



Engineering Experiences

UAV Challenge: Aerial Survey of a Disaster Area

Planning Rubric

Does the team have a plan for:

	4	3	2	1	0
photographing key features of Disasterville?	The team's plan for photographing features of Disasterville is complete and detailed.	The team's plan for photographing features of Disasterville is complete.	The team's plan for photographing features of Disasterville is incomplete.	The team's plan for photographing features of Disasterville is so incomplete the UAV should not be flown.	The team has no plan for photographing the features of Disasterville; the UAV should not be flown.
a recommended emergency response to the town that addresses urgent issues	The team's recommended emergency response plan is complete and detailed and addresses the most urgent issues.	The team's recommended emergency response plan is complete and addresses some of the urgent issues.	The team's recommended emergency response plan is incomplete and does not address the urgent issues.	The team's recommended emergency response plan is incomplete and not based on existing data.	No judgment can be made about the emergency plan.



Performance Rubric

	4	3	2	1	0
Has the team mounted their camera on the UAV in a way that allows them to capture good pictures?	The team mounts the camera in a manner that is safe, unlikely to interfere with the propellers, and unlikely to fall off during flight and understand the importance of these key features.	The team mounts the camera in a manner that is safe, unlikely to interfere with the propellers, and unlikely to fall off during flight without significant errors.	The team mounts the camera safely, but makes some errors when mounting the camera: either by interfering with the propellers or falling off during flight	The team makes so many errors in mounting the camera that they cannot perform the flight.	No judgment can be made about the team's ability to mount the camera to the UAV.
Does the team successfully capture images of most of the key features in Disasterville?	The team successfully captures images of most of the key features in Disasterville and understands the importance of each.	The team successfully captures images of some of the key features in Disasterville.	The team is only able to capture a few images of features in Disasterville.	The team is unable to capture any images of the features in Disasterville.	No judgment can be made about the team's ability to capture images in Disasterville.
Does the team successfully fly their UAV to the town and back and land safely?	The team successfully flies their UAV to the town and back and lands safely.	The team is able to fly their UAV to the town but crashes on the way back.	The team crashes the UAV somewhere near the town.	The team crashes the UAV onto a structure or "person" in the town.	No judgment can be made about the team's flight.



Team Self-Assessment Rubric

	4	3	2	1	0
Planning	Our plans are complete and detailed.	Our plans are complete but lack details that may result in minor mistakes.	Our plans are incomplete and will result in mistakes.	Our plans are lacking and will result in major mistakes.	We have no plans.
Planning Evidence					
Performance	Our team was very successful in accomplishing the aerial survey of Disasterville.	Our team was somewhat successful in accomplishing the aerial survey of Disasterville.	Our team was not successful in accomplishing the aerial survey of Disasterville but we learned from our mistakes.	Our team's aerial survey caused damage/harm to the town of Disasterville.	We were unable to perform an aerial survey of Disasterville.
Performing Evidence					

