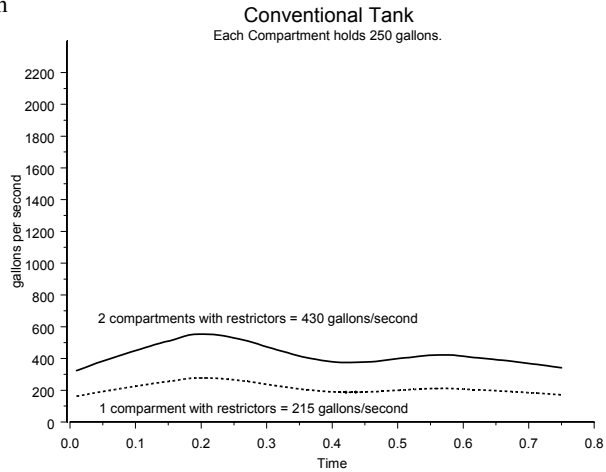
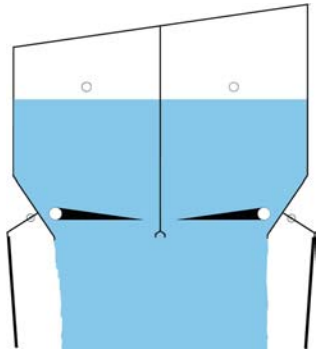




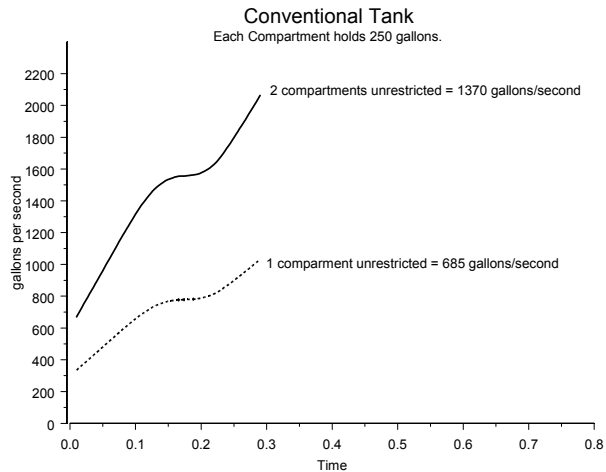
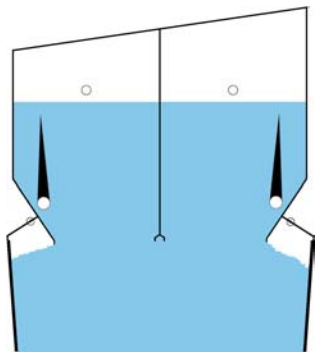
## Conventional Aerial Delivery Systems

Ann Suter, Wildland Fire Chemical Systems - MTDC

Conventional tanks divide the retardant load into several compartments. The compartments can be released individually or multiple compartments can be released simultaneously to increase both the volume and the flow rate and hence the coverage level. Multiple compartments can also be released sequentially at the appropriate release interval to increase the volume while maintaining the coverage level of a single compartment release. Conventional tanks often use deployable flow restrictors to help control the flow rate. Restrictors are physical barriers that lower the flow rate as liquid is released from the tank. There are a variety of conventional tanks with different shapes, compartments and capacities. Having the option of restricting the flow doubles the number of flow rates available to the system



The figure to the left above shows two compartments released simultaneously with restrictors down. Each compartment flows at about an average of 215 gallons per second. The dotted line shows the flow rate for one compartment while the solid line shows the flow rate for two.



The figures above illustrate the same thing but without the restrictors deployed. Each compartment flows about an average of 685 gallons per second.