CHAPTER 16

Fly-Time: Sci-Fi Speed

COVERED IN THIS CHAPTER

- Painting reflections
- Using the Pen tool and applying vector masks
- Creating a multipurpose glare using Gaussian Blur
- Adding an Outer Glow effect with layer styles

Speed painting (creating a project as quickly as possible) can be a fun personal challenge or an essential skill when you're on a deadline. Either way it's a stellar exercise for bringing your work and craft to another level. Without the time to flesh out ideas, details, and small imperfections, you are forced to quickly decide major aesthetic directions and just go with the flow. Pacing has to be steady throughout, and it pushes the bounds of what's comfortable—which is always required for growing and challenging yourself as an artist.

As an exercise in speed-compositing, I created *Fly Time* by combining such disparate elements as software-generated images, photographs, painted elements, and even monitor reflections off of a shiny spoon into one scene in the style of a matte painting (**FIGURE 16.1**). Under a self-imposed deadline, I brought *Fly Time* to life with a speed to match the racing ships it depicts, proving you don't have to labor at perfection to communicate a simple narrative, interesting setting, and dynamic perspective.

FIGURE 16.1 Fly Time combines a software-generated landscape, photography, and digital speed-painting to create a world of sci-fi racers.



Step 1: Design an Alien World

Rather than building this composite on a photograph as in the other projects I've shown you, I created the rendered planet scene shown in FIGURE 16.2 using Terragen. A landscape design and rendering program from Planetside Software, Terragen enables you to design other-worldly settings ripe for any number of sci-fi scenarios; simply set a series of parameters, then wait for the software to finish rendering. Whether you use Terragen (www.planetside.co.uk), Bryce (DAZ, www.daz3d.com), Vue (E-on Software, www.e-onsoftware.com), or any of the other planet and landscape rendering tools available nowadays, the same rules apply as in photography. When creating a scene, set up your lighting for interest and dramatic potential, then watch your POV, lighting angles, color, depth, composition, and so on! They all make a huge difference in the end, so build the most out of your image by setting a solid foundation from the start.

Previsualize

The theme of *Fly Time* is speed and racing, and the landscape I created with Terragen provided unusual terrain and enough depth for a potential sci-fi racetrack. Those wild and enormous rock formations were perfect for a range of interpretations and possibilities. With the ability to alter the angle of the view before rendering, I knew the image had the goods to be something in the first person (the subjective). Based on this idea, I brought the image into Photoshop and sketched out some strange building ideas along with some rough sketches of the speed racer ships (**FIGURE 16.3**).



FIGURE 16.2 First things first, render a sci-fi scene that has some narrative room for editing.



FIGURE 16.3 Whether digitally or on paper, start with a sketch of how to use the scenery and give yourself some options.

Keeping in mind that I was also racing to finish the speed-project and not supposed to over-think any one part, I kept the sketched pieces very rough. I didn't wait longer than a second to simply commit to one direction or another. In speed-painting this process is equivalent to driving unfamiliar roads with no map; you may have to simply turn down a street that feels like the right direction before you can truly get your bearing.

In the end I went with the flower-like tower because it was strange and alien looking. The more other-worldly the look of something, the more you can push what's visually acceptable in many cases, which worked especially well for this project because speed painting is more about implying detail than meticulously constructing it. It also fit with the composition idea balancing out the bright spot from the sun with some contrast.

Step 2: Add Sky Detail

Because the rest of the scene more or less depended on the coloring and sky, I fleshed these out first. Always a sucker for clouds at sunset, I raided my archive of sunset photos and threw on a few layers to start with. In **FIGURES 16.4A**, **B**, and **C** you can see the progression of how I added three sunsets and masked out each one to build on the previous addition and fill in the gaps. In the Layers panel, I changed each sunset's blending mode to show some of the original sky (**FIGURE 16.5**). The bottom layer I changed to Lighten to let just the lighter parts of the sunset and clouds through, while for the other two

▶ FIGURES 16.4A, B, and C Here you can see the quick progression of the three cloud layers I added. I masked the bottom layer and changed its blending mode to Lighten (a), then added and masked two more using Overlay blending mode for color and lightening (b and c).



