

# Virtual reality conquers flying fears

## Therapy conditions subjects to deal with experience of being in a plane

By Anna Repici

One of the best therapies to challenge the fear of flying is offered by the Center for Advanced Multimedia Psychotherapy which provides a "virtual reality" exposure treatment.

The center is attached to the California School of Professional Psychology in the University City area.

The center's director is Brenda Wiederhold. She is a Ph.D. candidate in Clinical Health Psychology

at California School of Professional Psychology in San Diego. She is nationally certified in biofeedback and neurofeedback by the Biofeedback Certification Institute of America, and serves on the editorial board of *CyberPsychology and Behavior Journal*.

At the center she uses integrated models of therapy to treat patients with anxiety disorders, stress-related disorders and psychophysiological disorders.

She is an accredited

expert on the application of virtual reality to treat phobias and other conditions. In her recent article, "A review of virtual reality as a psychotherapeutic tool," her husband, Mark D. Wiederhold, and she discuss the use of virtual reality techniques for medical applications, from simple phobias to potential applications, clinical outcomes and cost effectiveness.

The treatment consists of placing the client in a three-dimensional computer air-

flight simulation. The clients have a "virtual experience" of flying, things like sitting on an aircraft with engines off or on, taxiing on a runway, landing, take-off, flight in good weather or during turbulence and a thunderstorm.

The patient is conditioned in controlled stages, which elicit higher levels of anxiety and depression. Breath, brain and heartbeat are constantly set under a strict control, and, as Wiederhold noted: "All the equipment is secure, it doesn't involve any risk or danger to the client's health."

She added that "Nobody can be harmed or injured by the head-mounted display helmet."

Virtual reality exposure therapy provides a series of advantages that traditional treatments elude: first, it costs considerably less than vivo exposure (the use of real aircraft); secondly, it gives you a total control of the "flight" experience; finally, the repetition of the segments of flight enables the patient to gradually reduce fear and anxiety.

The virtual reality environment gives the patient complete confidentiality. For those people who are resistant to traditional exposure treatment, or are allergic to desensitization, the



Brenda Wiederhold situates a virtual reality headset onto a subject to guide them through computer-simulated flight. Photo/Don Balch

virtual reality exposure therapy is a precious advantage.

The process lasts eight to 12 sessions for a period covering four to six weeks. The process is individual and needs at least five sessions to be successful. The first session lasts about 1 1/2 hours, while successive sessions take only 45 to 50 minutes.

The center has six therapists who adopt "copying skills." They observe and listen to the client's "virtual" reactions to the visual, auditory and vibration simulation.

The price for the one session is \$120. But, clients can get the chance to use their insurance coverage.

The center is secure and big enough, but Wiederhold has the intention of extending it and introducing new

programs for the fear of driving and the fear of height.

The therapy is useful as a treatment for post-traumatic stress disorders.

Everybody with flying phobia may find a cure by taking advantage of virtual environments which are far less threatening than the real world.

As Wiederhold said, "This technique has a beneficial effect for patients because they learn how to overcome their fears and how to prevent panic attacks."

Virtual reality therapy is an innovative application, and as Wiederhold has noted: "Virtual-reality techniques will provide many novel avenues for the evaluation and treatment of psychological conditions." ■



*Ocean, Bay & City Views*

OPEN SUNDAY 1 TO 4  
1611 CALLE de ANDLUCA

Over 2600 sq. ft. on one level with 3 bedrooms, den, separate family room, inside laundry, 3 car garage.

