Ambulance Assignment

**Color Perception**

*Problem*

Emergency vehicles such as ambulances and fire trucks should be easily visible in a variety of lighting conditions. Your assignment is to develop recommendations on what color (or colors) should be used for emergency vehicles.

1. Consider the colors that are presently used for emergency vehicles. What do you think are the reasons that those colors are used? What are their advantages and disadvantages?

2. How can the color of an emergency vehicle make a difference? Use specific concepts about color perception from your notes.

3. What factors can affect how easy it is to see various colors?

*Report*

Prepare a brief recommendation that could be submitted to a city council, ambulance district, or other agency. Be prepared to summarize your recommendations for the class. Your recommendation should include the following:

1. Advantages and disadvantages of the colors that are currently used.

2. Recommendations for colors that should be used.

3. Advantages and disadvantages of your recommended colors.

**Auditory Perception**

*Problem*

It is important for drivers (and pedestrians) to be able to hear emergency vehicles and to identify their locations. Think about situations where you could not see an emergency vehicle but you heard a siren, and you had to figure out where it was coming from so that you would know what to do (e.g., pull over to the side of the road). Your task is to develop recommendations for sirens on emergency vehicles.

*Report*

Prepare a brief recommendation that could be submitted to a city council, ambulance district, or other agency. Be prepared to summarize your recommendation for the class. Your recommendation should include the following:

1. Your recommendations for the sirens in terms of decibels, pitch, and anything else you think is relevant.

2. A justification for each aspect of your recommendations. The justification should refer to specific material from your notes.