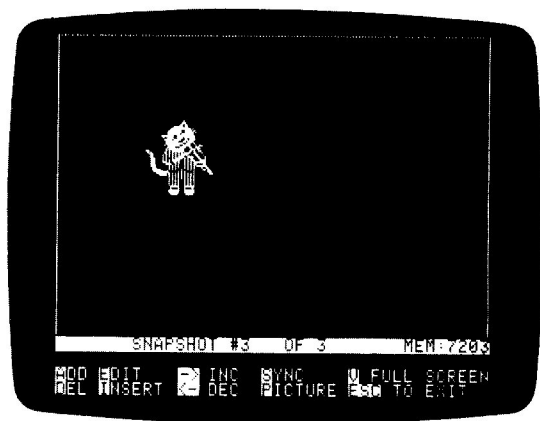
- A SPRITE snapshot encodes only the shape. The black area between the shape outline and the shimmering box is transparent. A SPRITE snapshot is just like a transparent cel that a cartoon animator uses with the shape painted on it.

- A SPRITE WITH HOLES is exactly like a sprite except you can specify transparent "windows" or holes inside the shape.

- A BLOCK SHAPE encodes everything inside the shimmering box including black. There are no transparent areas in a BLOCK SHAPE.

You will be using sprite snapshots for most of your animation, so select the SPRITE option for the type of snapshot. There will be a brief pause while the snapshot is being processed and then you will return to the hi-res picture ready to cutout another snapshot. Notice that the status window shows one snapshot in the actor file.

Now stretch the box around the second cat and cutout another snapshot. Do the same thing for the third cat. When you are finished, press [ESC] to get back to the EDIT ACTOR command screen.

## Flipping Through The Snapshots

Your screen should now look something like this:

```
       SNAPSHOT #3   OF 3         MEM:7203
MOD EDIT    ◄ INC  SYNC      U FULL SCREEN
DEL INSERT  ► DEC  PICTURE  ESC TO EXIT
```

The status window says that you are viewing SNAPSHOT #3 of
an actor file that contains three snapshots. Now you can use
the ◄─── and ───► keys to "flip" backward and forward
through the three snapshots. The cat appears to dance and
play his fiddle as you flip snapshots. This is a good example of
how much animation can be done using only two or three
snapshots. A bit of advice here is—don't use more snapshots
than are necessary to create the desired effect! Large actor files
will limit the amount of memory available when you are
shooting a scene.

## Pre-recorded Actions

When you were flipping through the snapshots you saw the
actor dance. The next step is to pre-record this sequence so
that you can just tell the actor to "dance" when you are
shooting the scene. Use the ESC key to return to the ACTORS
& ACTIONS function menu. Select the RECORD ACTION
function and you will see the following options at the bottom of
the screen:

Since you are creating a new action sequence, choose the
ADD ACTION option. You will be prompted to name the action,
just type "DANCE" and press (RETURN). Next you must choose
whether you want a background visible while recording. Select
"BLACK BACKGROUND" and press (RETURN). This will bring
you to the RECORD ACTION screen:
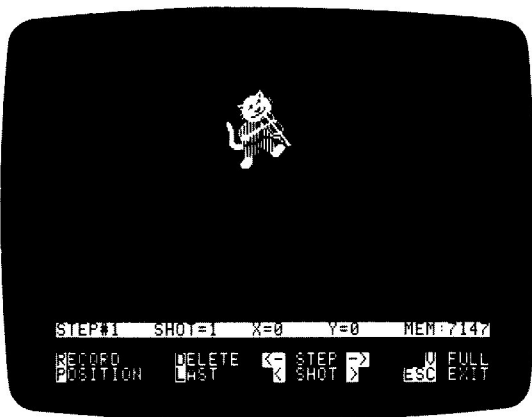


An ACTION is a sequence of snapshots, or STEPS, that define
a particular movement when you flip through the sequence.
The status window tells you which step you are viewing, how
many steps there are in the sequence, and which snapshot is
used in the current step. The commands used to record an
action are displayed at the bottom of the window.

We are going to record a sequence of two steps to define the
"dance." The ◁ and ▷ keys are used to select which
snapshot will appear in a step (these are the comma and
period keys—not the arrow keys). Use these keys to select the

snapshot of the cat standing on his left leg. This will be STEP #1 in the sequence. Press the ⓡ key to record the next step. Use the ⓒ and ⓢ keys again to select the snapshot of the cat standing on his right leg. This will be STEP #2.



You now have a two step dance sequence. Use the ⓒ and ⓢ arrow keys to flip backward and forward through the steps. Notice only two of the three snapshots appear in the action. This completes the recording of this action sequence. When you are finished, press (ESC) to get back to the ACTIONS & ACTORS function menu. The pre-recorded action that you named "DANCE" will become part of the actor file when you save it to the disk.

## Actions That Move

Just for fun, let's make a second action sequence with the cat dancing and moving to the right at the same time. Follow the same steps you used for the last action. When you are asked for a name for the action, type "DANCE RIGHT". As before, select the cat standing on his left leg for SHOT #1 and the cat standing on his right leg for SHOT #2. The move commands are active during the recording mode, so press the ⓢ key once (move right 2 pixels) when you get to STEP #2. This will record a movement for this step in addition to the snapshot change. Press ⓢ to get to STEP #1 and press ⓢ again to record movement in the first step.

Now press ⓢ repeatedly to flip through the sequence and watch what happens. The cat will be dancing and moving to the right across the screen. When he gets to the right edge of the screen, he will "wrap-around" to the left edge. When you

are finished recording, press (ESC) to get back to the function
menu.

## Saving The Actor File

You have created an actor file that contains three snapshots
and two pre-recorded actions named "DANCE" and "DANCE
RIGHT". At this point, you should save the actor to disk so you
can go to the SCENE EDITOR and shoot a scene using your
new actor. Place a formatted data disk in the drive, select the
SAVE ACTOR option, type a name for the actor file ("CAT
DANCE" might be a good choice), and press (RETURN).

While you are still in the ACTORS & ACTIONS program, you
might want to practice creating some new actors using some of
the other shapes on the picture. Always remember to select
NEW ACTOR when creating a new actor file. This will clear
memory of snapshots from the last actor you were working on.
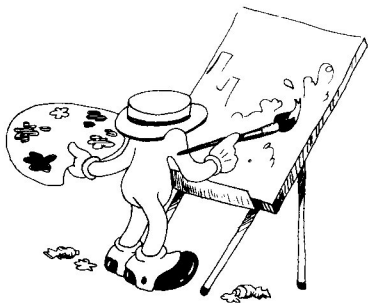
# Pictures & Backgrounds

The PICTURES & BACKGROUNDS program is a full-screen hi-res picture editor that uses shape tables, hi-res text, actors, colorfill, and a zoom pixel editor. A cut and paste "windowing" feature lets you clip out any part of the screen, move it, flip it horizontal or vertical, and duplicate it. At each step of the drawing process, an "undo" command will restore the picture if you don't like the result. Hi-res pictures and shape tables from other graphics programs can be used if the filenames are fixed using the TAKE 1 DISK UTILITIES.

In this program, a PICTURE is a standard 33 or 34 sector hi-res picture. A BACKGROUND is a picture that has been compressed to take up less space on the disk. The amount of disk space required for a BACKGROUND depends on how complex the picture is. The advantage of using compressed backgrounds for movies is obvious, less space taken up by the backgrounds leaves more room on the disk for the actors and scenes. Most of the TAKE 1 programs allow you to load either PICTURES or BACKGROUNDS, however, hi-res pictures must be saved as BACKGROUNDS before they can be used in the finished movie.

## Pictures & Backgrounds Function Menu

The PICTURES & BACKGROUNDS function menu will appear when you run this program from the main menu. Here is a summary of the available functions:

**LOAD SHAPE TABLE**—Load a shape table from the Baudville Shape Libraries or your data disk.

**LOAD CHARACTER SET**—Load a character set from the TAKE 1 program disk of Baudville Shape Libraries.

**LOAD ACTOR**—You can use actors you have created as shapes in the picture.

**LOAD PICTURE**—Load a standard hi-res picture. This will replace the picture in memory.

**LOAD BACKGROUND**—Load a BACKGROUND file. This will replace the picture in memory.

**NEW PICTURE**—Display blank hi-res picture editing screen with screen status window. This will erase picture in memory.

