

Abstract Submitted  
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**Overview of the Pegasus Experimental Program**<sup>1</sup> A.C. SON-  
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The Pegasus Toroidal Experiment is exploring plasma stability at near-unity  $A$  and  
developing non-solenoidal startup tools. Several techniques have been developed  
to suppress deleterious tearing modes by modifying the current profile, including  
toroidal field ramps and noninductive current drive via washer-stack current sources.  
These techniques have allowed access to  $I_N=14$  MA/m-T without the appearance  
of performance-limiting instabilities. Filamentary structures have recently been ob-  
served near the edge of almost all ohmic discharges; large values of  $j_{||}/B$  in this  
region suggest that these may be the result of peeling modes. Non-inductive startup  
via washer-stack current sources has produced plasmas with toroidal currents up to  
50 kA. Plasmas have been produced using two geometries: with sources in the lower  
divertor region, and with a source on the outboard midplane producing moderate- $A$   
targets intended for PF induction. Plasmas produced with both geometries have  
been successfully coupled to Ohmic drive.

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