

Staff Report

Subject: Radio Tower Aircraft Warning Lights Replacement
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Department: Information Technology, Fire/Emergency Management, E911 Services, Sheriff's Office, Emergency Medical Services (EMS)
Meeting Date: 11-15-2022

Item Description: Consideration to approve a replacement service with Mobile Communications America (MCA) for the replacement of the Radio Tower Aircraft Warning Lights.

Summary Recommendation: Effingham County's emergency service's radio tower located at the landfill site had a failure of the top light around the beginning of September. This poses a risk for air traffic in the area of the tower due to the missing warning light. MCA called the tower light outage into the FAA and suggest replacing the whole lighting system rather than just replacing the bulb due to age.

Executive Summary/Background:

1. The top light failed around the beginning of September and was called into the FAA.
2. Initial repair cost (bulb replacement) was \$5000, that is for the bulb and a tower crew to climb the tower and replace it.
3. The last bulb was replaced around 3 years ago.
4. The current lighting system is over 10 years old and is having parts breakdowns, terminal connections cracking from age, strobe power supply weak from age and now a bulb out.
5. MCA is suggesting that we replace the whole lighting system on the tower with a newer style LED strobe system bringing the lights up to current FAA standards.
6. The new lighting system will have a 5 year warranty and is expected to have 15 - 20 years of operation.
7. Fines for failure to maintain the structure and fines for obstruction lighting failure can be assessed by the FCC based off rules by the FAA. The fines could be in the tens to hundreds of thousand dollars.
8. This communications infrastructure is critical to all Public Safety including county Fire, EMS, Sheriff's Office, EMA, our cities Law Enforcement, and Fire, along with State and Regional agencies including State Patrol, Forest Service, Department of Natural Resources, Flight EMS Services, and other SEGARRN Public Safety members.
9. The board has approved and spent millions building out, upgrading, and maintaining our Public Safety communications infrastructure in the past, it would be a major loss to the community to not maintain it and let it fail.

Alternatives for Commission to Consider:

1. Board approval of the replacement service with Mobile Communications America (MCA) for the replacement of the Radio Tower Aircraft Warning Lights.
2. Board approval of only replacing the bulb and risk another lighting failure in the near future.

3. Do not approve the Services Agreement with MCA or replacing the bulb and risk fines from the FAA / FCC.

Recommended Alternative:

Staff recommends Alternative number 1

Other Alternatives: N/A

Department Review: Information Technology / Emergency Management / 911 Services / Sheriff's Office / Emergency Medical Services (EMS)

Funding Source: Total: \$ 35,932.14 to be paid, funded by the General Fund. This was not budgeted in this budget year.

Attachments:

1. Lighting Replacement Service Quote
2. Lighting System Drawings
3. Lighting System Information Pamphlet
4. Article on "Tower Lighting" from Tower Times