Introduction of the Special Operations and Research Division of ARL Presented at the ARL Laboratory Review May 3, 2011

Good Morning. Welcome again to the ARL Review. I am Walt Schalk, the Director of the Special Operations and Research Division in Las Vegas, NV. This video will be an overview of our Division. So, without further delay, welcome to SORD.

SORD is located in Southern Nevada and has three locations, the main administrative and research offices are located in Las Vegas, and the field location is 60 miles northwest of town. The field site, known as the Nevada National Security Site or NNSS or Test Site is a 1375 square mile area, roughly the size of the state of Rhode Island. It is located in the extreme southwest Great Basin region of the desert southwest.

The terrain of the Test Site varies from flat dry lake beds to mountains and mesas with elevations ranging from 2700 ft to 7700 ft. And as you can see, the climate is arid with limited precipitation, low humidity, intense sunlight, and large daily temperature ranges. Annual temperatures range from -20°F to 115°F.

To really understand what SORD is all about, we need to go back to the beginning, and it started with a big bang.

BOOM!

With the advancement of national security research and testing in the 50s and 60s, it became abundantly clear that there was an urgent need to understand and predict where radioactive plume clouds would or could go. It was then that ARL and SORD ancestry began atmospheric dispersion work with the Atomic Energy Commission, which is now the Department of Energy.

Today SORD provides high quality atmospheric science expertise, data, and research in the areas of dispersion meteorology, consequence assessment, air quality and visibility, and mesoscale weather forecast modeling. SORD accomplishes this work using three facilities, operating and maintaining a 28 station weather tower network, a 17 station precipitation network, a high resolution lightning detection system, a mobile radiosonde balloon launch capability, and a staff of 11 scientists, technicians, IT, and administration.

On behalf of the entire SORD Team, I would like to thank you for your time and attention and for taking the SORD tour.