

AGENDA
SOUTHERN NEVADA AREA COMMUNICATIONS COUNCIL
BOARD OF DIRECTORS
REGULAR MEETING

1:30 P.M. – JUNE 15, 2022
Las Vegas Valley Water District
1001 S Valley View Boulevard, MEAD 3
Las Vegas, NV 89153

ALL ITEMS LISTED ON THIS AGENDA ARE FOR ACTION BY THE BOARD OF DIRECTORS, UNLESS OTHERWISE INDICATED. ITEMS MAY BE TAKEN OUT OF ORDER. THE BOARD OF DIRECTORS MAY COMBINE TWO OR MORE AGENDA ITEMS FOR CONSIDERATION, AND/OR MAY REMOVE AN ITEM FROM THE AGENDA OR DELAY DISCUSSIONS RELATING TO AN ITEM ON THE AGENDA AT ANY TIME. COPIES OF WRITTEN MATERIALS PROVIDED TO THE BOARD MEMBERS IN ADVANCE OR AT THE MEETING MAY BE OBTAINED FROM JASON MANZO, SNACC OFFICE, 6000 EAST ROCHELLE, LAS VEGAS, NV OR BY CALLING (702) 455-7390.

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: At this time, the Board of Directors will hear general comments from the public on matters under the jurisdiction of the Southern Nevada Area Communications Council.

ITEM NO.

1. **FOR POSSIBLE ACTION:** Approve the June 15, 2022 agenda and the minutes of the May 18, 2022 Special Board meeting.
2. **FOR POSSIBLE ACTION:** Receive the Administrator's report with the inclusion of the SNACC monthly financial reports and budget variances for the month of March and April 2022 and the system reports for the months of April and May 2022.
3. **FOR POSSIBLE ACTION:** Approve and authorize the administrator to sign the Aviat Quote for Option 1 or Option 2 or take action as appropriate.
4. **FOR POSSIBLE ACTION:** For the Board to approve the quote from Motorola on the Juniper routers needed for the Microwave project.
5. **FOR DISCUSSION/ACTION:** For the Board to set a deadline to get as many radios on the SNACC system to be TDMA (Time Division Multiple Access) ready by 2024 and for those agencies which are not ready, SNACC will make a reasonable effort to help facilitate their transition to TDMA (Such as, by temporarily enabling Dynamic Dual Mode).
6. **FOR POSSIBLE ACTION:** Approve the Nevada Pool insurance for fiscal year 2023

COMMENTS BY THE GENERAL PUBLIC

NO ACTION MAY BE TAKEN: At this time, the Board of Directors will hear general comments from the public on matters under the jurisdiction of the Southern Nevada Area Communications Council.

NEXT MEETING DATE/ADJOURN

AFFIDAVIT OF POSTING

This is a public meeting. In conformance with the Nevada Open Meeting Law, this agenda has been posted in the following locations:

Clark County Government Center
Clark County Water Reclamation District
Clark County Courthouse Annex
Las Vegas Valley Water District
<https://notice.nv.gov/>
PLEASE POST

Chairman: Scott Mazick **Vice Chairman:** Chris Vasquez
Board Members: Wendy Lotman, Brian O'Neal, Terrance Holmes, Vince Albowicz,
Isaac Henn, Frank Milligan, Mitchell Maciszack & Brad Adams

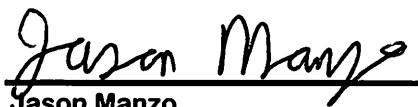
**Southern Nevada Area Communications Council
Agenda Item**

Issue: Approve the June 15, 2022 agenda and the minutes of the May 18, 2022 Special Board meeting.	Date: June 15, 2022
Petitioner: Jason Manzo, SNACC Administrator	Agenda Item: 1
Recommendation - FOR POSSIBLE ACTION: Approve the June 15, 2022 agenda and the minutes of the May 18, 2022 Special Board meeting and/or take action as necessary.	

