



## Customer Certificate of Acceptance Form

DCPPM006-f03

Project Name: P25 Phase II 800 MHZ Trunked Simulcast Radio System and Microwave Network

Customer Name: City of Norman, OK

L3Harris Corporation Contract ID No.: 1518

SYSTEM PURCHASE AGREEMENT between the City of Norman, OK, and Norman Municipal Authority, and Harris Corporation dated 3/14/2017.

This is to certify that, having taken part in the agreed upon acceptance test, we declare the following system as accepted under the terms of this Agreement and can immediately enter the warranty phase upon execution of this certificate.

1. This acceptance is the Final Acceptance, based on the following:
2. Please refer to Addendum A, for the attached punch list, which has been reviewed on our weekly calls between Norman and L3Harris.
3. The below punch list captures all remaining punch list items. L3Harris agrees to continue their work until all items have been completed and shall be completed during maintenance phase of contract.

- Move to new ECC, when complete, including Calypso Cove core (this would be captured in warranty stage, as this is projected for ~Q2/Q3 of 2022). All future ECC work shall be done in accordance with the contract, that provided the scope for the implementation of the current L3Harris P25 radio system.
- This work will include the following (per the contract):
  - This is the equipment we are tracking to relocate:
    1. Location High Availability (H/A) VIDA Core
    2. Interoperability Gateway
    3. ISSI
    4. Logging Recorder
  - Addendum B, part II, attached, provides the scope responsibility matrix for this effort.
- L3Harris agrees to provide Norman with up to \$9,600 (retail sales price) worth of 3M Peltor IV (or the like) headsets. PO issued on April 20<sup>th</sup> 2021.
- ISSI connectivity between Norman and OKWIN. L3Harris agrees to continue working with the OKWIN system to establish a connection. This work will take place in the warranty and/or maintenance stage of the contract. Appropriate resources will still be adequately provided by L3Harris, to accomplish this.
- City of Norman agrees that remaining contractual training balance, shall be reduced by \$9,360 (plus travel), by providing Norman the following class for up to (3) people:

<u>Training Code</u>	<u>Class Name</u>	<u>Class Length</u>
YTSN9L-B	ISSI, RNM, UAS & BeOn (Various)	4 Days (in Lynchburg, VA)

- This class will be in lieu of any current, or future programming commitments (due to updating roaming parameters, etc.) for non-public safety radios.



## Customer Certificate of Acceptance Form

DCPPM006-f03

- PS radio programming efforts are captured in Addendum B, part I.
  - The class will be provided for by L3Harris, at Lynchburg, VA, and will include travel and hotel.
4. Upon execution of this certificate, L3Harris will send an invoice for the full Final Acceptance milestone in the amount of \$999,544.83.



