successful or not. If the sprite's rating is greater than the technomancer's Resonance, the damage is Physical rather than Stun.

Netcat threaded a complex form, scoring 4 hits and raising it from 4 to 8. Netcat's Resonance is 5, so she's facing Fading equal to 4P. She rolls her Willpower 4 + Resonance 5 (9 dice) and gets 3 hits, so she takes 2 boxes of Physical damage.

SUBMERSION

Submersion strengthens the link between the technomancer and the Matrix Resonance. Similar to an Awakened character's initiation, submersion is a very personalized and ego-wrenching experience, a process of growth and awareness, a chance for the technomancer to better attune himself to the machine world. Submersion grants the technomancer greater abilities known as echoes, grants access to the mysterious Resonance realms hidden within the Matrix, and allows him to raise his Resonance attribute beyond his natural maximum of 6.

Submersion is measured in grades, beginning with Grade 1 and increasing. Submersion has a Karma cost equal to 10 + (Grade x 3). A technomancer's grade cannot exceed his Resonance attribute.

Increased Resonance

A technomancer's natural maximum for the Resonance attribute is 6 + his grade of initiation. He will still have to pay normally to increase his Resonance attribute.

Access to the Resonance Realms

Upon the technomancer's first submersion, he finds his way to the secret resonance realms tucked away in the folds and corners of the Matrix. Steeped in rumor and speculation, these realms are known only to submersed technomancers—and perhaps sprites and other creatures of computer consciousness. Though they are accessed by secret pathways within the Matrix, in truth no one is sure exactly where these realms lie.

Echoes

A technomancer can choose one of the following echoes at each grade of submersion (including the first). Unless otherwise noted, no power may be chosen more than once.

- Firewall Upgrade: The Firewall rating of the technomancer's living persona increases by 1. This echo may be taken more than once (at different grades), up to 3 times.
- **NeuroFilter:** The Biofeedback Filter rating of the technomancer's living persona increases by 1. This echo may be taken more than once (at different grades), up to 3 times.
- Overclocking: The technomancer accelerates his living persona's system clock, allowing him to act more quickly within the Matrix. This grants the technomancer + 1 to his Response (also increasing his Matrix Initiative), and grants him an additional Initiative Pass while operating in full-sim VR.
- Resonance Link: This echo establishes a low-level, one-way
 empathic link with another technomancer of the character's
 choice. As long as both characters are meshed, the techno-

mancer can discern the dominant mood and emotions of the linked companion. He knows whenever the linked companion is under attack or duress, feeling pain, or otherwise endangered online. The resonance link works in only one direction (the linked companion does not receive empathic signals), but two technomancers may both take the echo with each other in mind to create a "two-way" link.

• **System Upgrade:** The System rating of the technomancer's living persona increases by 1. This echo may be taken more than once (at different grades), up to 3 times.

RIGGING AND DRONES

Hackers (and technomancers) who focus on rigging drones and vehicles tend to favor different gear and programs than regular system hackers. Riggers don't usually focus on tweaking their commlink to be a hacking machine par excellence, though a high Firewall is essential for keeping hostile hackers out and preventing other riggers from hijacking their drones. Riggers also don't usually spend the time or money to buy up or program their own top-notch hacking utilities, preferring instead to focus on a good Signal strength, good Scan, Command, Encrypt, and Sniffer programs, and of course, plenty of drones with amped Pilot, Response, and Firewall attributes of their own. Finally, riggers tend to focus less on Hacking and Software skills, relying heavily on Electronic Warfare and Hardware instead.

DRONES

Nearly any kind of vehicle—matchbox-sized cars, dwarf-sized rotorcraft, ground patrol vehicles the size of a large dog, even modified sports cars—may serve as drones. The key difference that sets drones apart from ordinary vehicles is the rigger adaptation that provides drones with a Pilot program, which enables the drone to act independently of its controller to a limited degree.

All drones that are incapable of carrying passengers are usually automatically pre-adapted for rigger control. Passenger vehicles or larger passenger drones are not usually pre-adapted, but can be adapted quickly by the manufacturer, a mechanic, or even a rigger character (see *Rigger Adaptation*, p. 341).

Controlling Drones

To manipulate a drone, you must first have accessed it and linked to it as a subscriber (see p. 212). Actively subscribed drones count toward your persona's subscription limits. See *Issuing Commands*, p. 221, for details on instructing drones.

Drones acting on their own use their own Pilot and autosoft (see p. 239) ratings for all necessary tests, and act on their own Initiative (see p. 239).

A rigger can choose to have multiple drones subscribed as a single device. This allows the rigger to have more devices actively subscribed, but is limiting since all the drones must receive the same orders. Alternately, a rigger can choose to issue orders to a drone and then unsubscribe it and trust its dogbrain to carry out the orders.

If instructed to, drones can subscribe to each other and share data, allowing them to coordinate attacks and other actions.

