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Leveraging R&D Resources via the Joint LLC Model MATTHEW W. GANZ, President and CEO, HRL Laboratories, LLC

Industrial scientific research labs have become increasingly stressed in recent years by a variety of external forces. Both corporations and government funding agencies have shifted their priorities from long-term fundamental research toward projects that have a high probability of shorter-term payoff. Industrial funding has been further stressed by an increasing demand for quarterly results and fierce global competition. Industry leaders are now asking their R&D labs for "home runs and not just a solid base in the physical sciences. The end of the Cold War has also left the US without a declared enemy whose overt intention was to defeat us through a mastery of large-scale weaponry based upon exploitation of fundamental physics. This, when combined with a bona-fide need for technology gap fillers to respond to on-the-ground threats in the current Middle East conflicts, has led to diminished government emphasis on long-term research in the physical sciences. Simultaneously, the global sources of R&D spending are expanding. The dramatic growth of private equity in the technology development arena has both drawn talent from industry and changed the expectations on researchers. R&D spending in China, India and many other countries is growing significantly. Thus, in order to become relevant, industry must now keep its finger on the pulse of the hundreds of billions of dollars being invested privately and publicly around the world. HRL Laboratories, LLC in Malibu, California represents a unique and successful new business model for industrial R&D. HRL was founded by Howard Hughes in 1948 as the Hughes Research Laboratory and for more than four decades was the internal R&D lab for the Hughes Aircraft Company. After a series of mergers, acquisitions and divestitures over the past 15 years, HRL is now a stand-alone LLC that is owned jointly by General Motors and the Boeing Company. HRL, with a staff of about 300, performs R&D services for GM and Boeing as well as for government and commercial entities. The central themes to HRLs business model are innovation, value and leverage. Leverage is key to the companys success. HRLs business model has been carefully honed to allow its parent companies to perform proprietary R&D in certain areas and joint, collaborative R&D among the LLC members in others. The intellectual property arrangements are skillfully organized so that the LLC Members receive a greater than 4:1 leverage of their research dollars in terms of the IP rights gained. This briefing will describe an overview of the current industrial research environment, HRLs business model, and challenges to future success.