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# UTAH COMMUNICATIONS AUTHORITY (UCA)



Radio System Upgrade to new L3Harris P25 System - Project Monthly Report

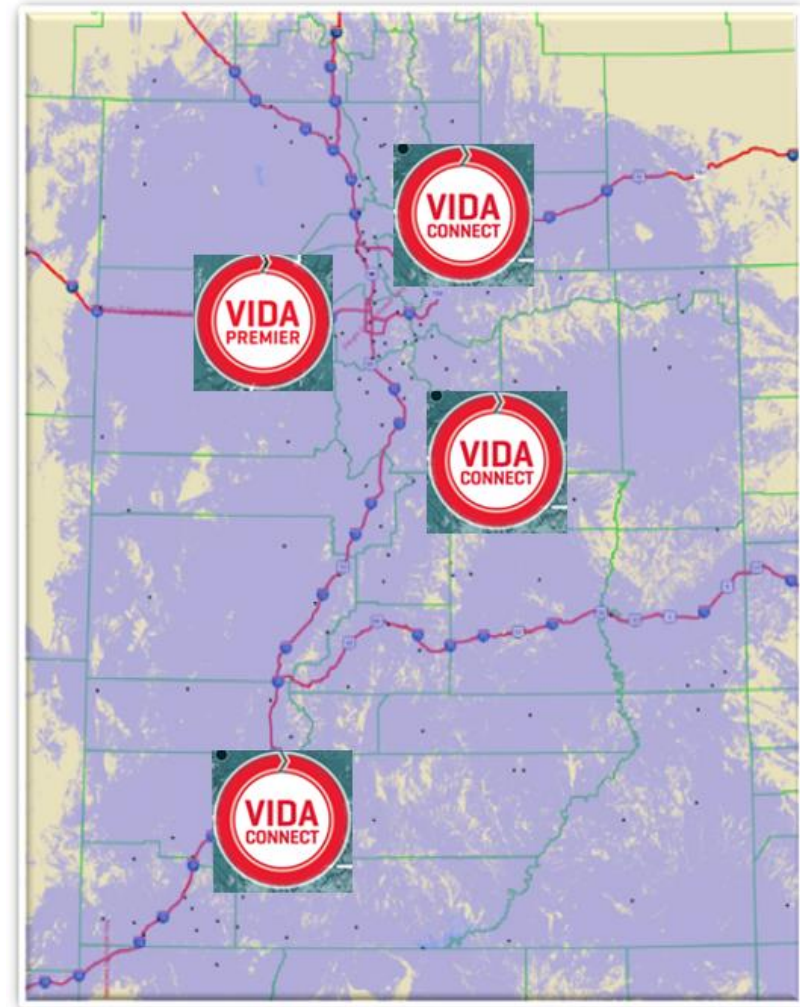
Nov 9, 2021

Presented By: L3Harris UCA Program Team

# 1 – UCA Contract Technology Overview



- Design, implement and install P25 Phase-2 IP Trunked System Radio Communications System
- The UCA solution will consist of four (4) IP based VIDA Core Pairs
- 144 MASTR V-based RF sites
- 224 Symphony Dispatch Consoles
  - 221 active + 4 training/spares
  - 560 conventional (4-wire) interfaces
  - 1 centralized voice logging recorder
  - VIDA Interop Gtwys & Encompass Gtwys
- ISSI (Inter Sub System Interface)
- BeOn Gateway Server



## 2 – Highlights/Recent Status



- Site Grounding as of Nov 4, 2021
  - Sites Completed / Accepted / Total for CY21: 34 / 33 / 39
  - 2 sites in progress, 2 sites on hold due to weather & would likely push out to 2022 (no impact to major project milestones)
  - 1 site awaiting lease agreement finalization
- L3H Site Remediation as of Nov 4, 2021
  - Sites Completed / Accepted / Total for CY21: 17 / 16 / 20
  - 3 site completed this month, 5 site accepted this month, 1 as-built drawing being updated
  - 1 site in progress with last 2 awaiting lease agreement finalization
- Antenna Installs as of Nov 4, 2021
  - CY21 target is 53, L3H has completed 72 to-date (51 sites were completed back in July)
  - 15 sites completed this month, 1 site awaiting lease agreement finalization
- RF Sites Install as of Nov 4, 2021
  - CY21 target is 53, 50 site inspections completed, as-built drawings being updated
  - 32 site walkthroughs completed in last period
  - L3H has delivered equip to 15 additional sites above target of 53 with 5 sites work completed
  - L3H requested UCA authorization to continue to pull in additional sites in CY21 build season as long as build season allows
  - Scheduling RF site walkthrough for acceptance
- NSC Installs as of Nov 4, 2021
  - 8/8 installs accepted
  - St George PD NSC site accepted on 10/26
  - Awaiting UCA fiber backhaul completion for final commissioning configuration