(A)



(B)



I used the Overlay blending mode to add their coloring and lighter elements to the background image. Again, it doesn't need to be pretty and perfect for speed-art (though sunsets can help), just workable. When picking out and matching up sky and sunset pictures for a scene such as this one, keep a few things in mind:

- **Clouds.** Should they be wispy, textured, under lit? The entire look of the scene changes with the clouds, so take a look at the possible images and find ones that could have a similar feel, lighting direction, coloring, and even density. If you're not seeing any cloud shadows on the ground, don't include rising thunderheads, for example.
- Angle and perspective. Much of what makes a cloud, or other element, workable is the angle at which you took the shot when compared to the image you are layering it onto, in this case the barren planet and sunset. The planetscape is viewed somewhat from above, for example, so if the clouds were shot looking straight up, the combination simply won't work. As with most aspects of a composite, match up the perspective as close as possible for best results.
- **Coloring.** Although you can control some coloring after the fact (more on this in step 9), finding images with the right palette is still important for blending purposes. If the skies are too dramatically different, you'll need more time to make the combination look right—and you may not have the time to spend.
- **Gaps.** Are there gaps in the clouds or coloring that need to be filled, bridged, minimized, or hidden? Find additional pieces that might work to bridge these gaps and still add to the look and feel in their own right. The progressing sunset pictures in Figure 16.4 are a perfect example of this as each new layer added to the gaps of the previous.



FIGURE 16.5 It's a good practice to change the blending modes of sunset layers to let the lights and color through; here you can see how each stacks up and the areas that I masked.

- Blending modes. Overlay, Screen, and Lighten all let a layer's lights and colors through in various ways (see Chapter 3), and are very important when trying on sunsets. Add your layer, then quickly cycle through the blending modes; I guarantee that Overlay, Screen, or Lighten will produce usable results for sunset, cloudy, or planetary skies. Figure 16.4, for example, uses a combination of Overlay and Lighten.
- Planets. A plant-studded sky is iconic of the sci-fi genre, so don't hesitate to add a planet rise to your sunset. Using Terragen I created a few planets, then added them to the scene with Screen blending mode. Screen lets light elements through with an even transition—the darker the pixels, the more transparent they become, and the lighter the elements (such as the planets' sunny sides) glow through. Vary your planet size and placements working with the rest of the clouds.

Step 3: Paint the Ship

For the ship, I began with an outline sketched on a single layer. Below this sketch, I added another layer on which I painted black using the standard soft and round brush (have you guessed it's my favorite?) until the shape of the side ship was more or less blocked out and dark (FIGURE 16.6). With the base shape of the ship roughed out, my plan was to first simulate the sunset reflections before adding in some lighting accessories and then finish it off with some glow for good effect. Working in this staging process helped me accomplish the final result of the side ship in under a half hour.

Reflections on the Ship

No self-respecting alien paints a spaceship flat black, and to have that sleek, metallic look the ship needs to reflect the colors around it. I used the Eyedropper (I) tool to pick the appropriate shade of sunset vibrancy. With my soft, round brush, I then painted on top of the black underpainting where I felt the reflections would be on a chrome-like surface, using the white sketch as a faint lowopacity reference for shape and form (FIGURE 16.7).

The best method for applying accurate reflections is to throw a tennis ball. Seriously, imagine if something bouncy, like a tennis ball, is thrown from your vantage point at the reflective object. In what direction would the ball bounce off it? The area where that bounce aims is where you should pick your reflection colors with the Eyedropper. This is essentially how reflections work: The tennis ball mimics the rays from the light source, and our eyes see the bounced light-rays off of the reflective surface. It's a game of angles, so bring a lot of mental tennis balls and fire away (**FIGURE 16.8**).



FIGURE 16.6 With your sketch on a separate layer, fill in pieces on a layer beneath it as an underpainting.



FIGURE 16.7 Use the Eyedropper tool to pick out some of the appropriate color being used for painting reflections.



THINK ABOUT HOW REFLECTIONS BOUNCE

FIGURE 16.8 Thinking about how light-rays (just like other objects) bounce off of surfaces is helpful for approximating the reflection direction from which you need to pull color and lighting using the Eyedropper tool.



FIGURE 16.9 Using the Smudge tool is a good way to push and pull the various painted pieces into a smeared, reflective chrome-like surface.