**EDIT PICTURE**—Display hi-res picture editing screen without erasing picture in memory.

**SAVE PICTURE**—Save standard hi-res picture file.

**SAVE BACKGROUND**—Compress the picture to a BACKGROUND file and save it to disk.

**CHANGE DISK DRIVE**—If you have two drives, select this option to change the drive.

**QUIT PICTURES & BACKGROUNDS**—Return to the TAKE 1 main program menu.

## *The Picture Editing Screen*

You can get to the hi-res picture editing screen from the NEW PICTURE or EDIT PICTURE options. In either case you will see a flashing cursor near the center of the screen and a status window at the bottom of the screen:

```
X=96   Y=96   [V]FULL  [U]UNDO  [ESC]EXIT
        DRAWING TOOL  SHAPES
                      TEXT
```
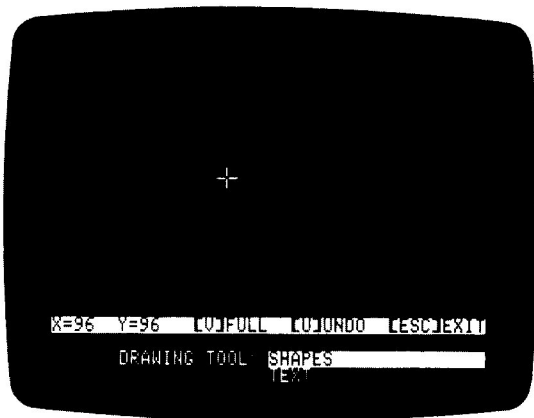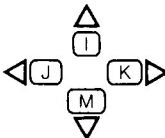
The status window shows the current horizontal X and vertical Y coordinates of the cursor. The cursor is moved around the screen using the move keys:
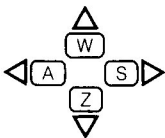


Move the cursor or shape 2 pixels in the direction of the arrow.
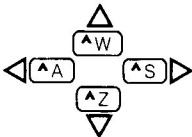


Move the cursor or shape 10 pixels in the direction of the arrow.



Move the cursor or shape 1 pixel in the direction of the arrow.

The V key will switch the status window off and on, and the ESC key will get you back to the function menu. At the bottom of the status window is a scrolling menu of drawing options. This is your drawing tool kit, the choices are: SHAPES, TEXT, ACTOR, COLORFILL, PIXEL EDITOR, and WINDOW.

## Drawing With Shapes

Pre-drawn Applesoft shape tables are a convenient way to create hi-res drawings quickly. If you have the Baudville Shape Libraries or shape tables made with other shape generating programs, they can be used with TAKE 1. The selection of available shapes can be changed at any time by loading in a different shape table. To draw with shapes, move the cursor where you want the shape to appear and select the SHAPES option. One of the shapes in the table will appear on the screen and the status window will look like this:
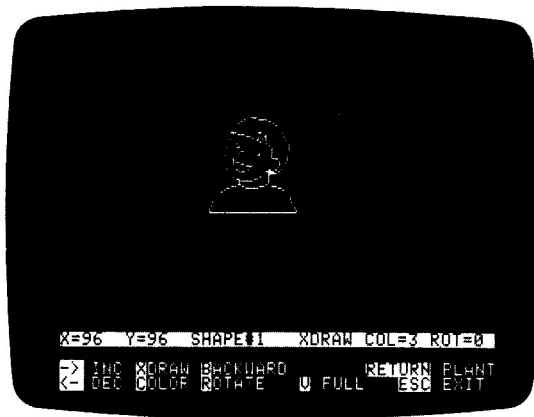


The top line of the status window shows the screen coordinates, current shape number, XDRAW status, shape color, and rotation. These are standard Applesoft parameters. The move commands will move the shape around the screen. The bottom of the screen has the commands used to manipulate the shapes:

⟨◄─⟩    Scan backward or forward through the available
⟨─►⟩    shapes.

⟨X⟩    **XDRAW**—When you add shapes to the picture, the
        XDRAW mode will place the shape on the screen in
        the inverse color of the background, and the DRAW
        mode will place it on the screen in the selected color.
        Press ⟨X⟩ to switch between XDRAW and DRAW.

B   **BACKWARDS**—This will flip the shape to its mirror image.

C   **COLOR**—A shape can be drawn in one of the standard Apple colors. Color selected will not affect shapes in the XDRAW mode. Press C to change the selected color.

R   **ROTATE**—This will rotate the shape clockwise.

RETURN   **PLANT**—Will plant the shape to the background.

ESC   **EXIT**—Undo shape from screen and exit.

The standard colors available for drawing shapes are:

| | |
|---|---|
| 0 = Black 1 | 4 = Black 2 |
| 1 = Green | 5 = Orange |
| 2 = Purple | 6 = Blue |
| 3 = White 1 | 7 = White 2 |

The best technique for coloring shapes is to XDRAW them to the screen and then use the colorfill option.

## Adding Text To The Picture

Text can be added to the picture if you have loaded a character set. Here is how to add a line of hi-res text:

*   Move the cursor to where you want the line of text to appear.

*   Select the TEXT option. The cursor will be replaced by a flashing text prompt.

*   Type the line of text directly from the keyboard. The ⬅ key will backspace to correct mistakes.

*   Release the caps-lock key on the Apple IIc and IIe to get lower case. On the II +, the ➡ key is used as a caps-lock. Press the ➡ key once for lower case (a smaller cursor will indicate lower case). Press it again to return to upper case.

- Press (RETURN) when the line is finished. At this point you can reposition the text with the move keys. If you don't want to move it, press (RETURN) again.

## Drawing With Snapshots

You can use actor snapshots in the picture just like shapes. Move the cursor where you want the snapshot to appear and select the ACTOR option. One of the snapshots in the actor file will appear on the screen and the status window will look like this:

```
X=96   Y=96      SNAPSHOT #2    OF 3

              ➡ INC        RETURN PLANT
              ⬅ DEC           ESC EXIT
```

Top line tells the current snapshot number. Use the (⬅) and (➡) keys to scan through the snapshots. The move commands will move the snapshot around the screen. Press (RETURN) when the snapshot is positioned where you want it. Press (ESC) to exit this mode without planting the snapshot.

## Colorfill

You can colorfill any enclosed area of the picture. Move the cursor to a space inside the enclosed area and select the COLORFILL option. The status window will display a scrolling menu of the available fill colors and a sample patch of the color will appear right above:

```
X=96   Y=96     COLOR FILL
                            WHITE
                COLOR  GREEN
                            PURPLE
```
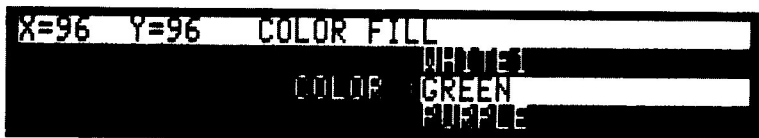
Use the ⬅ and ➡ keys to select one of the colors and press RETURN to fill. Any area that is already filled with one of the solid colors can be refilled with another color (including black). The fill may leak out of an area that is not completely enclosed. The ESC key will exit this routine without filling.

## The Zoom Pixel Editor

The ZOOM PIXEL EDITOR gives you a magnified view of a small area of the picture and allows you to draw and edit fine details. Move the cursor to the spot that you want to zoom in on and select the PIXEL EDITOR option. The cursor will be replaced with a small flashing box and a very large box will appear at the opposite side of the screen:
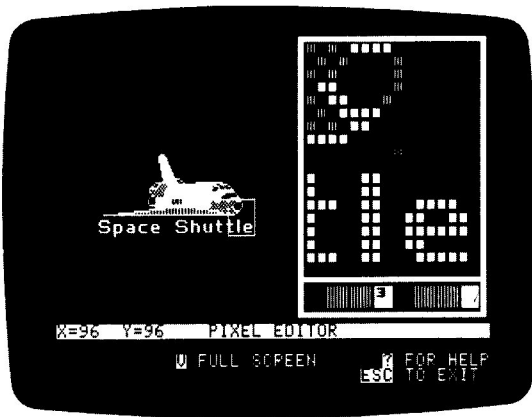


The large box is called the ZOOM lens. Every screen pixel inside the smaller box appears as a magnified square in the ZOOM lens. A flashing cursor will appear inside the ZOOM lens to indicate the exact pixel location. Press the ? key to see a help screen of all the PIXEL EDITOR commands. The move commands are somewhat different from the other routines.