# Customer Certificate of Acceptance Form

DCPPM006-f03

## Addendum A:

Status	Norman Final Acceptance Criteria	Holding Up Final Acceptance	Deadline	Current Status
Done	1. Final Documentation Package		Complete	Complete.
Done	2. Decommission Legacy System – City to provide storage area		Complete	Work ongoing by Ka-Comm.
Done	a. PD Dispatch Equipment Room		Complete	Work ongoing by Ka-Comm.
Done	b. Sarkay Site (OKWIN Equipment)		Complete	Work ongoing by Ka-Comm.
Done	c. Northeast Site (OKWIN Equipment)		Complete	Work ongoing by Ka-Comm.
Done	3. Backup Symphony Consoles and backup radios in PD Dispatch Equipment Room		Complete	Duplexer ordered (ETA: 4/10). Early on in the project, consoles were RMA'd (#1 - Symphony Console) and (#2 - Symphony Console) - apparently. Can the web interface license be added, while it is being repaired, so that it would just boot up. Need locking codes. Web interface license (2 (RMA'd) 13 = 15 total) - Russ will send me the locking codes (SN's can be possibly provided later on), and see if Dabble/TAC can help on that. Russ sent Jason the locking codes on 4/8. Jason created sales order. Russ has NOT heard back from Wanda. Russ did receive the original 11, but not the licensed ones, but didn't have it. Jason will follow up with Wanda, relative to web interface feature being added. The CS7000's were NEVER outside of the box, so not sure how damage occurred. Russ is asking for a photo of what the damage is. Jason ordering new CS700, XG-75 and system head. Multi-key AES feature string to FEW tool. Russ/Bryan will send SN's to Jason. Two sets of brackets for Symphony's, back from RMA - the ones they can't get into.
Done	a. Backup radio combiner		Complete	Complete.
Done	4. Baseband module update for MASTRV Channels 9-10 single point of failure		Complete	Completed on Dec 9th.
Done	5. E-switch Upgrade	Yes	Complete	Completed on January 27th.
Done	6. Warranty Meeting		Complete	Meeting held on 12/1/20.
Done	a. Configuration file storage for warranty maintenance		Complete	Complete.
Done	7. Test Equipment – Aeroflex advanced feature for autotuned		Complete	Phone call with Dave Shepherd and Aeroflex technical service identified feature needed. Ordering features for test set on April 5th, 2021. Jason followed up with Aeroflex and they confirmed it was sent. I did reply to them the whole "zip file" being stripped out issue. Jason forwarded/FTP'd file to Russ/Dave. Dave tried it on 5/12, could not get it to work, apparently.
Done	8. Change Order #12 – all equipment has not been delivered		Complete	Partially delivered "Monday 12/14/2020 at 12:51 PM" and signed for by "HBUCKFORD". Remainder showing delivery of "12/23. XL-200 should have been partial keypad, but full keypads arrived instead.
Done	a. XG25 chargers		Complete	Partially delivered "Monday 12/14/2020 at 12:51 PM" and signed for by "HBUCKFORD". Remainder showing delivery of "12/21. Different chargers arrived which may or may not work.
Done	b. Qty 8 – XL200's and Fire Speaker Mic's		Complete	Partially delivered "Monday 12/14/2020 at 12:51 PM" and signed for by "HBUCKFORD". Remainder showing delivery of "12/21.
	9. Change Order #13 –			Jim Nechamkin sent Russ email on Nov 11th @ 9:37 AM with details that Russ requested.
	a. Battery refreshment			Language previously provided to Russ, on battery refresh terms. Keeping open until approved by Norman City Council.
	b. \$75,000 credit			Language previously provided to Russ, on battery refresh terms. Keeping open until approved by Norman City Council.
	c. 2 <sup>nd</sup> year full warranty			Language previously provided to Russ, on battery refresh terms. Keeping open until approved by Norman City Council.
Done	10. RMA list	Yes	20-Nov	Sent to Russ on 12/1; Russ requested S/N's, if possible. Per CC: "I don't think there is a way to pull serial numbers on RMA's since they are only added to an internal text field (sales item note), but I will check with IT."; Sent out on 1/14 @ 9:45 AM
Done	a. Infrastructure	Yes	20-Nov	Sent out on 1/14 @ 9:45 AM
Done	b. Subscribers	Yes	20-Nov	Sent out on 1/14 @ 9:45 AM
Done	c. Accessories	Yes	20-Nov	Sent out on 1/14 @ 9:45 AM
Done	11. BeOn Optimization	Yes	Complete	Confirmed that latest BeOn version is R7C, which will resolve issue. Upgrade can be performed remotely on this system with minimal impact. BeOn SW needs to be updated over network. Who can do this? DeHart + Jim Nechamkin's team can update this. Upgraded BeOn servers to R7C on November 20th @ 11:29 AM. Steve sent Jason detailed explanation on 12/13 @ 5:38 PM; forwarded to engineering...waiting on response. Steve mentioned getting a hold of Fernando for help/update. Meeting held with Russ, Steve and Dave on Nov 11th (Tue); Jason emailed summary at end of meeting. Is the primary point out of the system @ Animal Welfare? If AW is the primary IP address, what can Norman IT department do to optimize this? We want to make sure that BeOn is going out on the fiber. Stephen White's (or Chad Stephens) work at OKC is also done at Norman. Mike Willis visited with Stephen and Chad and sent Russ a summary email. Visited with Russ; told the issue is happening 100% of the time. Discussing next steps internally. Primary access point is AW (Russ wants to confirm this is how it is set up). Russ - If nothing is wrong, he is asking to send something to his IT, so they can troubleshoot further. Team met with Russ on 1/27, tested and re-tested. Current vantage point is this is resolved.