FIGURE 16.10 The Color panel is a good place to start for bringing in new color variety, such as blue lighting.

TIP Flip your image back and forth horizontally as you work. Whenever doing visually touchy painting like reflections, give your eyes a refresher by reversing what you are used to seeing (Image > Image Rotation > Flip Canvas Horizontally). Working on it from this new orientation will instantly show what's not looking so hot.

With the Smudge tool, I next pushed and pulled the painted streaks until they better matched the rounded body of the ship and the reflections it might throw the viewer's way (FIGURE 16.9). When working with the Smudge tool, use it nondestructively by creating a blank new layer above the content you want smudged, then check the Sample All Layers toggle in the options bar. This enables you to smudge what you are seeing, but places the smudged content onto the new layer. If you don't like your smudging, erase it! For best reflection results, it's a good idea to use high contrast and the most vibrant color when imitating chrome surfaces; all transitional shading basically gets squashed down to nothing creating high contrast streaks—this is what needs to be simulated.

TIP Like flipping the canvas, you can also rotate the canvas orientation using the Rotation tool (R) to get a fresh or easier angle for painting. This is very much like what you might do on physical paper, rotating the art in any direction that helps with the piece. Jump back to the default orientation by double-clicking the Rotate tool in the toolbar.

Running Lights

The theme of the project as a whole is one part speed, one part warm-andcool color scheme. On this very red and barren planet the only fashionable lights allowed on ships and buildings was, of course, cool blue. From the Color panel I chose a pale blue that was bright enough to be the center of a blue light source (**FIGURE 16.10**). I planned to add vibrancy through the use of a layer style effect.

On a new layer named Blue Glow, I painted in blue streaks using full opacity at 8px following the form of the ship's body (based on the sketch). Because

the ship was not detailed all that precisely, I heavily applied some tripped-out lights wherever there was a plausible spot to paint one. In dark spots like the rocket thruster cylinders, the light blue helped provide a better sense of the ship's form (FIGURE 16.11); this added credibility without much time or effort.

Glowing Propulsion

The rocket propulsion on the back end of the ship was quite a blast to make: I used the Outer Glow layer style to create a gradient that did the heavy lifting of painting. Basically, I set up an Outer Glow gradient (covered in Chapters 8 and 10) to simulate the transitional glow of flames from bright yellow to orange and then eventually dissipating to 0% opacity red (Figure 16.11). Taking out the opacity at the end while changing color is the critical part to making this glow successful; real flames change both color and opacity, even if it is not really noticeable.

To give myself a target for this effect, I made a new blank layer, placed it in my Side Ship folder, then painted a quick pale yellow smear using a spatter brush at 100px to roughly mimic the flames coming out the back of the ship. This quick spatter gave me a visual of the effect that I could add to and adjust. It didn't have to be in the correct place or shape at this point, just in the area to properly see the glow.

For the glow effect itself, I clicked the small FX icon *A* at the bottom of the Layers panel to open the Layer Styles window. There, I toggled on Outer Glow, then double-clicked the gradient to then edit the colors in the Gradient Editor (FIGURE 16.12). Once I got the gradient and glow looking okay on the spatter streak, I erased the streak and painted fiery blasts that followed the direction of the rocket's thrust (FIGURE 16.13). Because I was painting with a tablet I pressed firmly with the pen at the initiation of the blast, then released pressure by the end of the stroke away from the ship. Lighter pen pressure allowed more of the faint red and orange to come through compared to the pale yellow of the foreground color, so to control smooth shading transitions from red to yellow and back, I simply changed the firmness accordingly. This was very helpful for places where I wanted to extend the gradient effect. (If you don't have a tablet, you can roughly simulate this by using a lower Flow setting in the options bar and repetitive strokes.) I added a couple extra smaller streaks to the wing tip pieces for good effect, as well.



FIGURE 16.11 I painted in strips of lights for the darker areas to help flesh out the ship's form and draw the viewer's eye from focusing too heavily on the reflections.



FIGURE 16.12 Paint a pale yellow streak using a spatter brush, add the Outer Glow layer style, then alter the gradient for best fire glowing results.

