

# Team #45 Neighborhood Surveillance System

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## OBJECTIVE

Supply reliable, time-stamped, twenty-four hour surveillance to Clearlake Estates with license plate recognition

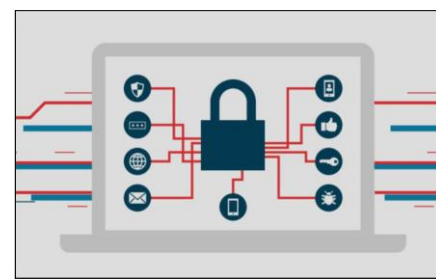
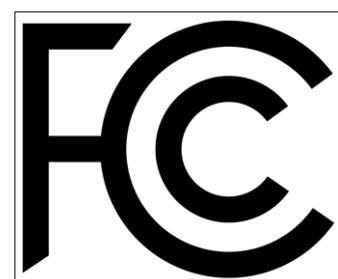
## BACKGROUND

The Great Flood of Baton Rouge (2016) damaged existing surveillance equipment. The new system must account for similar events.

## ENGINEERING SPECIFICATIONS

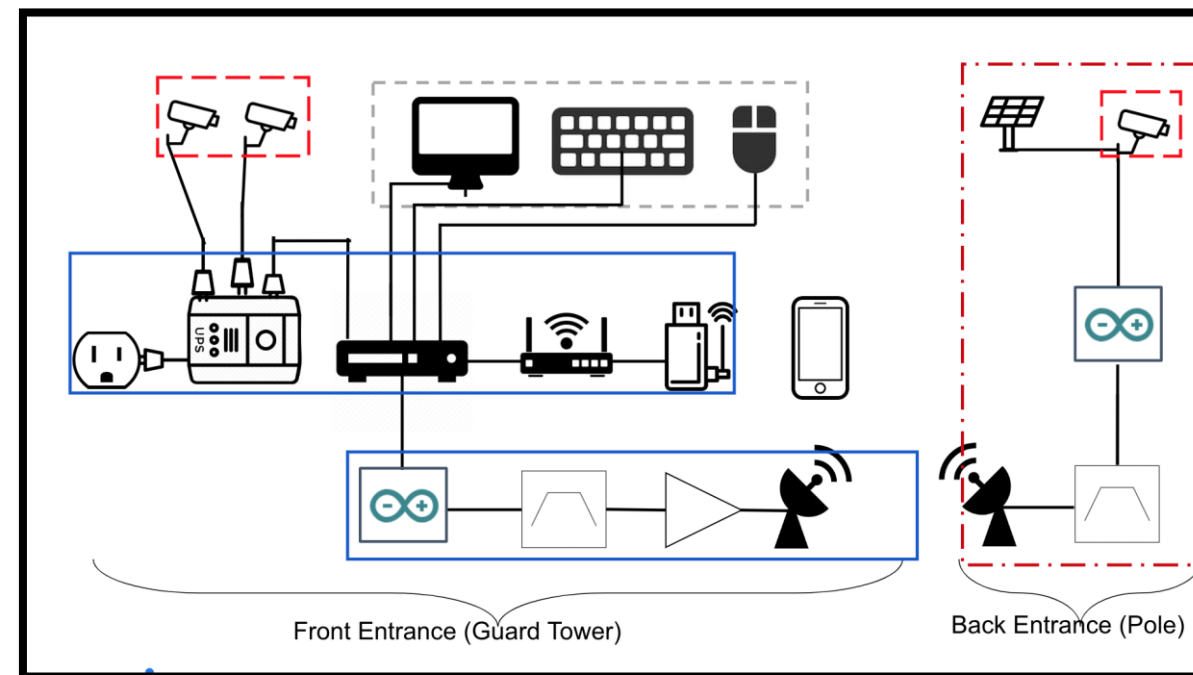
Specification	Value	Specification met
FCC Requirements	See FCC §15	✓
Camera Resolution	1080p	✓
PS Output	12V, 24W	✓
Storage	> 2 TB	✓
Battery Runtime	> 12 Hours	6Hours
Camera Shell Strength	> 450J	✓
Mounting Lifetime	> 5 years	----