## 2 – Highlights/Recent Status.. cont'd



- Design Reviews 119 sites
  - 117 DDR packages approved by UCA out of first 119 sites in contract
    - Only Dugway & Shawshank packages work remain
    - Dugway: awaiting lease agreement finalization, progress made lately with Army & USAF committing to giving a response back to UCA before end of the year
    - Shawshank: awaiting site work completion and backhaul info from site owner
      - Design package with all other details completed and would be reviewed as partial complete package with UCA this month
  - Material order authorization received from UCA for 22 additional RF sites & Consoles
    - This would only leave Dugway site for material order (Shawshank is a site location change and material was already ordered, staged & delivered to SLC)
  - L3H received UCA's authorization for additional Antenna & RF sites install work
- Frequency Plan Applications
  - Freq. applications prepared and submitted by L3H team. These are going through final regional approval phase on UCA's end
- UCA New Fleet Map Approval
  - Early this year, UCA board approved the new fleet map structure
  - L3H continuing conversations with UCA system administrator on new fleet mapping & talk-group details

# 3 – Highlights/Recent Status.. cont'd



- 10 Tower Remediation Sites and 1 New Tower Site
  - L3H completed geotechnical field sampling & field survey reports in Aug/Sept
  - L3H structural engineering subcontractor is completing tower remediation detailed designs
  
- 25 Expansion Sites
  - Schedule refresh discussions to take place early next year with UCA to plan next project tasks around site construction completion timelines
  - UCA appointed new PM in Sept to manage expansion sites work.

# 4 – Upcoming Milestones - Next Quarter Outlook



- Dec 2021 – Apr 2022
  - Field work that started in May 2021 for site & grounding remediations, Antenna & RF sites install. This would wrap up in Dec & restart in Apr/May during next year's build season
  - L3H site managers & field sub-contractors traveled & worked throughout the state during the year to support field efforts and would plan to continue that for 2022 build season as well
  - Tower Remediation
    - Field studies/geo-techs surveys completed in Aug. Assessments are in progress & expected to be completed by early Dec following which L3H would furnish the details to UCA
  - CFAT # 3
    - Planned for Mar/Apr 2022. Material availability due to global shortages need to be closely monitored
  - 25 Expansion sites
    - L3H would need more info to start integrating into design packages - following which DDR date could be scheduled and next steps could be planned for 25 expansion sites
  - L3H F2F (Factory to Field) team field engagements begin Apr 2022
    - L3H F2F team would start visiting the installed sites to complete the commissioning field steps.

## 5 – Schedule Overview



- Original contract: updated schedule put in place in Oct 2020
  - To account for 2021 field developments, updated schedule baseline agreed to by UCA
  - Weekly schedule review meetings in progress with L3H scheduling expert to review task level details and analyze schedule
  - Overall project is on track



# 5 – Challenges/Risks



- UCA Backhaul Readiness
  - Unexpected Fiber delays for NSC sites slowed down NSC install acceptance, sites connectivity to cores work, and installation acceptance. L3H provided interim Cradle Point solution enabling NSCs to be powered up & allowing 37 sites to undergo an early CFAT
  - RF sites readiness, RFC tests, MW vendor timelines
    - All 8 NSCs up & running on Cradlepoint solution as of early Aug, UCA Fiber nearing completion
- Global supply chain shortages
  - In general, L3H and UCA are experiencing long material lead times which are being mitigated as much as possible. CFAT #3 in CY22 might be impacted, L3H would continue with the lead time challenges mitigation efforts
- 30+ PSAPs required info collection / Agencies preferences, TG affiliation info etc.
  - L3H had questions on existing UCA system that need to be clarified/understood to better plan for new P25 system Cutover and migration plans.
- Weather/Snow
  - Snow starting in Oct restricted access to some sites & work completion for CY21



## 5 – Challenges/Risks – cont'd



- Dugway site Design & SA (Structural Analysis) completion
  - Dugway (USAF & Army) is the last site remaining for design finalization. It is awaiting on USAF & Army to coordinate approvals amongst themselves and to sign site use lease agreement with UCA.
  - Thanks to UCA's efforts, progress was noticed on this item by Army & USAF. Both committed to completing MoU with UCA by Dec end 2021. UCA is following up with USAF & Army
  
- L3H unable to obtain approvals from some land-owners who are requesting new lease agreements. UCA is working with these landowners to renegotiate leases for sites like the SLC PSB, City Creek, and Ibapah
  
- 25 Expansion Sites Development
  - UCA continues to work on grounding remediation & other site development work to allow for sites design review process & material ordering phase to begin in 2022
- Approval from Tower/Shelter Owners – 3<sup>rd</sup> party co-located sites
  - Getting 3<sup>rd</sup> party responses/agreements have been a tough challenge from beginning of the project due to non-responsiveness from most of 3<sup>rd</sup> party owners/managers
- COVID-19 Impacts
  - Just like during CY21, in CY22, personnel Covid-19 exposures have to be monitored. L3H is enforcing mask mandates for its teams
- Onsite meetings
  - Potential health concerns with travel
    - For now, UCA & L3H restricted travel advisory in place
  - No onsite monthly meeting with UCA, could resume in the future