	Layer Style	
Styles	Outer Glow	ОК
Blending Options: Default	Blend Mode: Screen \$	Canaal
Bevel & Emboss		Caricer
Contour		New Style
Texture	Noise:	V Preview
Stroke		Treview
Inner Shadow	Elements	
Inner Glow	Technique: Softer ‡	
Satin	Spread:	
Color Overlay		
Gradient Overlay	Size:	
Pattern Overlay	Quality	
Couter Glow	Contour: 🛛 🕴 🗌 Anti-aliased	
Drop Shadow	Range: 50 %	
	Jitter: 0%	
	Make Default Reset to Default	

$\Theta \Theta$		Gradient Ed	itor		
Presets				°	OK Cance Load
lame: Custom - Gradient Type Smoothness: 1	: Solid	÷			New
		\$			
A					
Stops					
Opacity:	• %	Location:	100	%	Delete
Color:	Y	Location:		%	Delete



FIGURE 16.13 Varying tablet pen pressure while painting the gradations of the Outer Glow is helpful for better controlling places of gentler transition.

Even with the bit of glow from the back, the inferno didn't feel especially bright so I brought in some larger and more general amounts of glow using the same Outer Glow layer style on another new layer above the fiery blast. On this new layer and its duplicated layer style I painted with a round-and-soft white brush set to a low 10% opacity and a 400px radius so that it would cover a larger area smoothly without leaving any noticeable brushstrokes. Painting over the areas of fire and general glow and glaring reflections helped sit the racer into the scene a bit more seamlessly, while simultaneously covering up a few rough spots (FIGURE 16.14).

As a final touch to the racer, I added a similar glow to the blue decorative panels. This time I used a blue gradient, and applied it to the Blue Glow layer, which contained the blue stripes. When applied, a layer style works across an entire layer, applying its gradient to the outside edges of all pixels it encounters (Figure 16.14).



FIGURE 16.14 The combination of a couple painted layers and an Outer Glow layer style created a nice glowing illumination that helped mask some speed-related crudeness in the details.





Step 4: Paint the Track Markers

The racetrack markers floating off into the distance help add both dimension and a clearer narrative. I started these with a basic vertical cylinder shape for the closest marker and painted in additional coloring and slight shading (FIGURE 16.15). I figured that if I rendered at least the closest, most visible marker in detail, then viewers would assume the others would look the same. In effect I cheated, using the expectations of viewers to save me time. Creatively obeying a sense of perspective and a vanishing point, I painted the additional markers closer and closer to each other while they receded into the distance, while at the same time shrinking their size.

With the basic shapes smeared into place, I then painted the highlights and shadows to give the main object just a hint of dimension before adding in more top and bottom colors. Next, I needed the right glow so the light sources felt like light beacons and not AA batteries bobbing **FIGURE 16.15** The closer track marker began with a roughly painted dark gray cylinder-like shape as a base, then the others soon became nothing more than quick scratches of color with some added light blooms.



FIGURE 16.16 Light blooms and glow are a staple of the sci-fi genre. While they conveniently cover up rough details, they also fulfill viewers' expectations.

about (FIGURE 16.16). It's harder to find the balance by starting heavy then taking parts away, so I began on the conservative side then built it up over the course of several passes until the glow vanished appropriately into the distance.



FIGURE 16.17 Start with a roughed out underpainting before bringing textures onto it.



FIGURE 16.18 Real photographs such as building windows can provide both detail filler and a little credibility to painted areas.

TIP You can copy a layer style effect (such as a particular glow you think works well) by Alt/Opt-dragging the style icon of one layer onto another within the Layers panel. This will copy the first layer's styles to the second and save you the time of manually resetting all the styling particulars. Even if you want a slightly different glow, it's at times easier to start with one, then tweak it to the right look you are going for, rather than starting it from scratch.

Step 5: Apply Texture with a Vector Mask

Photographs can lend their credibility to roughly sketched or computergenerated images, helping to fill in details that you might not have time to get perfect. The structure on the right side of *Fly Time* is a good example of this. As for the racing ship, I first created a black underpainting to block out the area's general shape. Next, I fleshed out the structure's color and shading (**FIGURE 16.17**) to resemble a very smooth plant-like creature. To solidify the structure's look, I applied the Montreal cityscape from Chapter 9's *Nature Rules* as a texture. Specifically, I copied a selection of windows from one of the buildings (Ctrl/Cmd+C), and pasted them into the *Fly Time* composite (Ctrl/Cmd+V) as a layer. I positioned the windows directly over one of the horn-shaped towers, then changed the new layer's blending mode to Overlay (**FIGURE 16.18**). To keep further transformations nondestructive, I converted the layer to a Smart Object.