Two sets of move keys move the cursor inside the ZOOM lens. One set moves without plotting and the other plots in the selected color as it moves:
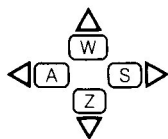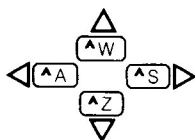
These keys move the cursor one pixel in the direction of the arrow without plotting.
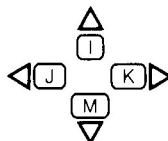
These keys plot the pixel at the cursor location and move the cursor in the direction of the arrow.

When the cursor gets to the edge of the ZOOM lens it will "bump" the smaller box in the direction of the move. A faster way to move the small box is to use the third set of move keys:

These keys move the small box 10 pixels in the direction of the arrow.

The current plotting color is shown at the bottom of the ZOOM box. This color is changed by pressing number keys from 0 to 7:

| | | | |
|---|---|---|---|
| 0 | Black 1 | 4 | Black 2 |
| 1 | Green | 5 | Orange |
| 2 | Purple | 6 | Blue |
| 3 | White 1 | 7 | White 2 |

Here is a description of the other PIXEL EDITOR commands:

SPACE  **PIXEL ON/OFF**—To switch a pixel from on to off or vice versa, press the SPACE key.

C  **CHANGE PIXEL COLOR**—This will change a pixel from one color group to another.

V  **FULL SCREEN**—Switch status window off and on.

ESC  **TO EXIT**—Quit PIXEL EDITOR.

# The Cut/Paste Window

The WINDOW option lets you clip out a portion of the screen (like cutting out a snapshot) and then move it or flip it to face the other direction. When you select the WINDOW option you will be in the CUTOUT mode. This works exactly like the cutout mode in the ACTORS & ACTIONS program. Use the move keys to position one corner of the shimmering box where you want it. Press the (SPACE) bar to select the opposite corner. Then move that corner to enclose the part of the screen you want to move or flip. When the box is where you want it, press (RETURN) to cut it out.

Once the window is cut from the screen, it can be moved to another part of the screen with the move keys. The following commands will also operate on the window box:

(F)        **FLIP**—Flip vertically.

(B)        **BACKWARDS**—Flip horizontally.

(C)        **CLEAR**—Clear entire window to black.

(R)        **REVERSE**—Change white areas to black and black to white.

(V)        **FULL SCREEN**—Turn status window off and on.

(RETURN)   **PLANT**—Plant current window to the screen and exit window routine.

(ESC)      **EXIT**—Undo current window and exit.
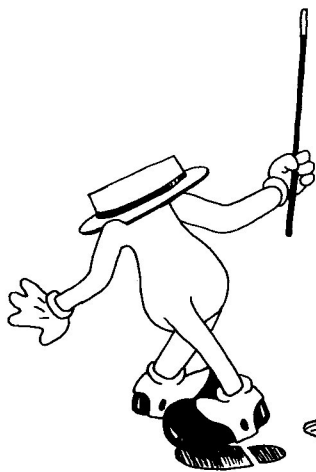
# Actors & Actions

Professional animators use cels (transparencies) for images that are animated in a scene. The image is painted on the cel and the cels are overlayed on a background to make a frame of animation. The advantage of this technique is that the cels can be positioned anywhere in the frame and used over again in other frames. The SNAPSHOTS that make up an ACTOR file are just like the animator's cels. The ACTORS & ACTIONS program is used to clip out snapshots from hi-res pictures, edit those snapshots, and record short action sequences based on the snapshots.

## Actors & Actions Function Menu

You should already be familiar with the ACTORS & ACTIONS FUNCTION menu. Here is a summary of the available functions:

**LOAD BACKGROUND**—Load a background for cutting out snapshots. This will replace the background or picture in memory.

**LOAD PICTURE**—Load a hi-res picture for cutting out snapshots. This will replace the picture or background in memory.

**LOAD ACTOR**—Load an existing actor file for further editing. This will replace the actor in memory.

**NEW ACTOR**—This will erase actor in memory and display the EDIT ACTOR command screen. This is where individual snapshots are created and edited.

**EDIT ACTOR**—Same as NEW ACTOR except the actor in memory is not erased.

**RECORD ACTION**—Record an action sequence.

**SAVE ACTOR**—Save the actor to disk.

**SAVE PICTURE**—Save the hi-res picture in memory. This is handy if you have made changes to the picture while editing or cutting out snapshots.

**CHANGE DISK DRIVE**—If you have two drives, select this option to change from one drive to the other.

**QUIT ACTORS & ACTIONS**—Return to the TAKE 1 main menu.

## Creating An Actor

When you select NEW ACTOR or EDIT ACTOR, you will see the EDIT ACTOR command screen. This is where you add, edit, and delete individual snapshots for the actor.
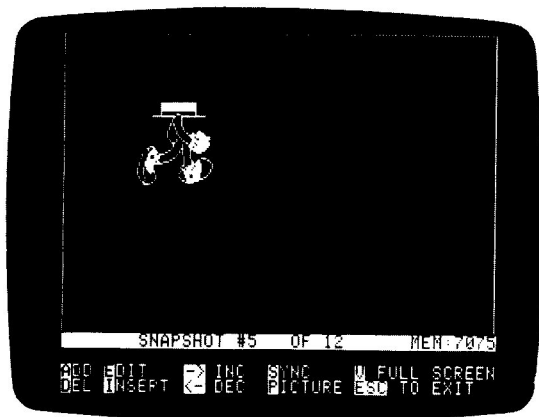


snapshot

status line
commands

It is easy to tell when you are in this mode by the blue borderline around the screen. If there is already an actor file in

memory, one of the snapshots will be on the screen. The status window tells you which snapshot you are viewing, how many snapshots make up this actor, and how much free memory is left. As you add snapshots to the file, the free memory will be used up.

The command keys for this screen are displayed at the bottom of the status window. Here is a description of the commands:

| | | |
|---|---|---|
| (A) | **ADD**—This will add a new snapshot to the end of the actor file. |
| (I) | **INSERT**—This is just like ADD except new snapshots are inserted at the current snapshot number. |
| (D) | **DELETE**—Delete the current snapshot. |
| (E) | **EDIT**—Modify the current snapshot. |
| (←) | **DEC**—Flip to last snapshot. |
| (→) | **INC**—Flip to next snapshot. |
| (S) | **SYNC**—Synchronize or line up the snapshots so that one part of the shape always appears in the same spot when you flip through the snapshots. |
| (P) | **PICTURE**—Edit the hi-res picture in memory with a pixel editor and colorfill. |
| (V) | **FULL SCREEN**—Turn the status window on or off. |
| (ESC) | **TO EXIT**—Back to the ACTORS & ACTIONS menu. |

## Adding Snapshots

Press the (A) key to add new snapshots to the actor. You will be prompted to select the source of the new snapshot. The choices are: (1) Cutout from the picture or background in memory. (2) Take a snapshot from a different actor file. (3) Duplicate a snapshot from the current actor.

The procedure for cutting a snapshot from the hi-res picture is described in detail in Chapter 4. Let's briefly review the steps:

- Using the move keys, stretch the shimmering box so that it completely surrounds the shape you want to cut out. then press (RETURN).

- Select the type of snapshot you want: SPRITE, SPRITE WITH HOLES, or BLOCK. Then press (RETURN) to process the snapshot.

- When the snapshot is processed, you will still be in the cutout mode ready to clip another snapshot from the picture. Press (ESC) to get back to the EDIT ACTOR screen.

If you are adding a snapshot from a different actor, you will have to insert the data disk containing the actor in the drive. Press (RETURN) to get a list of the actors on the disk, select the actor file you want, then use the (←) and (→) keys to flip through the available snapshots. Press (RETURN) when you get to the desired snapshot and it will be added to the current actor file.

Duplicating a snapshot from the current actor file works the same. Use the (←) and (→) keys to flip through the snapshots and press (RETURN) when you get to the one you want to duplicate.

