



## Fort Meade Flying Activity

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### *Pilot Information File*

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*PIF #:* 2010-18

*PIF Date:* 13-Dec-2010

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*Subject:* Engine Shock Cooling

PIF 2010-18 Engine Shock Cooling

Shock cooling an aircraft engine can cause cracks in engine cylinders, especially the forward cylinders. Pilots are cautioned against making quick power reductions to prevent shock cooling. Power reductions should be gradual. For example, a power setting of 2400 rpm should be reduced to 2200 rpm with mixture rich, maintained at 2200 for 15-20 seconds, then reduced to 2000 rpm for 15-20 seconds, and so on. Power should not be reduced abruptly at any time with leaned mixture. Mixture should always be full rich prior to reducing power to descend and land.