The next step was to apply some heavy warping to make the layer feel more curved than the original flat wall. With the Move tool still selected, I clicked an edge of the layer then right-clicked. From the resulting context menu, I chose Warp. Using the Warp grid's control points (also accessible up in the option bar a once transforming has been initiated), I pushed and pulled to alter the texture's form to better fit one arm of the alien structure (FIGURE 16.19). The main element that I needed to create was the 3D curve from the window texture, and I mostly ignored the outside shape it was making beyond the drawn building. As I replicated this technique repeatedly, many of the building textures went beyond the building shape, which was just fine in this case because I was planning on using a sharp vector mask on the group to clean up any stray.

pieces. This is one of those techniques that can greatly help with efficiency and not bog you down in getting each piece just right individually. The vector mask for the group would contain the textures and hide all the excess pieces.

Creating a Vector Mask

Unlike a standard pixel-based mask, a vector mask uses a path of infinitely scalable vector points and smooth Bézier curved lines to outline the area you need to mask. Vector masks provide a mathematical precision you can only dream of creating by hand, plus they are nondestructive as you can reposition the vector points with ease at any time. When you need to create perfectly rounded and symmetrical building shapes, as for texturing the *Fly Time* structure, using vector masks ensures nondestructive precision.

Although you can apply a vector mask to a single layer at the bottom of your stack and then clip other layers to it, I decided to place the vector mask on the Building group folder. This allowed me greater flexibility as it freed up all the building-related layers inside the group folder to be clipped to each other if needed.

NOTE The Pen tool uses vectors rather than rasterized lines. This means that you can move the vector points, and the lines connecting them are always mathematically sharp, regardless of how they are scaled together and moved around. Using the Pen tool for vector lines can take the trial work out of getting perfectly smooth lines (such as toiling with the Brush tool for a similar effect).

To create a vector mask (and the smooth edges to the building), you use the Pen tool (P) to generate the necessary points and path, then Photoshop will turn them into a vector mask. With the Building group folder active, I clicked with the Pen tool along the building edges to make vector-based anchor points. For areas where I wanted a smooth curve (such as those rounded hornlike parts), I clicked a point then held while dragging the cursor a short ways in the direction I wanted the path to extend and follow. When you drag rather than click, Photoshop gives the point two opposing Bézier curve handles, one of which stretches in the direction that you are dragging. This control point



FIGURE 16.19 The Warp feature helps you bend flat surfaces into more rounded shapes.

is then called a *smooth point* (compared to a sharply pointed corner that you get from a quick click without dragging, like a ball bouncing off the ground).

The Bézier curve handles mathematically control the curve direction and pull of the smoothed line. Each anchor point has two handles, one for each direction that the path travels through it. So not only can you move the anchor points, but you can control the curve and direction they pull in by adjusting the handles. Moving one handle away and above an anchor point, for instance, causes the path to veer proportionally in that direction like putting greater force behind throwing that wicked curve ball. Pointing and dragging the other handle down and outward similarly causes the line to travel downward before bending to the next anchor point. In the case of the building, I used a series of gently pulled handles (not overly stretched handles) to guide the path in a smooth curve before reaching a point of sharp angle change (FIGURE 16.20). For these anchor points I simply clicked without dragging; wherever I place my next anchor point is the sudden direction the path takes after the single click.

To complete the path and close the vector shape, click back on the point where you began, similar to closing the Magic Lasso tool selection. If you need to adjust the path's shape after closing it, you can now move the anchor points with the Direct Selection tool (A). And finally, to turn this path into a vector mask, right-click a portion of the path and choose Create Vector Mask from the context menu. Everything inside the path (and within the group folder, in my case) is now masked and controlled with vector-based anchor points. Using the Direct Selection tool, I positioned the mask shape into place (FIGURE 16.21) to produce the final result in FIGURE 16.22.



