Ensuring Continuity of Communications & Emergency Response Via Satellite

Case Study: H-E-B

Continuity Insights Conference - April 12-14, 2010

Welcome and Introductions

Speaker: Glenn Katz
President & COO
Spacenet

Speaker: Justen Noakes
Director of Emergency Preparedness
H-E-B
Agenda

- Business Continuity & Emergency Response Communications
- The Real Cost of Network Downtime
- Challenges & Requirements
- Real Solutions
- H-E-B Real-World Experiences
- Summary/Q&A

Business Continuity & Emergency Response Communications

- **Fixed Backup/Business Continuity Communications**
  - Enable fixed locations to communicate in any disaster - even if the local wireline/terrestrial network is compromised
  - Independent of the wireline infrastructure
  - Reliable and always on-call
  - Interoperable with industry-standard equipment/technologies
  - Support “converged communications” (data, VoIP, fax, video)
  - Cost-effective/cost-justifiable

- **Mobile Emergency Response Communications**
  - Enable first responders/incident management personnel to deploy quickly to an emergency site and communicate effectively
  - Must be “untethered”
  - Available for use anywhere (urban or rural)
  - Reliable and always on-call
  - Interoperable with industry-standard equipment/technologies
  - Support “converged communications” (data, VoIP, fax, video)
  - Cost-effective/cost-justifiable
The Real Cost of Network Downtime

Downtime Creates a Number of Risks

- Lost Revenue → no point of sale transactions
- Lost Productivity → idle employees
- Liability and Fraud → lost records and data
- Safety → no surveillance or critical communications

**Revenue Risk Calculation**

\[
\text{Revenue at Risk per Site Due To Network Outage} = \frac{\text{Annual Revenue from Operations}}{\text{Number of Sites}} \times \frac{\text{Industry Average Network Outage}}{2\%}
\]


How Long Can You Afford to Be Offline?

**$20M Potential Lost Revenue Per Year!**

<table>
<thead>
<tr>
<th>Large Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Revenue: $1 Billion</td>
</tr>
<tr>
<td>Number of Locations: 1000</td>
</tr>
</tbody>
</table>

**Revenue Risk Calculation**

\[
\text{Revenue at Risk per location per year} = \frac{\text{Large Enterprise Annual Revenue}}{\text{Number of Locations}} \times \frac{\text{Industry Average Network Outage}}{2\%}
\]

* Infonetics independent research report 2006
Just 1 Hour of Downtime is Worth*:

- Brokerage operations = $6,450,000
- Energy = $2,817,846
- Telecom = $2,066,245
- Manufacturing = $1,610,654
- Financial Institutions = $1,495,134
- Information Technology = $1,344,461
- Insurance = $1,202,444
- Pharmaceuticals = $1,082,252
- Banking = $996,802
- Consumer Products = $785,719
- Chemicals = $704,101
- Utilities = $643,250
- Healthcare = $636,030


Communications Challenges

Minimize Complexity → Focus On The Mission

- Voice, Video, & Data
- Integrated Solution
- Rapid Deployment
- Interoperability
- Budget
- Quality, Security & Ease of Operation
Satellite Easily Integrated Into Existing Networks

Today’s satellite networks utilize industry standards and integrate seamlessly into your existing infrastructure.

Satellite Modem Card

Emergency Communications

*Integrated Satellite Solution - Multiple Form Factors*

- Enterprise or Govt. Locations
- Incident Command Post
- Mobile Vehicles
- In Field Personnel

Corporate Voice, Video, & Data

INTERNET

PSTN

Spacenet Teleport

Terrestrial Telco Central Office

Continuity of Operations (Satellite Stand-by)

On Foot LMR

Rapid Deployment

Stand-by

Temporary Encampment

Around Scene Mobility
Meeting BC and ER Needs with Satellite

- Provides cost effective broadband access for multiple applications
- Provides 99.99% uptime per remote locations
- Establishes an always on, back up network that is 100% diverse from the terrestrial network
- Keeps communications running with constant access to data, video, voice and radio, even when local network services are down
- Provides a solution that is easy to manage, deploy and operate on an ongoing basis

H-E-B’s Emergency Preparedness Program
H-E-B Real World Experiences

H-E-B Requirements

- Needed a reliable communications network to support emergency response initiatives and its Disaster Recovery Unit (DRU)

Solution

- High-performance satellite services
- Transportable satellite antenna
- Rapid deployment of converged communications

Solution Benefits:

- Dependable communications network
- Transportable system and rapid deployment
- Support for voice, video and broadband data

H-E-B Overview

- Founded in 1905 in Kerrville, Texas. Today, H-E-B serves families all over Texas and Mexico with over 300 stores and 72,000 employees.

