The Oz...International Virtual Reality Capabilities

CORPORATE OBJECTIVE: Oz...International, Ltd. (Oz) intends to provide realistic interactive 3D experiences at consumer prices.

PEOPLE: The Oz technical team has an established, world-class performance record. We fielded the first publicly accessible immersive VR demonstration system (6/89) and have completed successful VR projects in education, aerospace, science, medicine, exercise, ecology, and entertainment. We have long-term experience advising start-up companies, corporations and government agencies, including Boeing, DEC, Autodesk, the US Navy, the National Science Foundation and the National Academy of Sciences. The team has invented and defined many of the VR techniques used today for operating systems, for interactive programs, and for the generation of virtual experiences. The four team members have over 40 years of VR and simulation experience.

CURRENT TECHNOLOGIES: The Oz VR system smoothly integrates the features that people want in VR systems:
   * *Complete Inclusive Virtual Reality*, includes 3D objects, fully immersive environments, realistic dynamics, complete interactivity with entities, physiologically accurate scaling, and customized individual experiences.
   * *Participant-Centered Design of Virtual Experience* enhances the feeling of comfort and presence, avoids disorientation, provides the feeling of freedom and excitement, and promotes the desire to return to the virtual world.
   * *Multiple Participants* are networked together in the same world, freely interacting with the world and with each other. People can explore by themselves, form teams for competition and cooperation, and play with each other. The social environment makes virtual worlds stimulating, challenging, and fun.
   * *Interactive Entities* are objects which act naturally in the virtual world and interact with all the participants. Entities are sensitive to environmental conditions, react conditionally, and have their own dynamic agenda. This amounts to real-time, interactive, participatory, 3D cartoons. Entities encourage emotional involvement, captivating interactions, and participant acceptance.
   * *Revolutionary Software Tools and Techniques* provide unparalleled capabilities for prototyping, for world development, and for performance.

ADVANCED TECHNOLOGIES: Using proprietary technologies in hardware, software and interface, Oz is developing extremely efficient solutions to the critical performance problems associated with 3D graphics and spatial computation.
   The patented *Oz Smart Spatial Engine* improves price/performance for simulated physics and dynamics modeling by hundreds of times. The engine is designed to maintain accurate physical dynamics for up to 1000 interacting objects, each modeled with 1000 polygons, at 60 Hz display rate, for $3000.
   Oz holds the rights to *Boundary Mathematics*, a revolutionary software technology which accelerates logical and numerical computation while using less memory. Evaluation of logical control, for example, is thirty times more efficient.

CURRENT STATUS: Today Oz has very powerful, robust and general software which supports immersive VR, multiple participants, realistic dynamics, and interactive entities. We expect to deliver both high quality performance and complete functionality for under $20,000 per seat. These current technologies are ready for productization and marketing, to applications developers and into selected applications markets. Our advanced technology prototypes await development funding.