FIGURE 16.20 Using the Bézier curve handles to control the pull and direction allows for precise control of the line.



FIGURE 16.21 Use the Direct Selection tool to grab and move vector points and adjust the Bézier curve handles.



FIGURE 16.22 Here you can see the crisp lines created by the completed vector mask for the building's curves.



FIGURE 16.23 Just like the blue glowing streaks from the side ship, these added that final touch to the building.

TIP Create additional vector points to an existing mask path by picking up the Pen tool once again and clicking along the path line. You will notice that hovering over the line will add a small plus sign to the cursor indicating that another vector point will be created once clicked. Each new vector point can be altered just like the others.

Final Flare for the Building

After adding in the remaining texture pieces within this vector mask, I brought in one last bit of flare to the building—blue lights! I applied some quick streaks of blue with a soft and small brush, then copied the Outer Glow layer style from the ship's blue brilliance (**FIGURE 16.23**).

Step 6: Warp to Match Spoon Reflections

When you don't have reference pictures of real places and objects, sometimes you need to fabricate them with whatever means possible. For the racer ship in the foreground, I started with a spoon. I held a shiny spoon near my computer monitor while it displayed a full-screen image of the *Fly Time*. The spoon's curve approximated a racer ship's nose and reflected the on-screen image like a ship would reflect its environment. With my point-andshoot camera, I photographed the spoon as a reference, then added the image to the composite to give myself a basic idea of where to work in some reflections (**FIGURE 16.24**).

Copy and Warp

Although the spoon worked as a reference, it wasn't quite convincing as a chromed nose of a ship. After studying the existing composite, I realized everything I needed for the reflection was already there. All I had to do was copy the upper half of the background image and flip it vertically. Temporarily turning off the Building folder's visibility first (by clicking its Visibility icon), I made a quick selection of everything remaining using the Marquee tool (M). Next, I copied and merged it in one swoop (Ctrl+Shift+C), then pasted it back on the scene and inside a new folder called Racer Bottom. The next stage took advantage of the Move tool's (V) transform features by clicking on one of the edges, then right-clicking to bring up the transform context menu again. From there, I chose Flip Vertical, which made a mirrored reflection of the top half of the scene (FIGURE 16.25).



FIGURE 16.24 Taking a picture of a spoon similar to the shape of a racer ship gave me a starting point for creating needed reflections.



FIGURE 16.25 Flip a copied top part of the scene to get the base material for a reflection.

To mask some of the inaccuracies of the synthesized reflection, I first applied a Gaussian Blur to the entire layer (with a radius of 26px). I then converted the layer into a Smart Object so my warping would be nondestructive and I could try again if it started looking too much like shiny garbage. With the nice and fuzzy reflection, I clicked an edge using the Move tool (V), right-clicked once again, and selected Warp from the context menu. Some bending and finagling positioned the pieces into place to provide the rounded shape of the racer's nose (**FIGURE 16.26**).

NOTE I know it seems counter intuitive to apply the Gaussian Blur filter before converting the layer into a Smart Object. Because any warping you do always gets applied before a Smart Object applies the Smart Filter, converting to a Smart Object first would cause the blur to be too flat rather than looking like an almost shiny rounded surface. In short, you want the blur to get warped along with the reflection, not afterwards.

I duplicated the process to create a lip-like layer to the ship, again using the vector mask feature for sharp edges. As a final step in the outside body of the ship, I applied a Curves adjustment layer clipped to the entire Racer Bottom group folder to darken everything.

Gadgetry and Glowing Goodies

Cockpits need gadgetry, so I added in some small glowing pieces inside a black panel so that they would stand out with good contrast while simultaneously hide details that were purely nonexistent (FIGURE 16.27). Again, I used vector masking and outer glow, and again left the details up to the viewer's imagination. With the bottom ship done, I again turned on the Building folder's visibility before moving on.



FIGURE 16.26 Use the Warp tool to bend all the pieces into a nose-like shape.



FIGURE 16.27 Just a couple gadgets over a black cockpit suggested controls while letting the viewer's imagination fill in the details.