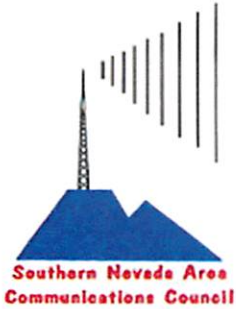
Fiscal Impact:
None

Background:
The Southern Nevada Area Communications Council operates an 800 megahertz (MHz) Public Safety radio communications system in the Clark County /Las Vegas urban area. This will be a reoccurring item.

Respectfully Submitted:



Jason Manzo
SNACC Administrator



Southern Nevada Area Communications Council

SPECIAL MEETING MINUTES

Date: May 18, 2022

Location:

Southern Nevada Area Communications Council
6000 E. Rochelle Ave
Las Vegas, NV 89122

Time: 1:30 P.M.

Board members present:

Scott Mazick, Chair
Frank Milligan
Terrance Holmes
Henry Blackeye
Tim White

Chris Vasquez, Vice Chair
Brian O'Neal
Wendy Lotman
Isaac Henn

Call to Order

Public Comment: NONE GIVEN

Unless otherwise stated, items may be taken out of the order presented on the agenda, and two or more items may be combined for consideration. The Board may also remove an item from the agenda or delay discussion relating to an item at any time

1. Approve the May 18, 2022 agenda and the minutes from the April 20, 2022 meeting. (*FOR POSSIBLE ACTION*)
 - Motion was made to approve, motion passed unanimously.
2. Approve the Fiscal Year 2023 SNACC Budget, presented by Jason Manzo. (*FOR POSSIBLE ACTION*)
 - Motion was made to approve the presented budget with Page 8 to be included, motion passed unanimously

Southern Nevada Area Communications Council

Fiscal Year 2023

Final Budget

Presented May 18, 2022

SNACC – FY23 BUDGET: REVENUES

FY 22 Revenues - Budgeted	
Radio Fees	\$ 2,924,141
Reimbursement of Console SUA II & Maintenance	\$ 420,318
Total	\$ 3,344,459

FY 23 Revenues	
Radio Fees	\$ 2,804,902
Reimbursement of Console SUA II & Maintenance	\$ 420,318
Total	\$ 3,225,220

- Fiscal year 2023 revenues ~
 - Annual fee is increased 5.7% to \$311.62 per radio
 - Reimbursement of console maintenance is increased 3% in response to the annual escalation rate as contracted with Motorola

SNACC – FY23 BUDGET: SALARIES and BENEFITS

FY22 Salaries, Wages, and Benefits (Budgeted)

Salaries	\$	307,185
Benefits	\$	144,903
Overtime	\$	7,500
Call Back	\$	2,500
Total	\$	462,088

FY23 Salaries, Wages and Benefits

Salaries	\$	338,873
Benefits	\$	153,800
Overtime	\$	7,500
Call Back	\$	2,500
Total	\$	502,673

- Fiscal year 2023 salaries and benefits budget ~
 - Salaries and Benefits are increased due to Merit and COLA from Labor Contract.

SNACC – FY23 BUDGET: SERVICES AND SUPPLIES

FY22 Services and Supplies		
FCC licensing assistance	\$	1,780
Repair, maintain, clean facilities	\$	2,720
Air Conditioning Service & Repairs	\$	9,000
UPS maintenance	\$	5,400
Rack Space Rental at Apex and Suncoast	\$	8,466
Lease of SNACC offices	\$	12,000
Elkhorn lease	\$	6,000
Business Insurance	\$	23,000
Data Circuit charges	\$	5,320
Keys	\$	205
Office, cleaning supplies	\$	6,400
Hardware and supplies	\$	13,264
Computer equipment and software	\$	4,500
Electricity	\$	16,000
Staff Travel/Training	\$	10,000
Support, incl Administrative Support Agrmnt	\$	48,763
Telecommunications	\$	4,560
Printing	\$	2,100
Automotive	\$	20,000
Total	\$	199,478

