Darold Whitmer
Senior Vice President of Strategic Relationships
(NGA 911 Overview)
NGA 911 Overview

- **550+ Years Experience in 9-1-1**
  - 150+ years NG9-1-1 Experience

- **$200M+ Contracts**
  - Business to Government
  - Including California - Largest US Contract
  - 9-1-1 Association of Central Oklahoma Governments (9-1-1 ACOG)
  - California SCOUT
  - California Community Isolation

- **Technology Platform**
  - AWS Partner
  - Scalable, Reliable, Resilient, Secure, and Agile

- **Intellectual Property**
  - Patents Issued
  - 2019: Brain of NextGen 9-1-1
  - 2014: Personal Emergency Response

NGA 911 LLC brought Cloud Computing to 9-1-1, offering the Next Generation of 9-1-1 service across North America. In this next generation of 9-1-1, caller location will be known, calls will be routed directly to the authorized call center, video and RTT will be enabled.
Definitive leader in cloud services.
Definitive leader in data center infrastructure
NGA 911 has built a 99.999+% available, Public Safety grade, solution on the AWS infrastructure.
Integral part of our Cybersecurity response team.
**NGCS** – Next Generation Core Service

**ESInet** – Emergency Services IP Network

**ESRP** – Emergency Services Routing Proxy

**LIS** – Location Information Server

**LVF** – Location Validation Function

**BCF** – Border Control Function

**OSP** – Originating Service Provider

**SIP** – Session Initiation Protocol

**IP** – Internet Protocol

**ECRP** – Emergency Services Routing Proxy

**LNG** – Legacy Network Gateway

**LSRG** – Legacy Selective Routing Gateway

**LPG** – Legacy PSAP Gateway

More...
NGA 911 SOLUTION

- NENA i3 Standard Compliant
- Non-intrusive Scalability
- 99.999+% Availability for NGCS and ESInet
- Federal Level Cybersecurity
- 24x7 Monitoring and Support
- Agile: New Features & Functionality when available and as required
9-1-1 systems must be designed, architected, implemented and operated to meeting standards for high availability, reliability, and resiliency.

A public safety grade highly available system is considered to provide 99.999% availability in a year.
NGA 911 NEXT GENERATION CORE SERVICES

- NGA 911’s non-proprietary NGCS
- NENA i3 compliant
- Dedicated to the State of Oklahoma

<table>
<thead>
<tr>
<th>NGCS</th>
<th>Non Redundant 1 AZ</th>
<th>Redundant 2 AZ</th>
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<tbody>
<tr>
<td>Functional Element</td>
<td>Signaling</td>
<td>Media</td>
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<td>AWS Data Plane</td>
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<tr>
<td>BCF</td>
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<tr>
<td>ESRP</td>
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<tr>
<td>ECRF</td>
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<td></td>
</tr>
<tr>
<td>LVF</td>
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</tbody>
</table>

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- **Resilient multipath connectivity**
- **No loss of call with a single or up to 3 path failures**
  - All 4 paths carry the same call!
- **Packet duplication for superior resiliency and voice quality**
Transition - Solacom in Process
Solacom - Full Transition

NGA 911

NGA 911 NGCS

NGA 911

SOLACOM

MIDCOM DC

TIERPOINT DC

SOLACOM
Michelle Bland
Chief Operating Officer (COO)
(9-1-1 ACOG Deployment Status)
# Deployment Status

<table>
<thead>
<tr>
<th>Category</th>
<th>Status/Date</th>
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<tbody>
<tr>
<td>Contract Executed:</td>
<td>10/13/2020</td>
</tr>
<tr>
<td>Draft Plans Approved:</td>
<td>12/7/2020</td>
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<tr>
<td>Site Surveys:</td>
<td>12/3/2020</td>
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<tr>
<td>Interconnect Agreements:</td>
<td>Complete</td>
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<td>Coordination with OSPs:</td>
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<td>Data Center Confirmed:</td>
<td>Tierpoint 2/25, MidCon 2/15</td>
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<td>NG Trunk Due Date:</td>
<td>Coming Soon</td>
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<td>Equipment Configuration:</td>
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<td>Equipment Install:</td>
<td>Will be scheduled with NG Trunk Installation - 911 ACOG Smart Hands</td>
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<td>Training</td>
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<td>Solacom IOT:</td>
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<td>911 ACOG Lab:</td>
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</table>
THANK YOU!

NGA 911

CONFIDENTIAL PRESENTATION

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