## SAFETY



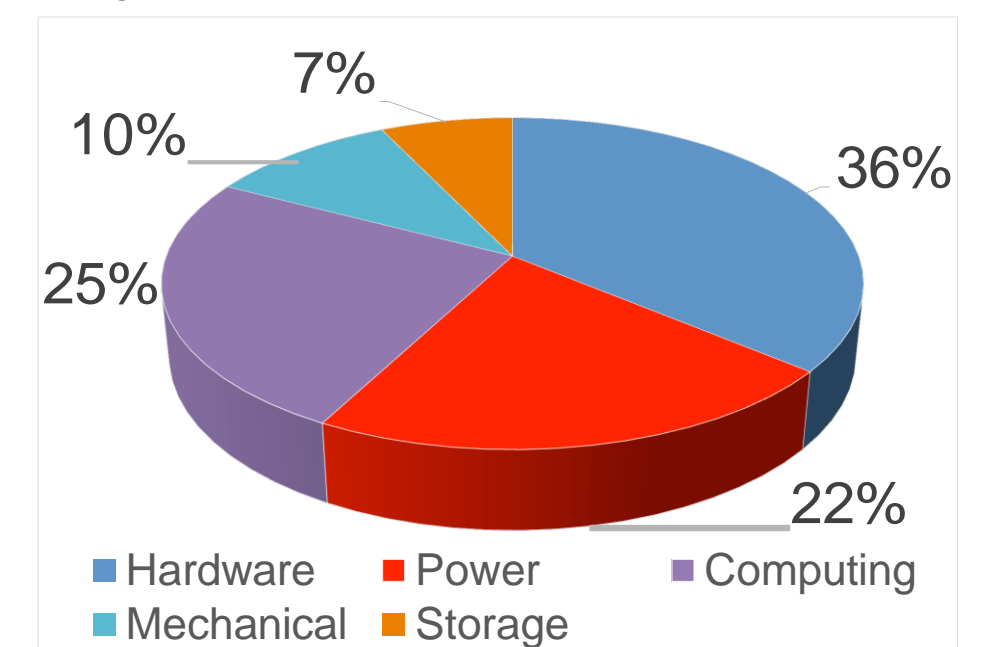
Sponsors: Greg Boudreaux, John Scalzo

## SYSTEM ARCHITECTURE



## BUDGET

Budget: \$1000 Actual: \$980

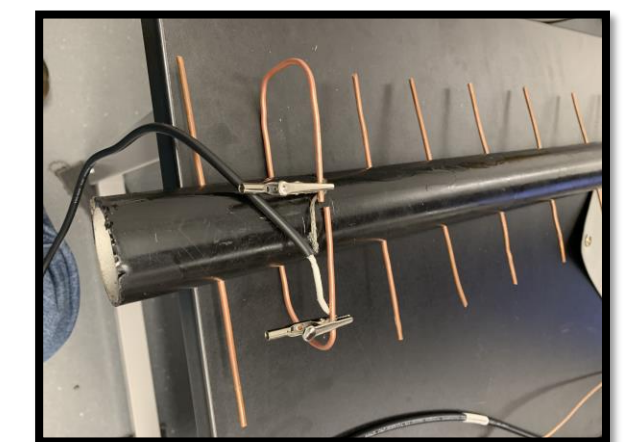
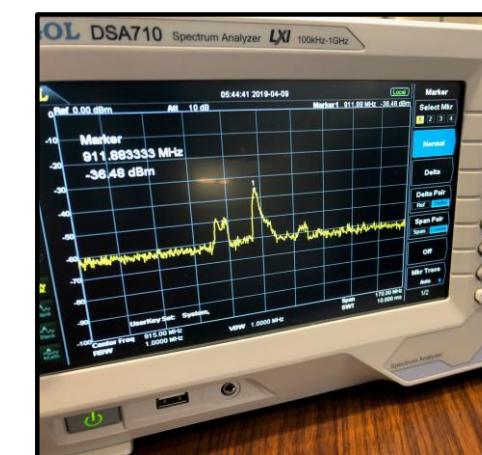


## MANUFACTURING AND TESTING

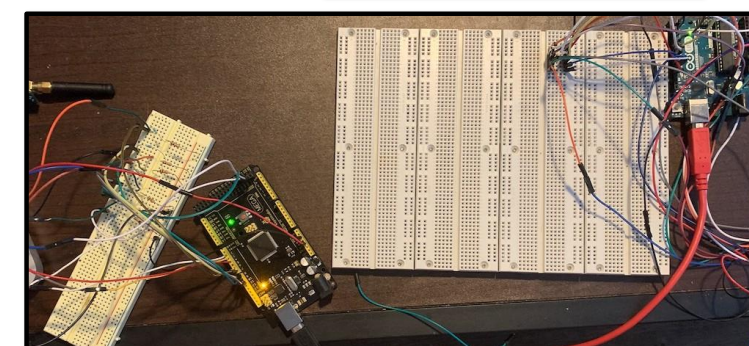
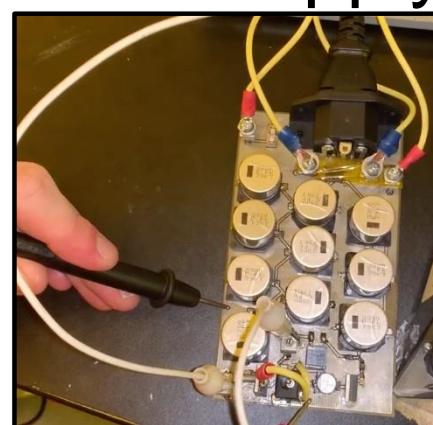
### Camera Testing



### Yagi Antenna Testing



### Power Supply Testing

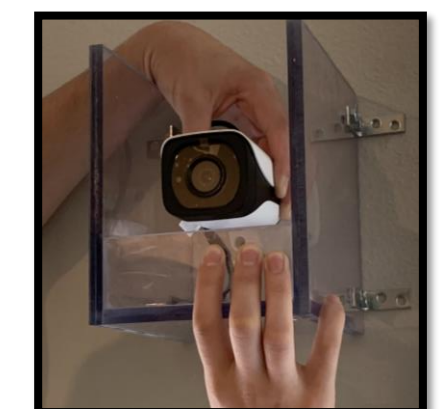


### Arduino

Communication Testing



### Shelving Testing



### Camera Casing Testing

Advisors: Dr. Wu, Dr. Park, Dr. Guo