FY23 Services and Supplies		
FCC licensing assistance	\$	1,780
Repair, maintain, clean facilities	\$	2,720
Air Conditioning Service & Repairs	\$	9,000
UPS maintenance	\$	5,400
Rack Space Rental at Apex and Suncoast	\$	8,466
Lease of SNACC offices	\$	12,000
Elkhorn lease	\$	6,000
Business Insurance	\$	23,000
Data Circuit charges	\$	5,320
Keys	\$	205
Office, cleaning supplies	\$	6,400
Hardware and supplies	\$	13,264
Computer equipment and software	\$	4,500
Electricity	\$	16,000
Staff Travel/Training	\$	10,000
Support, incl Administrative Support Agrmnt	\$	48,763
Telecommunications	\$	4,561
Printing	\$	2,100
Automotive	\$	20,000
Total	\$	199,479

- Fiscal year 2023 services and supplies budget ~

SNACC – FY23 BUDGET: SUAll and MAINTENANCE

FY22 SUAll and Maintenance

SUAll for Consoles (reimbursed)	\$	230,568
Maintenance for Consoles (reimbursed)	\$	174,002
SUAll for system infrastructure	\$	298,881
Maintenance for system infrastructure	\$	495,526
Total	\$	1,198,977

FY23 SUAll and Maintenance

SUAll for Consoles (Reimbursed)	\$	230,568
Maintenance for Consoles (Reimbursed)	\$	189,751
SUAll for system infrastructure	\$	298,870
Maintenance for system infrastructure	\$	510,392
Total	\$	1,229,582

- Fiscal year 2023 SUAll and Maintenance ~
 - Infrastructure and console maintenance increases are at the contracted annual escalation rate of 3%.

SNACC – FY23 BUDGET: CAPITAL

FY22 Capital - Budgeted

Capital lease interest	\$	68,048
Capital lease principal	\$	514,533
Microwave upgrade	\$	1,900,000
Replace Vehicle 14236	\$	75,000
Arden Site AC/Genesis/Device Mgmt	\$	92,500
Total	\$	2,557,582

FY23 Capital - Budgeted

Capital lease interest	\$	47,996
Capital lease principal	\$	534,586
Microwave upgrade	\$	1,900,000
Simulcast	\$	1,500,000
Total	\$	3,982,582

- Fiscal year 2023 capital budget
- Status of Capital Lease Agreement
 - Original amount of issue in fiscal year 2015: \$4,795,356
 - Final payment date: December of 2024
 - Principal balance at end of fiscal year 2022: \$1,375,782
 - Principal balance at end of fiscal year 2023: \$841,196

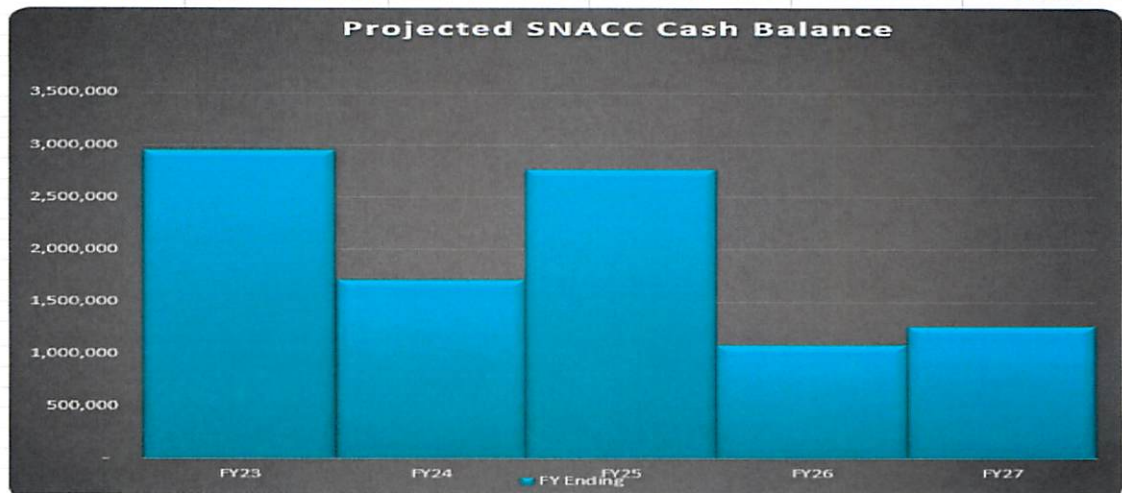
SNACC – FY23 BUDGET: FUTURE CAPITAL PROJECTS

