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A Hydrodynamic Investigation of Beryllium Defects PAUL KEITER, JAMES FINCKE, GEORGE KYRALA, STEPHANE LAFFITE, DOUGLAS WILSON, Los Alamos National Laboratory — One of the proposed methods for filling ignition capsules for the NIF is to drill a hole in the beryllium layer and use a fill tube. One must evaluate this design to determine the effect it may have on capsule performance. Simulations of an experimental design for an OMEGA experiment have been performed. In the experiment a hohlraum temperature drive is incident on a Be disk with two different aspect ratio holes. Two jets are created when the temperature drive interacts with these holes. The hydrodynamic motion of the jets as a function of time is studied via x-ray radiography. We present simulations of our experimental design and, if available, preliminary experimental results from an experiment performed on the OMEGA laser to study the hydrodynamic evolution of a “fill hole” in Be. *This was performed by the Los Alamos National Laboratory under the auspices of the United States Department of Energy under contract no. W-7405-ENG-36.*

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