

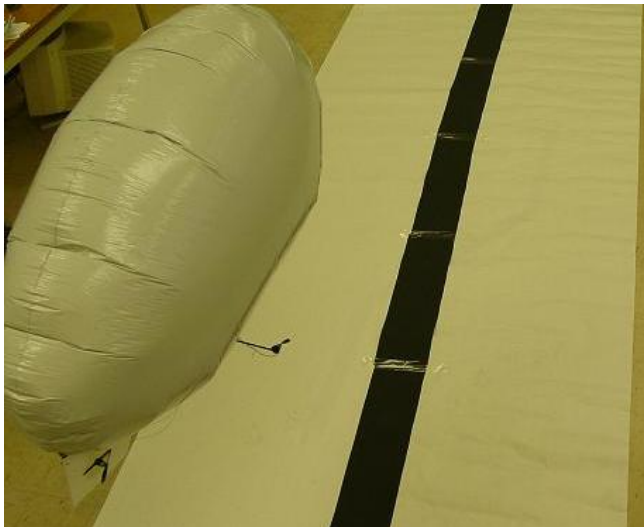
A Robotic Blimp for Search-And-Rescue Applications

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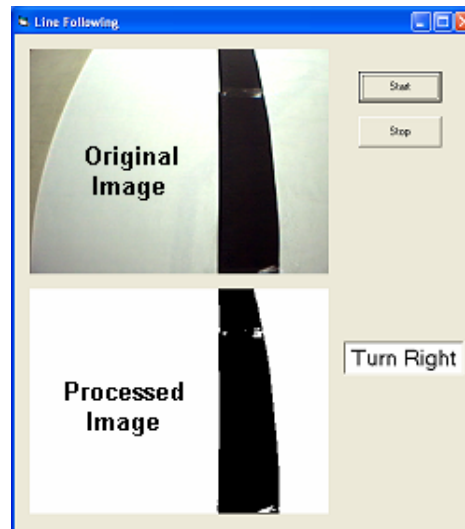
- Urban search-and-rescue (USAR) missions are often dangerous and require large diverse task forces.
- Robots offer a means to offset this demand in resources and personnel. In particular, aerial robots may be effective in environments which are *rugged* (e.g. layered with rubble)
- A blimp, equipped with a wireless camera, can hover and remain airborne for hours and days at a time.
- Autonomous tasks (line following) and pre-programmed repeatable trajectories can be implemented through a PC-to-RC interface



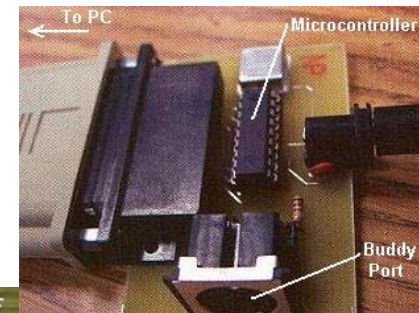
Blimp hovering above 4 victims in a USAR mission



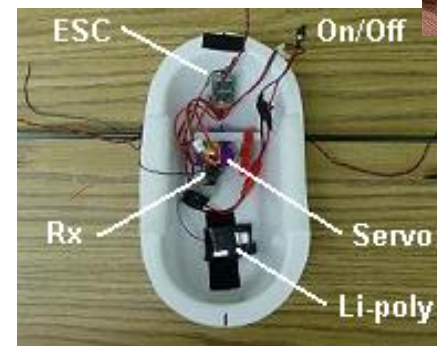
Blimp performing line following



Turning commands are sent to blimp in order to track image centroid



PC-to-RC circuit



Blimp RC electronics