

Cloud-Based Satellite Infrastructure: COMSAT and SD Data Center Approach

Network Independence and Infrastructure Resiliency





About Us

COMSAT, Inc. is a leading operator of customized, secure end-to-end satellite communications services. We deliver a full portfolio of GEO and LEO satellite network solutions in multiple frequency bands (L, S, C, Ku, Ka) and provide complete end to end mobile satellite solutions. We service aeronautical, landmobile and maritime users in multiple markets, including U.S. government and military, global governments and commercial maritime.

COMSAT, Inc. owns and operates two commercial teleport facilities in the United States. Our teleports are provisioned with fully redundant components and diverse terrestrial connectivity; each has operated continuously since 1976. Both facilities are WTA Tier 4 Certified and provide secure equipment collocation and uplink services for various L, S, C, Ku and Ka band satellites.

COMSAT is wholly owned by Satcom Direct (SD). SD offers world-class global communications services, support, and technology to business and general aviation, military, government, emergency response, media, and others who depend on reliable, global communications. SD supports customers via locations around the globe including our world headquarters and network operations center (NOC) located in Melbourne, Florida.







Aerial Photos









Southbury Teleport

The Southbury Teleport is situated on 16.3 acres of land in Connecticut, approximately 60 miles northeast of New York City.









Santa Paula Teleport

The Santa Paula Teleport is situated on 10 acres of land in Southern California, approximately 70 miles north of Los Angeles



PACIFIC TELECOMMUNICATIONS COUNCIL





Southbury and Santa Paula Teleport Overview

- Both Teleports are within close proximity to ample highways, major airports, and major communication centers, such as New York and Los Angeles, which simplify access to the station, yet distanced enough to isolate the station from the problems of urban development.
- The teleports are staffed 24 hours a day; 365 days per year with a full staff of FCC licensed technicians and are equipped and staffed to provide continuous operation, even during severe weather or natural disasters.
- Each teleport is provided with a minimum of 40 minutes of redundant uninterrupted power and continuous generator power with at least 1 week of fuel on site. Both teleports have redundant HVAC, Fire Suppression Systems and full security monitoring and site access control.
- A majority of the staff is prior military.





PTC'

Terrestrial Network Connectivity

In addition to infrastructure expansion, COMSAT is creating new levels of terrestrial redundancy and increasing capacity throughout the entire network by using multiple carriers and more geographically diverse routes. By using numerous carriers, we are providing solutions that do not depend on a singular carrier or route, thus allowing for less disruption during outages.





SD Data Centers

- SD Data Center operates data centers in the following global locations
- A fully redundant secure private transport network connects the data centers

Certifications and Compliance

• SD Data Center is committed to providing secure environments and solutions by meeting and maintaining compliance controls and standards

SD Data Center Solutions

• Custom designed to your unique business requirement *On-staff CCIE and VCP certified personnel

Colocation: Cabinet, Cage, Suite

Cloud: Public, Private, Hybrid

ITOM: BaaS & DRaaS • Network • Firewall

Consulting: Plan, Design, Implement

Dedicated Private Server

Consolidated Logging and Analytics

Backup and Disaster Recovery

Procurement: Hardware, Software, Services

Hybrid Cloud Services at the Teleports

- COMSAT and SD Data Center specialize in providing a bridge for legacy network services and the new networks through our in-house data center services and access to our cloud services or any of the numerous cloud service providers.
- As part of the Satcom Direct family of companies, COMSAT works closely with SD Data Center to provide:
 - Industry leading cybersecurity services
 - Satellite communications services
 - Global terrestrial communications and bandwidth
 - Private cloud services
 - Hybrid cloud services
 - Traditional colocation services including fractional / full cabinets and cages

Hybrid Cloud Services at the Teleports

- COMSAT partners with other teleports across the globe that enable us to provide worldwide coverage to meet any needs.
- All these measures differentiate COMSAT by creating an independent, global, fail-safe network to provide continuous and secure connectivity to our customers.

Solution Design and Consulting Services

The COMSAT and Satcom Data Center Teams provide design and consultation services for:

- Business continuity solutions that take advantage of satellite and terrestrial communications.
- Hybrid cloud and colocation services from Teleport to Data Center to Client HQ.
- Cloud / offsite system backup and recovery options.
- Access to edge computing and communications that reduce costs while extending access to services for COMSAT clients.

SD Data Center - Cloud Services Provider

Satcom Direct's data center blends teleport services, colocation, and cloud services together so that hybrid and legacy systems can co-exist.

Built on Enterprise Class hardware and VMWare technology, SD's cloud provides private virtualization and global communications for:

- Physical to Virtual migration of legacy systems
- Hybrid computing that blends leading virtualization services with legacy collocated / hosted applications that aren't cloud ready
- State of the art redundancy, backup and replication services capable of utilizing terrestrial and satellite communications
- Secured communications from satellite to cloud and aircraft to cloud

Cloud Service Benefits

A blended cloud and colocation service delivers benefits and efficiencies to the client and the teleport

- Efficiency / Cost Reduction Reduces capex expenses
- Data Security Provides private network capability end to end satellite to ground – ground to cloud – cloud to office
- Scalability Allows teleport to rapidly respond to needs of new and existing clients
- Disaster Recovery Cloud services provided at the teleport allows for rapid replication of data sent to alternative locations or systems.
- Competitive Edge Enables service offerings and revenue generation capabilities that were previously unavailable or outsourced