5 YEAR CAPITAL PLAN	FY23	FY24	FY25	FY26	FY27
Microwave upgrade	\$1,900,000				
Simulcast Redesign Project	\$1,500,000	\$2,000,000			
Device Management - licenses for 3,000 addtl radios		\$ 75,000	\$ 75,000		
Replace vehicle # 15722			\$ 75,000		
Device Management - licenses for 10,000 radios				\$1,250,000	
Brooks Site Air Conditioners (2x4 Ton Units)				\$ 20,000	
TDMA Migration				\$2,000,000	\$1,500,000
	<u>\$3,400,000</u>	<u>\$2,075,000</u>	<u>\$150,000</u>	<u>\$3,270,000</u>	<u>\$1,500,000</u>

- Proposed Future Capital Projects ~
 - Device Management: This allows for firmware upgrades and is used in conjunction with OTAP. This also automatically tracks codeplug data for each radio on the system.
 - Simulcast Redesign Project – This allows SNACC to expand and align our current radio coverage in the Las Vegas Valley to keep pace with the current growth trend.
 - Microwave Upgrade Project: Budgeted amount is \$1.9 – Microwaves are at end of life and need to be upgraded to maintain compatibility to the SNACC System. Microwaves have to be upgraded before the next system upgrade which will be taking place in September 2022.

SNACC – FY23 BUDGET: CASH BALANCE

Projected Cash Balance	FY23	FY24	FY25	FY26	FY27
	projected	projected	projected	projected	projected
Cash Balance (carried forward)	5,586,882	2,947,327	1,709,324	2,768,528	1,084,552
Revenue	3,344,459	3,535,093	3,736,593	3,949,579	4,174,705
Expense	2,001,431	2,115,513	2,236,097	2,363,555	2,498,277
Capital (incl. lease)	3,982,583	2,657,583	441,292	3,270,000	1,500,000
FY Ending	2,947,327	1,709,324	2,768,528	1,084,552	1,260,980



- SNACC fund projected cash balance ~
 - With the current capital plan, anticipated cash balance will decline through fiscal year 2027 with an exception in fiscal year 2024 and 2027.