## Sprites With Holes

Sprite snapshots can have transparent "windows" or holes inside the shape that allow the background to show through when they are projected on a frame. If the snapshot is a car, for example, you want the background to show through the windows of the car. You can create a see-thru hole at any black area inside the shape. To do this, select the SPRITE WITH HOLES option in the cutout mode. There will be a brief pause to process the shape, then the snapshot will display a shimmering background at the transparent areas. The status window will look like this:

```
ADD SNAPSHOT #1   OF  1        MEM:8137
                         SPRITE
         TYPE OF SNAPSHOT: SPRITE WITH HOLES
                         BLOCK
```

Use the move keys to position the cursor to a black area inside the shape that you want to make transparent and press (H) (for hole). You can specify as many holes as you like. When you are finished, press (RETURN) to process the snapshot.

## Editing Snapshots

Use the (E) command to edit the current snapshot. This will bring you to the EDIT SNAPSHOT screen:

```
EDIT SNAPSHOT #3   OF  5        MEM:7977

F FILL      P PIXEL EDITOR    RETURN PROCESS
U UNDO      V FULL SCREEN        ESC TO EXIT
```

The two editing options in the EDIT SNAPSHOT mode are the pixel editor and colorfill. Press (P) to use the pixel editor. Press (C) to colorfill. The (U) key will undo the last colorfill. These routines are identical to the PICTURES & BACKGROUNDS routines (see Chapter 5). When you are finished editing, press (RETURN). If you changed the shape so that it is larger than before, you will have to stretch the shimmering box so that the shape is completely enclosed. Press (RETURN) again to process the snapshot.

## Editing The Hi-Res Picture

You can make changes to the hi-res picture in memory or even create new shapes from scratch using the (P) (picture edit) command. The editing options are the pixel editor and colorfill,

the same as EDIT SNAPSHOT mode. This feature lets you
make minor changes in the picture without having to go back
to the PICTURES & BACKGROUNDS program. Press [ESC]
when you are finished editing the picture. The picture will
disappear (don't worry, it is still in memory) and you will return
to the EDIT ACTOR screen.

## Synchronizing Snapshots

This is an advanced option that will synchronize or line up the
various snapshots in an actor file. This process is called
"registration" and is simply a position alignment of one
snapshot relative to another. It is extremely useful when an
actor is made up of several interconnecting pieces, like a body
with separate snapshots for the arms and legs. When the
snapshots are synchronized, the arms and legs will appear at
the proper place on the body as you flip through the
snapshots. use the [S] command to SYNC the current snapshot
with another snapshot:

```
 SYNC SNAPSHOT #3    WITH #5

RETURN RECORD SYNC    ⮕ INC       W FULL
                      ⬅ DEC     ESC EXIT
```

You will have to select the snapshot you want to SYNC with.
use the [⬅] and [➡] keys to flip through the other
snapshots. The current snapshot will be overlayed on top of the
other snapshot. When you get the desired snapshot, use the
move keys to position the current snapshot and then press
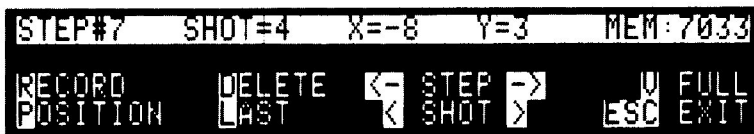[RETURN] when everything is lined up.

## Recording Actions

When you have finished making the snapshots for an actor, you
may want to pre-record some action sequences. Return to the
ACTORS & ACTIONS function menu and select the RECORD

ACTIONS option. At the bottom of the screen you will have three editing options:

```
ADD ACTION
EDIT ACTION
DELETE ACTION
```

You can add a new action sequence, edit an existing action, or delete an action from the actor file. In the add and edit modes, you may choose to have a background visible while recording. the status window for the RECORD ACTION mode looks like this:

```
STEP#7    SHOT=4    X=-8    Y=3    MEM:7033

RECORD       DELETE   <- STEP ->       W FULL
POSITION     LAST     < SHOT >     ESC EXIT
```

An ACTION is made up of one or more STEPS that create movement when shown in sequence. The top line of the status window tells which STEP you are viewing and which snapshot is used in the current step. The values of X and Y tell how far the actor moves in this step. Positive values of X indicate movement to the right and negative values of X indicate movement to the left. Likewise, positive values of Y indicate downward movement and negative values of Y indicate upward movement.

The commands used during the recording of an action are shown at the bottom of the status window. Here is a summary of the recording commands:

[R]          **RECORD**—Add a new STEP to the action sequence. The new step will immediately follow the current step on the screen.

[D]          **DELETE**—Delete the current STEP.

⟨◄━⟩ ⟨━►⟩ Flip through the STEPS in the action sequence.

⟨◄⟩ ⟨►⟩ Select a snapshot for the current STEP.

⟨P⟩ **POSITION**—Move the entire action sequence to a new screen location without disturbing the relative movements of each step.

⟨L⟩ **LAST**—View the current STEP overlayed on the previous step. To turn this feature off press ⟨L⟩ again.

⟨V⟩ **FULL SCREEN**—Switch status window off and on.

⟨ESC⟩ **TO EXIT**—Return to the function menu when you are finished recording the action.

The MOVE keys are also active during the recording process. When you first enter the RECORD ACTION mode you are already recording STEP #1. Anytime the move keys are used in this mode, the movement is being recorded for that step.

The simplest type of ACTION is a single snapshot moving across the screen (a car moving from left to right, for example). This can be accomplished with a single step action. To record this type of action, use the ⟨◄⟩ and ⟨►⟩ keys to select the desired snapshot, then use the move keys to add movement to the step. To preview how the action will look in a scene, press the ⟨━►⟩ key repeatedly. When you are finished, press ⟨ESC⟩ to return to the function menu.

More complicated actions require several steps using different snapshots in each step. The ⟨R⟩ key is used to add or insert additional steps to the action sequence. The move keys are used to define movement for each step. At any time, you can use the ⟨◄━⟩ and ⟨━►⟩ keys to flip back and forth through the steps to see how the action is progressing. The move keys can be used to "fine tune" the snapshot position from step to step.

Here is how to record a multi-step action sequence:

• Use the ⟨◄⟩ and ⟨►⟩ keys to select which snapshot will appear in STEP #1. Adding movement here is optional since you will probably have to adjust this step again after the last step is added.

- Press ⒭ to add another STEP.

- Use ⓒ and ⓒ to select the snapshot for this STEP.

- Use the move keys to position the snapshot so that it is lined up properly with the previous step in the sequence. Use the ⬅ and ➡ keys to flip back and forth between this STEP and the previous one to make sure the animation is smooth.

- Repeat this process for each new STEP.

- VERY IMPORTANT! When you have recorded the last step in the sequence, be sure to adjust the movement of STEP #1 so that the action is a smooth continuous loop.

Keep in mind that the snapshot movement for each step is recorded relative to the previous step. To help you get a snapshot aligned just right, press the ⓛ key to view the current step overlayed on the previous step. It is much easier to line up the snapshots when both are visible on the screen at the same time. Press ⓛ again to turn this feature off.

During the recording process, you may find that the action is near the edge of the screen making editing difficult. If you want to reposition the entire action sequence without disturbing the relative movement between steps, press the ⓟ (position) key. Now use the move keys to move the action where you want it on the screen. Press ⎋ to get back to the record mode.

> NOTE: If you synchronize a snapshot after recording actions, you will have to go back and edit any actions that use that snapshot. This is because SYNC affects the screen position of snapshots relative to each other. If you want to use the SYNC option, it is best to do so before recording any actions.
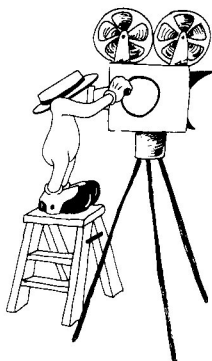
# The Scene Editor

The SCENE EDITOR is where you shoot scenes for a movie frame-by-frame. This is the "camera" of the animation system. Each frame is like one click of the camera shutter and may contain several different ELEMENTS consisting of ACTORS, TEXT, PAUSES, and special sound effects.

It is assumed that you have read the Let's Make a Scene chapter where some of the SCENE EDITOR features were covered. Now we will examine all of the options in detail.

To shoot a new scene, the typical steps are:

- Load a background for the scene.
- If you want text in the scene, load a character set.
- Load one or more actors for the scene.
- Shoot the scene.
- Save the scene.

