**Security Issues in Satellite Communication**

**Outline**

**Introduction**

Increasing number of satellites … not as secure as perceived… proliferation of satellites is bringing increased risks and concerns

**Importance of Satellite Systems**

Government and private-sector entities rely on satellites …. communication, navigation, remote sensing,

imaging, and weather …. meteorological support…. disruption can have a major adverse economic impact.

**Security Flaws in Satellite Communication**

Vulnerable earthbound entry points …… use of long-range telemetry ….. IoT devices …. Costly to invest in for new companies … Unencrypted data … slow processing …

**Mitigating Cyber Risk in Satellites**

use of robust hardware on satellites … physical security…logical access controls at ground stations…encryption of the signals for tracking and controlling the satellite and of the transmitted databeing sent to and from satellites…securing all entry points (authentication methods, IoT devices, secure tunneling)

**Conclusion**