- $15B in sales annually

- Headquartered in San Antonio, Texas.

- Five major distribution centers [DCs] in San Marcos, San Antonio, Houston, Corpus Christi, Weslaco and Monterrey, Mexico.

- Nine manufacturing plants; including three bakeries, two milk plants, a chip plant, a tortilleria, and an ice cream plant.

H-E-B has 120 stores, two major DCs and four manufacturing plants in immediate hurricane territory, and another 30 stores on the outer fringes and along evacuation routes...150 facilities in Texas Hurricane Country!
Disaster Response Unit aka “Dolly”

- Mobile Pharmacy & Business Center
- Top 800 maintenance RX
- Check cashing, Western Union, ATM
- Fully Self-sustainable for 3 days
- Comes with sleeping and shower unit

H-E-B DRU at Port Isabel Following Dolly
H-E-B’s Response During Hurricanes Dolly & Ike

Emergency Communications Lessons Learned

“If we learned anything from Hurricane Katrina, it is that we cannot rely solely on terrestrial communications... satellite communications are, in some instances, the most effective means of communicating.”

~Kevin Martin
Chairman of the U.S. Federal Communications Commission (FCC)
Summary

Satellite services were a critical component to the operation of H-E-B’s Disaster Response Unit and enabled data communications to be up and running within minutes after the DRU was parked.

The Right Solution Will Enable You to Focus on Your Company’s Mission
- Converged voice, video, radio and data in fixed and rapidly deployable systems

Satellite Communications is the Only Solution that Meets Full Requirements
- Redundancy, diversity, and independence

Selecting the Right Service/Solution is Critical to Success
- Experienced provider with field proven solutions

Thank You and Contact Information

Justen Noakes
Director of Emergency Preparedness, H-E-B
Noakes.justen@heb.com
210-938-5449
www.heb.com

Glenn Katz
President & COO, Spacenet Inc.
Glenn.katz@spacenet.com
703-245-6310
www.spacenet.com
Appendix

Satellite Value Proposition

*Satellite Enables High Performance Networking Virtually Anywhere*

- Ubiquitous Coverage - anywhere with view of the Southern sky
- Converged Communications – simultaneous voice, video and data
- Continuity of Operations – redundant, diverse, and independent path
- Rapid Deployability – mobile systems deploy in 10 minutes or less
- Scalability – service for a single site or 32,000 sites
- Security – inherent security plus secure over-the-air encryption
How Long Can You Afford to Be Offline?

Per Site Potential For Monthly Lost Revenue Due to Network Downtime Caused By Service Provider

<table>
<thead>
<tr>
<th>Industry</th>
<th>Annual Revenue*</th>
<th>% of Revenue Lost Metric**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Box Retailer</td>
<td>$58B</td>
<td>1.6%</td>
</tr>
<tr>
<td>Large Integrated Health Care System</td>
<td>$31B</td>
<td>0.7%</td>
</tr>
<tr>
<td>Brokerage Services Firm</td>
<td>$5B</td>
<td>1.9%</td>
</tr>
<tr>
<td>Commercial Bank</td>
<td>$4.3B</td>
<td>1.9%</td>
</tr>
<tr>
<td>Medium-Sized Hospital Network</td>
<td>$1.0B</td>
<td>0.7%</td>
</tr>
<tr>
<td>Restaurant Chain</td>
<td>$1.6B</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Lost Revenue

- $50,241
- $38,312
- $26,603
- $10,412
- $3,293
- $3,054
- $0

* Source: Company Annual Reports