Typical steps to edit an existing scene are:

- Load the background for the scene.
- Load the scene to be edited. The LOAD SCENE function will automatically load the actors and character set for the scene.

- Shoot the scene.

- Save the scene.

NOTE: Loading a background is optional when you shoot a scene. The elements that make up a scene file are saved independent of the background. When the scene is run in a movie, the scene and its background are loaded from separate files.

## Scene Editor Function Menu

You should already be familiar with the SCENE EDITOR function menu. Here is a summary of the available functions:

**LOAD PICTURE**—A hi-res picture may be used for background while shooting a scene.

**LOAD BACKGROUND**—This is the background for the scene.

**LOAD CHARACTER SET**—If you want text in the scene, you must load a character set. Only one character set can be used at a time.

**LOAD ACTOR**—One or more actor files can be loaded for a scene. If necessary, you may exit during the middle of shooting a scene to load another actor.

**SHOOT SCENE**—This is where you add, delete, insert, edit frames in a scene.

**SAVE SCENE**—Save the finished scene to your data disk.

**SAVE PICTURE**—Save a hi-res picture of an individual frame. This is the current frame showing when you exit SHOOT SCENE.

**CHANGE DISK DRIVE**—Select the drive used to load and save files.

**QUIT SCENE EDITOR**—Return to the TAKE 1 main menu.

## Shoot the Scene

When you select SHOOT SCENE, you will have the option to
change the FRAME RATE. The higher the frame rate, the faster
the frames will flip by when running the scene. To change the
frame rate, press (Y) (for yes) at the prompt. Then use the
arrow keys and (RETURN) to select a new frame rate. Normally
you will shoot the scene at 10 frames/second and then do a
preview run of the scene. If you decide that the scene should
be slower or faster, exit to the function menu and select
SHOOT SCENE again to get the frame rate option.

NOTE: The frame rate will be slowed down if you are
animating a very large portion of the screen at one
time. To get very fast frame rates, you will have to limit
the size and number of elements in a frame.

Selecting the frame rate will bring you to the SHOOT SCENE
command mode. The screen will look like this:



current frame

frame status
commands

This is where you choose to add, delete, insert, or edit frames.
The top line of the status window shows the current frame
number, the total number of frames in the scene, and the
amount of free memory. If the current frame contains a pause

element, a P will appear at the far right. If the frame has an
actor or text element that is planted to the background, a B will
appear there. The command keys for SHOOT SCENE are
displayed below the frame status. Here is a description of the
commands:

[A] **ADD**—This will add new frames to the end of the
scene. When you press [A], you will be in the FRAME
EDITOR where the individual frames are composed.

[I] **INSERT**—This is just like ADD except the new frames
are inserted at the current frame.

[E] **EDIT**—Modify existing frames using the FRAME
EDITOR starting at the current frame number.

[D] **DELETE**—Delete the current frame.

[←] **DEC**—Decrement or flip back one frame.

[→] **INC**—Increment or flip ahead one frame.

[F] **FRAME**—To get to a particular frame quickly, press the
[F] key and type in the desired frame number.

[R] **RUN**—This will do a preview of the scene starting at
the current frame and running to the end. You can
interrupt the run by pressing [ESC].

[V] **FULL SCREEN**—Press the [V] key to turn the status
window off or on.

[ESC] **TO EXIT**—Back to the SCENE EDITOR menu.

## The Frame Editor

Whenever you select the add, insert, delete, or edit options you
will go to the FRAME EDITOR. This is where the individual
frames are composed and edited. The three different types of
"elements" in a frame are ACTORS, TEXT, and PAUSES. You
have already seen how actors are used in a frame. TEXT is a
printed message in the frame using a character set loaded from
the disk. Text may be animated in a scene just like actors.
PAUSES are a way to temporarily stop the action so the viewer

can take a closer look at the frame. A special type of pause element is sound, several sound effects are available.

There are several command keys used in the FRAME EDITOR. When you are working on a frame, you can press ⃞? to get a help screen which lists all the commands. Some of them you already know from the tutorial, the others will be described in detail in this chapter. Here is a brief summary of the commands:

⃞ESC⃞  Return to the SHOOT SCENE command mode.

⃞RETURN⃞ Finished with current frame.

⃞SPACE⃞ Operate on the next element.

⃞<⃞  Operate on the last element.

⃞O⃞  **OVER**—Overlay the element in front of all the others.

⃞U⃞  **UNDO**—Undo changes made to the frame.

⃞D⃞  **DELETE**—Delete element from frame.

⃞B⃞  **BACKGROUND**—Plant element to the background.

⃞L⃞  **LAST**—View current element with last frame.

⃞N⃞  **NEXT**—View current element with next frame.

⃞T⃞  **TEXT**—Add text element to the frame.

⃞P⃞  **PAUSE**— Add pause element to the frame.

⃞V⃞  **FULL SCREEN**—Turn status window off and on.

Move keys position actors and text on the frame:

⃞W⃞ ⃞A⃞ ⃞S⃞ ⃞Z⃞  Move 2 pixels.

⃞I⃞ ⃞J⃞ ⃞K⃞ ⃞M⃞  Move 1 pixel.

⃞^W⃞ ⃞^A⃞ ⃞^S⃞ ⃞^Z⃞  Move 10 pixels.

These keys are used only for actors:

⃞C⃞  **CAST ACTOR**—Add new actor to the frame.

⃞Y⃞  **ACTION**—Select pre-recorded action.

☒ **WRAP**— Select screen wrap-around.

◁— **INC**—Decrease snapshot number.

—▷ **DEC**—Increase snapshot number.

## Actors In The Scene

Press the ☒ key to cast an actor into the current frame. You will be shown a scrolling menu of all the actor files that were loaded for the scene. Use the arrow keys and (RETURN) to select the name of the actor you want to cast. More than one actor may be cast in a frame, and the same actor may be cast more than once. Once an actor is cast, it will appear in all the frames that follow until it is deleted with the ☒ command. If there are any pre-recorded actions available for the actor, they can be selected using the ☒ action command. To turn off or change a pre-recorded action, press ☒ again. The status window for an actor looks like this:

```
   ADD FRAME #234   OF 345   MEM:5533
PRESS ? FOR HELP              [ESC] TO EXIT
X=100   SHOT=1    ACTOR:ASTRONAUT
Y=63    STEP=3    ACTION:FLY TO THE RIGHT
```

The bottom half of this window is information about the current actor in the frame. Let's take a look at each of the items in the actor status window and see what they mean:

**X**—The horizontal position of the actor.

**Y**—The vertical position of the actor.

**ACTOR**—The name of the actor.

**ACTION**—The name of the pre-recorded action currently in effect.

**SHOT**—The number of the snapshot on the screen. You can change the current snapshot using the ◁— and —▷ keys.

**STEP**—The step number for the action in effect. This is not necessarily the same as the SHOT number. If an action is in effect, the ⬅ and ➡ keys will change the SHOT NUMBER.

**WRAP**—This indicates that the current actor is in screen wrap-around mode. Normally an actor is in a non-wrap mode and can be moved right off the screen edge. In the WRAP mode, an actor that goes beyond one edge of the screen will reappear at the opposite edge. Use the ⒳ command to change the wrap status of an actor.

## Adding Text To The Scene

Text can be added to the scene if you have loaded a character set. Only one character set can be in memory at a time. A TEXT element in a frame is a single line of text that can be moved around and animated much like an actor. Here is how to add text to the frame:

- Press the ⓣ (for text) key. A small pointing hand will appear on the screen.

- Use the move keys to position the hand where you want the line of text to start and press ⌊RETURN⌋.

- A flashing text prompt will replace the pointing hand. Type the desired line of text directly from the keyboard. The ⬅ key will backspace to correct mistakes. Press ( RETURN ) when the line is complete.

- Release the caps-lock key on the Apple IIc and IIe to get lower case. On the II +, the ➡ key is used as a caps-lock. Press the ➡ once for lower case (a smaller cursor will indicate lower case). Press it again to return to upper case.