## Customer Certificate of Acceptance Form

### DCPPM006-f03

Same	12. ISSI (Yes for OKC, No for OKWIN)	Partial		Waiting on OKC to program radios. Site adjacency settings need to be updated, at that point in time. Mears - putting OKWIN in radios to "finger tip room" Re-engage with Motorola? Who is going to PM this, after system acceptance? About 150 radios away from completion (on OKC side). Per Jim Harold, "about 2-3 weeks out". Get back on weekly calls with Motorola, and pull in Norman, as needed, for testing. Targeting meeting for 5/20; working with Dave Mears and Mike Smith on details. OKC units going back and forth - nobody is getting stranded. In-band GPS testing, request, by Russ. Auto roaming <u>working now</u> . Test final programming, on auto roaming, to see if GPS comes across ISSI.
Same	a. Radio reprogram			Waiting on OKC to program radios. Site adjacency settings need to be updated, at that point in time.
Done	b. Testing and Training		Complete	Norman will handle.
Done	13. Microwave Alarm Mapping	Yes	Complete	Nokia sent updated print out, but it only corrected one of the two radio snafu's. Bryan installed one, awaiting other one to arrive. Update: Nokia: "I have requested the label from the factory. I think they plan to ship by Friday (18th)."
Done	14. Symphony Console –		Complete	Jason provided update on 11/17 @ 9:11 AM; Russ will validate and respond back to Jason. Russ having issues with Marker tones as well (expired licenses). OKC can help Russ with getting them to work correctly.
Done	a. Web interface to RNM	Yes	Complete	Jason will track down more info; Daniel: licensing is likely the issue, but needs to be confirmed, will test via another engineer, who will then reach out to Dave to implement; one license for both (supervisor); license needed (?) - Jason will follow up on this. License not owned by Norman. Can Wanda send (6) now? (12) on punchlist/Ka-Comm. Locking codes provided by Dave Shepherd on 1/14 AM. Dave Shepherd attempting to do this; file share available, but needs help. Mike - need to log in admin for access. Re-send the email to Dave. Debbie pushed this and communicated this to Russ on 2/9.
Same	15. In-band GPS XL200's			Covered with radio reprogramming, above (12.a).
Same	a. Display on BeOn map			Covered with radio reprogramming, above (12.a).
Done	16. Remote start all generators		Complete	Jeff Cook demonstrated to Dave Shepherd on 11/17 AM.
Done	a. Remote start software - noted in final documentation details		Complete	Jeff Cook demonstrated to Dave Shepherd on 11/17 AM.
Done	17. Disable USB ports on Symphony		Complete	Confirmed it is providing power only.
Done	18. RNM text for critical alarms		Complete	Jason provided update on 9/11 @ 9:11 AM; early spring and ice storm: too many alarms are being sent out, so nothing goes out; Dave/Russ will do some testing to confirm
Done	19. Shane Turner system audit report	Yes	Complete	Already sent to Russ and Dean; this was a checklist for his audit report, but did not include his findings (Jason will follow up). Add Steve to this as well.
Done	20. Cyber security audit report	Yes	Complete	Working with John Casler on this. Russ will follow up with John on this one, prior to next meeting. Set up call with Kasler, Dave, Russ and LaForge. Norman can't get into OKC and vice versa. Are there security holes? Russ is good on 1/11 (afternoon) and 1/19 (AM). Meeting held on 1/11; Steve to sit down with Russ to firm up questions that they want answered. Can a T1 be secured over microwave, between the 7705's? Backhaul is just a pipeline; open platform, but security is handled in VIDA network. Once OKC is in the microwave network, they do NOT have full visibility to Norman's network. Request is for a clear document/map which Steve, Russ, IT can understand. Have active directories been shared, between OKC and Norman? All defaults have to be removed to Norman's preferences. Russ stated on 20th that Norman IT will send us questions they are attempting to get answers. Steve will send email. Needs help on 7705. Engineer spoke to Steve on 1/27; current L3Harris understanding is that all questions have been sufficiently answered.
Done	21. FATP and CATP final signed documents		Complete	FATP over to Russ and Dean.
	22. Change Order 7-13 signed documents for City Council Approval and signature	Yes		Provided to Major, previously; awaiting feedback; need signature; no updates as of yet; Jason send email over to Major regarding Tom Clair's request; January 12th is next reasonable date that City Council meets; Russ and Major available Monday afternoon or Tuesday morning for Tom Clair. Meeting held on 1/26 @ 8 AM, with Major, Russ, Dean, Tom and Jason. Russ providing update at getting this on early April agenda, with City Council. Russ will ask his Chief for follow up.
