ecause video is an interlaced signal, you should avoid single pixel horizontal lines in your graphics and animations.   These produce flickering in a NTSC environment.   A flicker elimination filter will reduce the flickering, but a small degradation in image sharpness occurs.   Use horizontal lines that are 2, 4, 6, etc. pixels wide (i.e., avoid odd numbered line widths).

Be careful with gradient fills.   Video resolution is far below the quality of your computer picture and gradient fills may result in a stair step effect.   This can be avoided by applying a little noise to the image (for example, by using the noise filter in Photoshop).

Caution must be taken when choosing your colors.   As many engineers will tell you, NTSC also stands for 'Never The Same Color.'   The video signal strongly enhances colors, and they appear quite different on a TV than they do on your computer screen.   As a general rule, colors with saturation or brightness exceeding 75% should not be used. To avoid bleeding, stay away from fully saturated colors, especially reds, as much as possible.   Avoid two high contrast colors next to each other, bleeding may occur. Oasis from Time Arts is one of the only programs which allows you to paint with video legal colors. This program permits you to open existing files and make them video legal.   The NTSC legal filter from Photoshop (thank you John Knoll) can be accessed in many programs and will convert your files to NTSC legal colors.   Anti-aliasing helps a great deal; use a program like Smoothie or JAG to anti-alias your files.   RayDream, with our consulting help, added a check box in the 'Save As' dialogue for NTSC legal colors in JAG.   By checking this box, you can anti-alias a single file, a folder of files, or a PICS file, making them NTSC legal at the same time.

he best way to assure your graphics and animations are action, title, and color safe, is to constantly check them on an inexpensive TV (don't use an expensive monitor - other people will watch your graphics on regular TVs).   If you own a NuVista card, connect the composite output to a TV and regularly check your files on it.   You will instantly see the difference in colors.   A red on your computer screen may look dull and faded, but will appear bright and lively on the TV.   If your video card cannot output a composite video signal, invest in a cheap converter box.   This will allow you to see the image you are working on displayed on a connected TV at the

<u>same time.</u>