Once the text element is added to the frame it can be repositioned at any time with the move keys. If you move the text line beyond the edge of the screen, it will wrap-around to the opposite edge. The status window for the TEXT element looks like this:

```
    ADD FRAME #23   OF 23       MEM:6989
PRESS ? FOR HELP            [ESC] TO EXIT
X=2       TEXT Your message appears here
Y=73           and on the screen.
```

X and Y are the screen coordinates for the line of text. The right side of the window indicates that this is a TEXT element and shows what was typed.

Once a text element has been added to the scene, it can be used much like an actor element. The difference is that text does not have true sprite capability. It will appear distorted when it overlaps background objects of other frame elements. One solution is to keep the text elements on all black or all white areas of the background. If you want moving text with true sprite action, it should be cut from a hi-res screen using the ACTORS & ACTIONS program and saved as an actor.

## Pauses and Sound Effects

There are three different types of pause elements available. A frame can have only one pause element.

The first type of pause will stop the action at a given frame and wait until the viewer presses (RETURN) or one of the buttons on a joystick. This is useful for animated slide shows.

```
    ADD FRAME #1    OF 1       MEM:7921
PRESS ? FOR HELP            [ESC] TO EXIT

  PAUSE UNTIL [RETURN] OR BUTTON INPUT
```

The second type is a delay pause. It will stop the action at a given frame and wait for a selected time delay (or until the viewer presses (RETURN) or a joystick button).

```
 ADD FRAME #229  OF 229      MEM:6112
PRESS ? FOR HELP            [ESC] TO EXIT

\ PAUSE  20 TENTH SECONDS OR [RETURN]
```

The third type of pause is a sound effect at a given frame. The
reason that sounds are included with pause elements is that the
computer must take time out from the animation process to
generate the sound. The delay is just the amount of time it
takes to make the sound.

```
 EDIT FRAME #121  OF 227  MEM:4122
PRESS ? FOR HELP            [ESC] TO EXIT

\ PAUSE TO MAKE SOUND #3
```

To add a pause element to a frame, press the P key. You
select the type of pause from a scrolling menu using the arrow
keys and RETURN. If you select the delay pause you will be
asked to specify the duration of the delay in tenths of a second.
If you select a sound effect, you will have to select a number
from 0 to 9 to specify the sound you want. The available
sounds are:

> 0. click
> 1. pop
> 2. footstep
> 3. beep
> 4. double beep
> 5. crash
> 6. explosion
> 7. ray gun
> 8. slide up
> 9. slide down

## Keeping Track Of Frame Elements

The FRAME EDITOR commands operate on one frame element at a time. The actor or text element under control of the command keys is called the CURRENT ELEMENT. It is easy to spot the current element in a frame by the shimmering box around it. The bottom half of the status window will contain information about the current element like screen location, actor name, snapshot number, etc.

You can operate on a frame element, moving or changing it, as many times as you want. To switch control to a different element, press the ( SPACE ) bar. The shimmering box will move to the next element in the frame and the status window will change to reflect the status of that element. Each time you press the ( SPACE ) bar, control is passed on to the next element. The ⟨ (or comma) key will cycle through the elements in the reverse order.

It is possible for an actor to be cast in a scene but not appear on the screen. This would happen if you used the move keys to move the actor past the screen boundaries. In this case you probably would not see the shimmering box but the status window would tell you that the actor was still active in the frame.

## Who's Out Front

When there is more than one actor in a scene, the last actor cast will appear to be in front of the others. This overlay capability gives depth to the scene and allows you to create special visual effects. The text elements are included in the layering scheme also (but they don't have the true sprite capabilities of the actors). You can change which element is out front with the ( O ) (for overlay) command. When you press ( O ), the current element (in the shimmering box) will be displayed in front of the rest. This effect will only be noticed when the elements overlap each other.

## Last and Next Frame

It is sometimes useful to look ahead one frame or back one frame while editing so you can position an actor or text correctly. This is done with the LAST FRAME and NEXT FRAME commands. When you press ⓛ , the last frame will appear with the current element overlayed on top of it. This gives you a chance to position an actor in the current frame (using the move keys) by seeing where the actor was in the last frame. Likewise, the ⓝ command will display the next frame with the current actor overlayed on top. The message "LAST FRAME" or "NEXT FRAME" will appear in the status window when this command is in effect. To cancel this mode, press the ⓛ or ⓝ key again.

## "Planting" Actors And Text
## To The Background

Actors and text can be moved permanently to the background at any frame. Moving an element to the background is an advanced technique for changing the background "on the fly" and should be done only after you are quite comfortable with the scene editing process. You can change the background status of the current element with the Ⓑ (background) command. An element that is being planted to the background will show "BACK" in the status window. If you are in the ADD or INSERT mode, the element will no longer be active in the frames that follow.

When you do a preview run of a scene that has elements planted to the background, those elements will become part of the background in memory. To restore the background to its original condition, you will have to go to the function menu and either reload the background from disk or use the CLEAR BACKGROUND function.
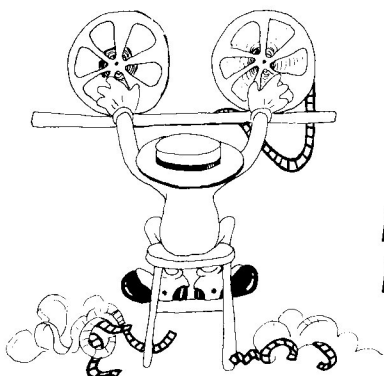
# Making A Movie

After you have created several scenes, they can be combined to run in sequence using the MOVIE EDITOR program. This program defines which scenes and backgrounds are in a movie, and what order they will be played. You can also select various types of fade-ins and fade-outs for each scene to give the final movie a professional look.

To make a movie, select MOVIE EDITOR from the TAKE 1 main program menu. The following screen will appear:

```
                  TAKE 1 MOVIE EDITOR
            ------------------------------------
                     FUNCTION MENU

         LOAD MOVIE
         NEW MOVIE
         EDIT MOVIE
         SAVE MOVIE

         REVIEW FADES

         CHANGE DISK DRIVE 1
         QUIT MOVIE EDITOR

         USE ARROW KEYS AND [RETURN] TO SELECT
```

The steps for making a new movie are:

- Place the data disk with scenes and backgrounds for the movie in the selected disk drive.

- Select NEW MOVIE to make the movie.

- Use SAVE MOVIE to store it to the disk.

The steps for editing an existing movie are:

- LOAD the existing movie.

- Select EDIT MOVIE to make changes.

- SAVE the movie back to the disk.

Here is a summary of the MOVIE EDITOR functions:

**LOAD MOVIE**—Load an existing movie from the disk for editing. This will replace the movie already in memory. If you have been working on another movie, make sure you save it before loading a new movie.

**NEW MOVIE** will erase the movie already in memory and display the movie editing screen ready to compose a new movie.

**EDIT MOVIE**—This will display the movie editing screen so you can edit an existing movie.

IMPORTANT: When you select EDIT MOVIE or NEW MOVIE, the program will go to the selected disk drive and find all of the scenes and backgrounds on that disk. These files will be your choices while editing. If you want to include a file that is on another disk, you will have to exit back to the MAKE MOVIE function menu, insert the disk with the desired scenes or backgrounds, and select EDIT MOVIE again.

**SAVE MOVIE**—Save the movie to the data disk.

**REVIEW FADES**—This will display a list of the available fade-in and fade-out options. Use the arrow keys to scroll the list and press (RETURN) to get a hi-res demonstration of the fade.

**CHANGE DISK DRIVE**—This will change the currently selected drive.

**QUIT MAKE MOVIE** Return to the TAKE 1 main menu. The TAKE 1 program diskette must be in disk drive 1.

## The Movie Editor

When you select NEW MOVIE or EDIT MOVIE, you will see the movie editing screen. The top part of the screen shows the actual scenes, backgrounds. and fades in the movie. The bottom of the screen has all of the commands used in this editor:



What you see here is a movie with 15 scenes. Only three of the scenes are displayed on the editing screen at a time. You can scroll through the list of scenes using the (←) and (→) keys. The current scene is the one in the middle with its scene number shown in inverse.

There are four items required for each scene in a movie:

**SCENE:** This is the name of the current scene.

**BACKGROUND:** is the name of the background that will be used for the scene. This can be a background from the disk or one of the following:
  BLACK  —An all black background.
  UNCHANGED  —Background from the last scene.