Step 7: Add Extra Atmosphere and Glare

The *Fly Time* project is less about precision detail and more an example of conveying mood and setting with a touch of narrative. In one last push for atmosphere, I used a neat recipe I call a multipurpose glare. This is a global edit (as it affects everything in the scene) and works only when all the visual elements are glued in place (because it requires a copy of everything into one flattened layer). You can see from **FIGURE 16.28** that I blurred the entire scene, using a Curves adjustment layer for control (such as making just the highlights brighter), then lowered the overall opacity until it provides a nice glow and softening around all the lighter elements within the scene. Did I mention this technique is totally controllable? Between the Curves and the blur layer opacity, you have full flexibility for any number of looks and styles. The specific recipe I used is in the "Multipurpose Glare" sidebar.

FIGURE 16.28 For a fully adjustable global glare effect, blur a full copy of the scene, clip a Curves layer adjustment to it, and change the blur layer's opacity to below 30%.





MULTI-PURPOSE GLARE

Rather than taking extra time in manually painting in glare with a brush at low opacity trying to get a uniform look and feel, here's an alternative method of creating controlled glare that's helpful for all kinds of final effects, from portraiture to landscapes (and ships racing on foreign planets, of course):

- Make a flattened copy of everything you have so far (be sure you're done editing everything except the final effects as the pieces of the composite can no longer be moved around when flattened into a new layer). The slick shortcut sequence for this is Crtl/ Cmd+A for select all, Ctrl/Cmd+Shift+C for copy and merge, then the usual Ctrl/Cmd+V to paste it in place (make sure it's the top visible layer).
- Convert the new layer to a Smart Object so you can apply Smart Filters to it. Right-click the layer's title in the Layers panel and select Convert to Smart Object from the context menu. (Alternatively, choose Filter > Convert for Smart Filters.)
- 3. Apply a Gaussian Blur, and set the blur's Radius to the width of the glare you want (this completely depends on your image size, but try starting with 20px and see what that gets you). Remember, whatever your blur setting, you can always come back and re-adjust as it's being applied to a Smart Object.

- 4. Create a Curves adjustment layer and clip it to the blurred layer. Either click the clip icon clip in the Adjustment Properties panel or Alt/Opt-click between the adjustment layer (placed above) and the blur layer (below). Boost the lights with a control point and anchor the darks with another control point. This will produce a brightening and higher contrast look, which is good for a glow effect.
- 5. Change the blurry layer's opacity to something under 30%. This will instantly create a bit of a fuzzy glow around everything, dramatically softening the image with glare, yet keeping the sharpness of edges at the same time. The trick is to have a blur large enough that it doesn't actually make the image look blurry, yet small enough that the glare lights and darks are isolated to the areas of the lights and darks they were blurred from.

As this entire effect is nondestructive and customizable, keep playing with the blur radius and Curves brightening for the right balance. By the way, don't forget that this blur layer can be used with mask, isolating the blur to just the right spots!

Step 8: Control Color and Finishing Touches

Color is always a fun balancing act at the end of projects, and in this case it was like running on a balancing beam after being spun in dizzying tight circles—not leaving much time to get one's orientation before moving ahead! On the technical side, color in this project was controlled very similarly to Chapters 8 and 10. I added separate black new layers for controlling the color with a blending mode.

FIGURE 16.29 shows the effects of adding a couple color layers (controlling warm and cool) and some adjustment layers to finish off the project. First I added a cool layer with its blending mode set to Hue (where the saturation



FIGURE 16.29 Final adjust-

level of the current composite colors are applied to the new color being painted on the layer) and painted the sky to make it feel more contrasting to balance out the blue in the lower-right corner coming from the building. Levels and Curves adjustment layers made moody shifts to the lights and darks increasing the contrast (with levels) and showcasing the glare even more so (using curves). To warm it all back up and increase the overall continuity, I threw on two last layers, a Black & White adjustment layer set to 23% to desaturate the entire scene, then finally my signature warm color layer set to Overlay blending mode at 21%. And with that, I was done—in just under three hours!