Same	23. Final Programming for subscribers			Dave Mears previously updated personalities on 9/17/19 and 1/22/20.
Same	a. ISSI	Yes		Refer to #12, above. Dave Shepherd will reach out to Dave Mears to confirm site adjacency subject matter.
Same	b. IP address in radios	Yes		Mears: Can this be rolled into the ISSI personality changes? Russ: Yes; IP just needs to be assigned to radios. Note: prolongs PS programming efforts.
Done	24. Fire Radios		Complete	Jason spoke with TAC; they are generating those features and allocating them over to SN's that Russ provided; training? Two LTE radios need all features. Russ is working on obtaining these. All radios have to be touched anyways, so units without UHF/VHF feature strings can be identified and then Russ can provide. Updated on 12/11: Deme radios are done, but fire radios do not possess features. Russ will provide Jason a list of those details. Update: S/N's captured, 6 more to go. Russ will attempt complete by end of day on 1/7. Dave provided Jason SN's on 1/21; Russ stated on 20th that Norman IT will send us questions they are attempting to get answers. Steve will send email. Needs help on 7705. Engineer spoke to Steve on 1/27; current L3Harris understanding is that all questions have been sufficiently answered.
Done	a. Full band updates in all radios	Yes	Complete	Jason spoke with TAC; they are generating those features and allocating them over to SN's that Russ provided; training? Two LTE radios need all features. Russ is working on obtaining these. All radios have to be touched anyways, so units without UHF/VHF feature strings can be identified and then Russ can provide. Updated on 12/11: Deme radios are done, but fire radios do not possess features. Russ will provide Jason a list of those details. Update: S/N's captured, 6 more to go. Russ will attempt complete by end of day on 1/7. Dave provided Jason SN's on 1/21; Russ stated on 20th that Norman IT will send us questions they are attempting to get answers. Steve will send email. Needs help on 7705. Engineer spoke to Steve on 1/27; current L3Harris understanding is that all questions have been sufficiently answered.
Done	25. System Printer	Yes	Complete	Jason ordered. Showing delivery of ~12/21.
Done	26. Tower Inspections due to long final system acceptance timeframe		Complete	
Done	27. System PM on RF & Microwave equipment	Yes	Complete	Being worked on currently. Schedule sent to Russ. They need report, that Jim will provide.
Done	28. PM on site compounds and other equipment before start of warranty		Complete	Being worked on currently. Schedule sent to Russ. Jason will follow up with Jim (compound specific).
	29. Pelator IV headset needed. Adaptor/radio pin out for SWAT headset.	Yes	6/1/2021	Jason having trouble getting a hold of a sales person to order this demo set from. Jason is working on this. 22 obtained for RMA; waiting on (3) more. 22 headsets will be sent back for RMA; (6) unopened and (16) lightly used. Russ provided Jason contact info of 3M sales person to execute order. Russ sent XL-200 PTT attachment, \$346 per connector. Headstyle configuration varies. Jason confirmed with 3M the headset/cord/connector. Order not placed as of yet. Green is the color, but the specific model is still under examination. Black is the only color available - its good. Quantity is for 16. Ordered to be placed 4/5/21; lead time ~4 weeks. Jason followed up on 5/20, feedback I received was: "Given there is a worldwide electronic component shortage, we are experiencing delays in getting products across the board. I have followed up with the supplier to see if 3M is being impacted in this way and will advise".
Done	30. Marker tones; separate - resolved		Complete	
Done	31. Dongle vs. Static license	Yes	Complete	
Done	32. Jason needs to follow up with Scott/get close out paperwork over to Russ/Dean	Yes	Complete	Draft copy sent over to Russ and Dean on 2/25. Spoke to Russ on 3/3 (he's on vacation), will review in earnest, once he returns on 3/8. Final public safety programming (at least carry in a bullet item into the original document), make addendum. Final SOW for final ECC move. L3Harris Customer Acceptance Form documentation sent over on February 24th - 30 days ago. No formal response from Norman, as of yet, other than ECC future work scope commentary. Dean has provided his feedback to Russ. Agenda item written up - date not set.
Done	33. Final site visit need to be done?		Complete	Dean - they should be walked with Jim, etc., prior to hand over. Russ - AW intake vent is pulled away from wall; never anchored properly? Jason will speak with Robbie, and get something set up. Vant required on 4/29.