**FADE IN:** This is the fade-in that will begin the scene. If you select <NONE>, no fade-in will be used.

**FADE OUT:** This is the fade-out that will end the current scene. The screen will fade to black on the last frame of the scene. If you select <NONE>, the last frame will remain on the screen until the fade-in for the next scene.

These items are changed using the ADD, EDIT, or INSERT modes. In each case you will get a list of available choices at the bottom of the screen. Use the arrow keys and (RETURN) to select the choice you want.

When you are starting a new movie, you will be automatically placed in the ADD mode. SCENE #1 will be showing at the center of the screen and you will be prompted to select a scene name, background, fade-in, and fade-out.

Here is a summary of the movie editing commands, press the key shown to enter the desired mode:

(A)     **ADD**—Adds a scene to the end of the movie. You will be asked to make a choice for each item of the scene.

(I)     **INSERT**—This is just like add but the scene is added at the current scene number. When you INSERT a scene to the middle of the movie, the current scene and all of those that follow will move down.

(D)     **DELETE**—This will remove the current scene from the movie.

(E)     **EDIT**—This will let you make changes to the current scene. In the EDIT mode, the arrow keys and (RETURN) are used to choose which scene item you want to

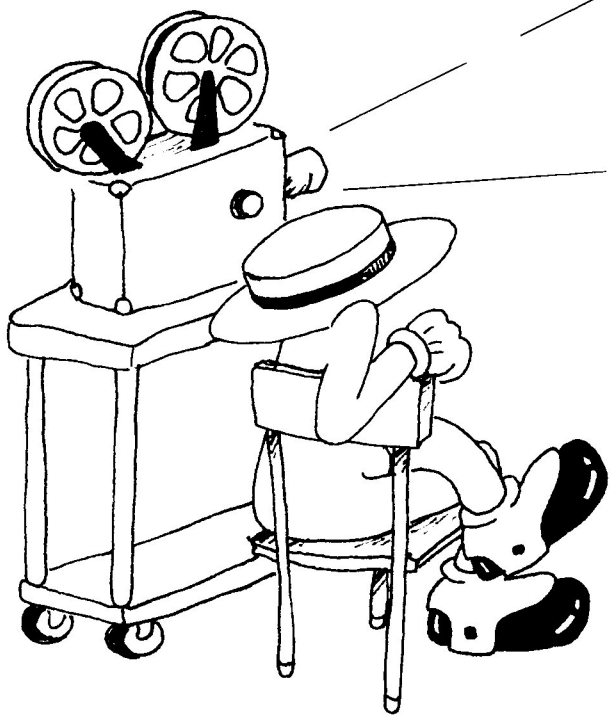change. When you are finished making changes, press (ESC) to get back to the command mode.

(←) **PREV SCENE**—Scroll up one scene.

(→) **NEXT SCENE**—Scroll down one scene.

(ESC) **TO EXIT**—Return to the MOVIE EDITOR function menu.

# The Projector

You've drawn the backgrounds, cast the actors, shot some
scenes, and edited the movie, now it's time to sit back and
enjoy the show. Select THE PROJECTOR from the main menu.
Place the disk with the MOVIE file in the drive and select
SINGLE PLAY or CONTINUOUS RERUN. A scrolling list of all
the movies on the disk will appear at the bottom of the screen
(you can have more than one movie on the disk). Make your
choice and press (RETURN) to play the movie. You can stop the
projector at any time by pressing the (ESC) key. Here is a
description of THE PROJECTOR functions:

**SINGLE PLAY**—Run the selected movie one time through.

**CONTINUOUS RERUN**—Run the movie over and over until the
(ESC) key is pressed.

**CHANGE DISK DRIVE**—If you have two drives, select this
option to change from one drive to the other.

**QUIT**—Return to the TAKE 1 main menu.

NOTE: All of the SCENE, ACTOR, BACKGROUND, and
CHARACTER SET files used in the MOVIE must be on
the disk for the movie to run. You can run a movie that
uses two data disks by placing the disk containing the
MOVIE file in drive 2 and the other data disk in drive 1.
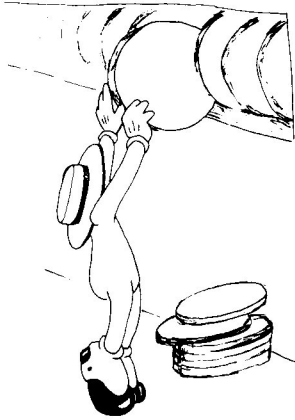
# TAKE 1
# Disk Utilities

TAKE 1 has different kinds of files for actors, backgrounds, scenes, etc. When you save a file to the disk, a prefix is automatically added to the filename you type. This is done so that TAKE 1 can identify the different types of files. The prefixes used are:

AC. Actor
BK. Background
CS. Character Set
MV. Movie
PI. Hi-res picture
SN. Scene
ST. Shape table

The DISK UTILITIES program will perform all disk operations necessary to make a movie with TAKE 1:

- FORMAT new data disks so you can save the actors, scenes, etc. It is a good idea to have several formatted disks handy before you start working.

- CONVERT hi-res pictures and shape tables from other programs so they will work in TAKE 1.

- COPY FILES from one data disk to another.

- Make a BACKUP copy of an entire data disk.

- Check the data disk to see if all the actors, scenes, and backgrounds are available to run a movie.

When you select DISK UTILITIES from the MAIN MENU the following screen will appear:
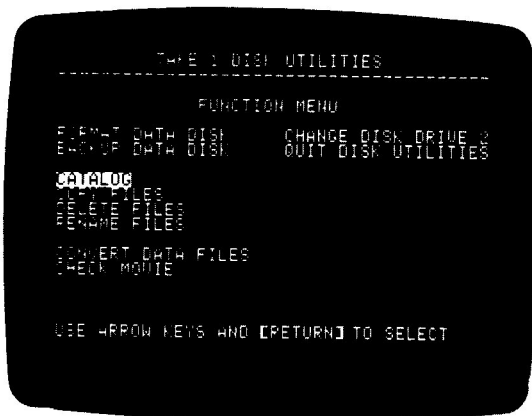


The ⟨⟵⟩ and ⟨⟶⟩ keys are used to scroll through the menu and the ⟨RETURN⟩ key will select the desired option. As with the other menus the ⟨ESC⟩ key will let you back out of an option.

**FORMAT DATA DISK**—Before any files can be saved to a disk, it must be formatted. This option will format a disk in the selected drive. You will be asked if you really want to format. Press the ⟨Y⟩ key for yes. The disk will spin for a few moments while formatting.

WARNING: Formatting a disk will destroy any files that were previously on it. Make sure you don't accidently format a valuable data disk or program disk!

**BACKUP DATA DISK**—This will copy an entire data disk onto another data disk. It is recommended that you make regular backups of your data disks.

**CATALOG**—Display a list of all the data files on the disk. Use the ⟨⟵⟩ and ⟨⟶⟩ keys to scroll through the list.

**COPY FILES**—is used to copy a file from one data disk to another. Use ⬅ and ➡ to scroll through the list of files and press [RETURN] to select the file you want to copy.

**DELETE FILES**—will delete an unwanted file from the data disk. Scroll through the list of files and press. [RETURN] to delete the file from the disk.

**RENAME FILE**—is used to change the name of a file. Use the arrow keys to scroll through the list and press [RETURN]. You will be prompted to type a new name for that file.

**CONVERT DATA FILES**—This will convert a hi-res picture or shape table from another program so that it will work with TAKE 1. The hi-res pictures must be standard 33 or 34 sector files. The shape tables are standard Applesoft shape table files not larger than 33 sectors. The convert function will append the correct prefix to the filename and limit the filename length to 20 characters.

**CHECK MOVIE**—To run a movie, all of the actors, scenes, and backgrounds for the movie must be on the same disk. Longer movies may also use files from a second disk. This option will examine a disk (or disks) to make sure all of the necessary files are there. If your movie requires two disks, place the movie disk in drive 2, and the other data disk in drive 1.

**CHANGE DISK DRIVE**—Select drive 1 or drive 2.

**QUIT DISK UTILITIES**—will return to the TAKE 1 main menu.

# Tips & Techniques

One of the most important guidelines in making animated movies is to keep things simple, especially at first. As you experiment and gain more experience, you will find little tricks that add character to the actors and scenes. Animated action is most effective when background features and other scene elements are minimized. Unnecessary details only draw the viewer's attention away from the important action. Screen resolution is another consideration, there are only so many pixels on the hi-res screen. Often the placement of a single dot can change the entire mood of a scene.