Conclusion

Whether it is for a client with a tight deadline or a personal timed challenge like mine, working quickly and with mixed imagery sources provides a lot of added benefits to learn from as an artist. It forces you to react emotionally and not over-think things. When you *are* thinking, it's more of a creative problem solving kind of process—figuring out reflections, glare, shortcuts to work quicker, smarter, visual cheats—and focusing on mood more than detail. In all of these cases you may not get it completely right, but that's the beauty of speed art, you have plenty of time left over to try something else out or go a different direction the next time. You can always spend days and days on a given project, but how do you know if you *should* be spending all that time? Speed-paint it first! If it's a solid visual idea you can always flesh it out in fully rendered detail as seen in Chapter 15 of this book.

MASTER VOICES



CHRISTIAN HECKER

www.tigaer-design.com

A resident of Nuremberg, Germany, Christian Hecker combines his Photoshop skills with 3D landscape rendering software to explore his love for interesting landscapes. Concentrating on sci-fi and fantasy scenes as well as digital matte-painting techniques, he creates concept art for small game studios, DVDs, CD covers, and more. Christian has been featured in Advanced Photoshop, Imagine FX, and 3D Artist, as well as Exposé and the D'artiste Matte Painting series. His clients include Galileo Press, Hachette Book, Group/Orbit Books, Panini, and Imagine Publishing.

How do you decide your point of view and perspective for a composite?

I create my pictures with help of Vue. It's a great tool for environment and landscape creation and especially helpful for digital matte painting. Because you're working in 3D in Vue, you have a lot of freedom in choosing perspectives and angles for your camera. You can plan very precisely how to approach your idea—always keeping the general rules, like the golden ratio or the rule of thirds, for picture composition in mind.



ARCADY'S EPIPHANY, 2013



ANCIENT MEMORIES, 2012



Com-cept 10, 2008

How do you first come up with a concept, and where do you go from there?

Generally it's the famous creative spark that gives me the ideas, at least when it's a personal project. A commissioned work is different, because normally the client has a certain image in mind and gives you some clues what direction to go. Either way I usually go into my 3D software, play around, and throw some things together to come up with a concept. That concept usually consists of some basic 3D models with a nice lighting and atmosphere. I then use Photoshop to quickly refine, overpaint, and enhance the concept. If that concept works out right, I go back into the 3D software and detail the scene out. After a big render, I move into Photoshop to do a lot detail work where a lot of things can still change.

How do you incorporate other applications into your workflow? What are some of the other programs you work with in collaboration with Photoshop?

As mentioned before, I'm heavily using 3D to get my pictures done. In all honesty I do that to compensate my lack of painting skills. The 3D gives me a fantastic plate to work from. Because the 3D software I use offers a multipass rendering option, it can render the image as an individually layered PSD file, so I can refine highlights or shadows, for example. It also contains masks of pretty much every single object in the 3D scene, so I can easily add or remove elements from a scene via Photoshop. The whole mood of a picture can still change when I'm in the Photoshop stage of creating a picture. That's the freedom and flexibility I love.

What's your total favorite go-to tool in Photoshop? Adjustment layers.

How can you tell when something is just not looking right? Do you move on or keep working at it?

It's a gut feeling to be honest. Usually when I'm stuck I tend to ask friends or fellow artists for opinions. Often enough that helps to get some pointers on where to go. Sometimes it's a simple taste thing, especially when doing commissioned work. Your taste may completely collide with what the client has in mind. That's when it can get difficult. Sometimes it's good to just leave the project for a while. Especially when it's a personal one. Lay it aside and try not to think about it for a couple of days. Then come back and have a fresh look at it. That helped me a couple of times as well.

How do you help tell a story with an image?

The hope I have for all my works is that they tell some sort of story. It starts with the creative spark, and out of nowhere a door opens to a world in your mind. Then you start to flesh out this world by adding detail. That's when you begin to explore that world yourself and try to find things that make it look really cool and special. Hopefully in the end you created a window to a world no one has ever seen before—something that inspires and encourages others to maybe be creative or interpret the picture for themselves.

Do you have any final professional advice for others pursuing this field?

Be patient, especially if you are learning by yourself in an autodidactic way. By no means expect mind-blowing results on day one. If you already have some experience, don't hesitate to try new things and push yourself. Ask for opinions from friends and family, and listen to what they say. Also, have a look at the work of already established artists to find inspiration and motivation.



FROM HERE I CAN ALMOST SEE THE STARS, 2012



ROOM WITH A VIEW, 2013