Location: <https://share.harris.com/sites/PSPC-BMS/QMS%20Documents/DCPPM006-f03.docx>  
(NOTE: Printed copies – UNCONTROLLED)

DCPPM006-f03 (Rev H)





Customer Certificate of Acceptance Form  
DCPPM006-f03



## Customer Certificate of Acceptance Form DCPPM006-f03

### Addendum B:

- I. PS Radio Programming –L3Harris will support this future effort by providing two separate teams: one for fire and one for police, to program radios with updated site adjacency settings. Duration in market is unknown but estimated to be 3-4 weeks. PS Radios count (per Jesse Mitchell): 723.

II. Future ECC Move Scope Responsibility Matrix:

Tasks	L3Harris	City of Norman	Comments
Move consoles from current location to ECC	X		
Move backup radios (control stations) from current location to ECC	X		
Provide grounding at each console position	X		
Provide network cabling at each console position	X		
Move networking equipment from current location to ECC	X		
Current switched, routers, and net-clock will remain	X		
L3Harris will install redundant switches and routers (already in Norman's possession, verified)	X		
Move Zetron equipment and associated control station to ECC	X		
Install Coax for control stations	X		
Coax runs from antenna to hybrid combiner/duplexer for 12 control stations (current install is utilizing old coax for the ECC control stations, the 6 dispatch stations and toning radio are on new runs)	X		
Install Antennas for control stations	X		
2 Outdoor Directional yagi antennas (current ECC set-up is utilizing old antennas, the 6 dispatch stations and toning radio are on a new yagi)	X		
Move Primary SMT	X		
Move Secondary SMT	X		
Connect to fiber between ECC and ECC Water Tower	X		Will require an SFP for fiber assuming existing connection is Microwave
For the NSC move, ensure the other NSC is the active system control	X		i believe this is the NSC at Calypso Cove.
Move NSC from existing location to ECC	X		
Install net-clock and associated antenna and cable run	X		
Provide a liaison to consult with the architectural engineering group to discuss antenna mounting, cable runs and conduit/weatherhead locations (previously identified as Scott Fischer of Ka-Corn)	X		



Customer Certificate of Acceptance Form  
DCPPM006-f03

This is to certify that, having taken part in the agreed upon acceptance test, we declare the following system as accepted under the terms of this Agreement.

See attachments (no. of pages: 6)

**Customer Representative**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**L3Harris Corporation Representative**

Signature: TOM CLAIR

Printed Name: TOM CLAIR

Title: PRINCIPAL CONTRACTS

Date: 6/15/2021