At first you should experiment and try anything that comes to mind. Once you become familiar with the TAKE 1 programs, you can attempt more serious animation projects. It is a good idea to prepare a script before you start a movie, make a plan of the actors, backgrounds, and scenes you will need. Try to organize the project into manageable pieces. Don't worry about getting everything perfect on the first pass, you can always go back and edit the fine details.

Above all else, have fun with TAKE 1. Even a serious business presentation will have more impact with a little animated humor.

## Memory Management

TAKE 1 is a very powerful and flexible animation system, but it does have some limits. The amount of free memory in the

computer and the available space on the disk are always important considerations. The number of frames allowed in a scene depends on how much free memory is left after you load the actors. Each active element in a frame requires additional memory. A scene with only one small actor might be up to 2000 frames long. If you use a number of large actor files in the scene, the free memory will be used up much faster.

The length of time a movie will run depends on the frame rate of each scene and how efficiently the disk space is used. Simple backgrounds use less disk space than complicated backgrounds. Making longer running movies requires ingenuity and careful planning. Here are some tips: (1) Try to design actors and actions that will work well in lots of situations. Use only the snapshots necessary to create the desired effect. (2) Use backgrounds over in different scenes. Backgrounds can be modified "on the fly" by planting actor or text elements to a frame. (3) Make sure the disk contains only files that are used in the movie.

## Multiple Actors In A Scene

The scene editor allows up to 11 actor files in one scene and 20 active elements in a single frame. The easiest method of handling multiple actors in a scene is to cast one actor and shoot the entire scene. Then use the EDIT mode to cast additional actors into the scene. This is much easier than trying to keep track of several animated objects at one time.

If you are running out of memory in a multiple actor scene, there are several options available. One is to go back to the ACTORS & ACTIONS program and thin out the actor files so they contain only the snapshots and actions essential to the scene. Another approach is to shoot the scene in several segments and splice them together in the MOVIE EDITOR. A good trick here is to shoot the first segment, save it to disk, then go back to SHOOT SCENE and delete all but the last frame. Now when you shoot the second segment, the first frame will be lined up perfectly with the previous segment. When you have finished shooting the second segment, delete the first frame so it doesn't appear twice when the scenes are

run together. Be sure you select <NONE> for the fade-in and fade-out between scenes.

## Tricks With Text

Only one character set can be used in a scene. If you want to use more than one font style in a scene, make up a hi-res picture of the different lines of text and cut them out as snapshots in an actor file. The font style used for the bulk of the text should be a character set.

When a text element is not going to be moved in a scene, you should plant it permanently to the background. Otherwise it will remain an active frame element and eat up free memory unnecessarily. Later in the scene, you can erase the text line by planting an identical line of text on top of it. Each time you plant a text element to the screen, it will reverse whatever was on the screen at that frame. A flashing effect can be created by planting the same line of text every few frames.

## Disappearing Acts

Suppose you want to shoot a scene where an actor disappears into some part of the background (a door for example). One very powerful technique is to create a BLOCK snapshot of that part of the background and use it as an actor in the scene. The "background" snapshot can be overlayed on the scene so that other actors will disappear behind it as they are moved to that spot. The "background" snapshot should be made just big enough to hide the actor that moves behind it.

Special effects can be created using the fades between scenes. Selecting <NONE> as the fade-out in the first scene will leave the background and actors on the screen. When you select one of the dissolves for the fade-in on the second scene, the result is quite dramatic. If the two scenes are identical except for one actor, only that actor will dissolve.

## Frame Rate

You should always use the slowest frame rate that still gives acceptable animation. This way you will get a longer running scene for the same amount of effort. You will find that the frame rate will slow down noticeably when a very large portion of the screen is animated at one time. This is because the computer can only process so much information at once. Careful casting and selction of frame rate will make the animation smooth and even.

# Glossary of Terms Used In TAKE 1

**ACTION**—A pre-recorded sequence of snapshots that define a movement for an actor.

**ACTOR**—A file of one or more snapshots that can be moved independently in a scene.

**ANIMATION**—The illusion of motion created by rapidly flipping through a sequence of individual images.

**BACKGROUND**—A high-resolution picture used as a setting for a scene. Background files are compressed to take up less room on the disk.

**BLOCK SNAPSHOT**—A rectangular image that has no transparent areas. A block snapshot will completely cover any object that it overlays in a frame.

**BOX**—See Shimmering Box.

**CAST**—Bring a new actor into a scene.

**CHARACTER SET**—Hi-res text font. Several different sizes and styles of text are available on the Baudville Shape Libraries.

**CURSOR**—A small flashing marker that indicates current screen location.

**CUTOUT**—An image that has been clipped out of a picture.

**ELEMENT**—The various items that make up a frame. Elements can be actors, text, pauses, and sounds.

**FADE-IN**—The special effect that starts a scene.

**FADE-OUT**—The special effect that ends a scene.

**FILE**—A block of data that is stored on the disk. The various items that make up a TAKE 1 movie are stored as separate files.

**FRAME**—A single picture from the series of images that make up ascene. A frame is just like a single image in a motion picture film.

**FRAME RATE**—The speed that the individual frames flip past when running a scene.

**MEMORY**—The area inside the computer where data is stored.

**MOVE KEYS**—A special set of keys that are used to move objects on the hi-res screen. See Chapter 3.

**MOVIE**—A series of scenes spliced together. A MOVIE file defines which scenes, backgrounds, and fades are in a movie and what order they will be played.

**OVERLAY**—An image that appears in front of another.

**PAUSE**—A delay in the action of a scene. Sounds are special types of pauses.

**PICTURE**—A regular full screen hi-res picture. PICTURE files are standard 33 or 34 sector disk files.

**PIXEL**—A single dot on the hi-res screen.

**PLANT**—Move an actor or text element permanently to the background in a scene.

**PREFIX**—The various types of disk files used in TAKE 1 have a prefix on the filename to identify whether it is an actor, background, etc. See Chapter 10.

**PROMPT**—When TAKE 1 is waiting for a user response, it will display some kind of message or flashing cursor as a prompt.

**RECORD**—Define the sequence of snapshots and moves that make up an action.

**SCENE**—A series of frames that use a single background.

**SHAPE TABLE**—The PICTURES & BACKGROUNDS program can use shapes from standard Applesoft shape tables.

**SHIMMERING BOX**—A flashing rectangle used to clip out snapshots from hi-res pictures. The shimmering box is also used to identify the current element when you are editing a frame.

**SHOT**—See snapshot.

**SNAPSHOT**—An image clipped out of a hi-res picture. It is just like an animator's transparent cel.

**SPRITE**—An object that can move on the screen with multi-layered action that is independent of the background and other screen elements. A sprite may have transparent holes that allow the background to show through.
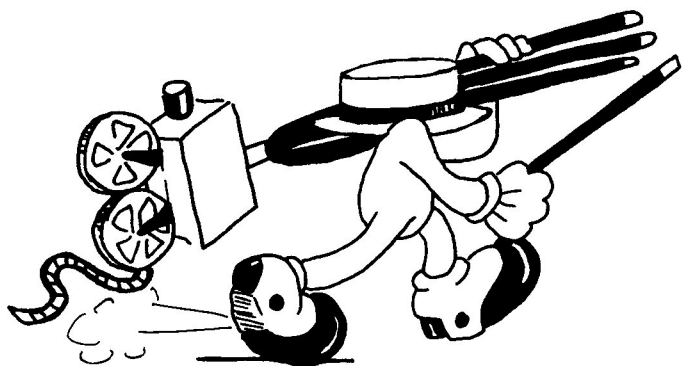
**STATUS WINDOW**—A text window at the bottom of the screen that contains current information about the screen and any commands that are available.

**STEP**—A pre-recorded action is made up of individual steps that define the snapshot and relative position to other steps in the sequence.

**TEXT ELEMENT**—A frame element that displays a line of hi-res text from a character set.

**UNDO**—Restore a frame or picture to its original condition after some change has been made.

**WRAP-AROUND**—Normally an actor can be moved off the edge of the screen. In the wrap-around mode, an actor that goes beyond the one edge of the screen will reappear the the opposite edge.