SNACC – FY23 BUDGET: AGENCY BILLINGS

SNACC FY23 BILLABLE RADIO INVENTORY					
Member	# Radios	FY 23 Fee	Member	# Radios	FY23 Fee
American Medical Reponse	141	43,939.09	Henderson Office of Health and Safety	10	3,116.25
Boulder City Fire	38	11,841.74	Henderson Police Department	1011	315,052.61
Boulder City Marshals	6	1,869.75	Henderson Utilities	54	16,827.74
Boulder City PD	104	32,408.97	Las Vegas Valley Water Department	558	173,886.60
Clark County School District Attendance Officers	31	9,660.37	SNWA	366	114,054.65
Clark County School District Police	381	118,729.03	Las Vegas Animal Control	32	9,971.99
Clark County Water Reclamation	152	47,366.96	Las Vegas Convention & Visitors Authority	2	623.25
Clark County Department of Aviation	998	311,001.49	Las Vegas Court Marshals	36	11,218.49
Clark County Boulder City Constable	5	1,558.12	Las Vegas Detention & Enforcement	207	64,506.32
Clark County Building & Fire Prevention	50	15,581.24	Las Vegas Fire Department	675	210,346.70
Clark County Coroner	1	311.62	Las Vegas Marshals	184	57,338.95
Clark County Family Services	13	4,051.12	Las Vegas Parking Enforcement	38	11,841.74
Clark County Fire Department	551	171,705.23	Las Vegas Water Pollution Facility (WPCF)	2	623.25
Clark County Constable - Henderson	5	1,558.12	Medic West	93	28,981.10
Clark County - Henderson Justice Court Marshals	12	3,739.50	Mercy Air Arizona	4	1,246.50
Clark County IT	9	2,804.62	Mercy Air Nevada	25	7,790.62
Clark County Juvenile Justice	2	623.25	MGM Resorts International	1	311.62
Clark County Office of Emergency Management	16	4,986.00	Moapa Valley Fire District	1	311.62
Community Ambulance	175	54,534.33	North Las Vegas Fire Department	205	63,882.10
CrossRoads of Southern Nevada	1	311.62	North Las Vegas Police Department	929	289,494.98
Elite Medical Center	1	311.62	Nye County IT	169	52,663.78
Dignity Health - St. Rose Micro	5	1,558.12	Nye County IT VHF	395	23,700.00
Guardian Elite Medical Services	26	8,102.24	OptimuMedicine	6	1,869.75
Healthcare America - SHS_ALIANTE ER	1	311.62	Pahrump Valley Fire Department	35	10,906.87
Healthcare America - SHS_LAKES ER	1	311.62	Pahrump Valley Fire Department VHF	24	1,440.00
Healthcare America - SHS_LAS VEGAS ER	1	311.62	Paiute Tribal Police	34	10,595.08
Healthcare America - SHS_SKYE CANYON ER	1	311.62	RTC	1074	334,684.97
Healthcare America - SHS_SUNRISE ER	2	623.25	Southern Nevada Health District	75	23,371.86
Henderson Alternative Sentencing	9	2,804.62	Nevada Gaming Control Board	82	25,553.23
Henderson Attorney	5	1,558.12	United States Air Force - Nellis	3	934.87
Henderson Business License	7	2,181.37	Universal Health Services - Blue Diamond	1	311.62
Henderson Code Enforcement	10	3,116.25	Universal Health Services - Green Valley	1	311.62
Henderson Fire	270	84,138.68	Universal Health Services - Valley Vista	1	311.62
Henderson Jail	75	23,371.86	University Housing & Residential Life- UNLV	24	7,478.88
Henderson Marshals	26	8,102.24	University Parking and Transportation Services	26	8,102.12
			University Police Services	208	64,816.96

- Agency billings for fiscal year 2023 ~
 - Fees shown above are based on current inventory as of the date of this report. These numbers are provided for budgeting purposes only and are subject to change as inventory numbers change.

End

COMMENT BY THE GENERAL PUBLIC:

NEXT MEETING DATE/ADJOURNED:

Next meeting is scheduled for June 15, 2022,

Meeting adjourned at 2:09 PM

**Southern Nevada Area Communications Council
Agenda Item**

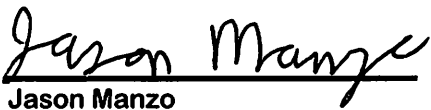
Issue: Receive the Administrator's report with the inclusion of the SNACC monthly financial reports and budget variances for the month of March and April 2022 and the system reports for the months of April and May 2022.	Date: June 15, 2022
Petitioner: Jason Manzo, SNACC Administrator	Agenda Item: 2
Recommendation - FOR DISCUSSION: For the Board to receive the Administrator's report with the inclusion of the SNACC monthly financial reports and budget variances for the month of March and April 2022 and the system reports for the months of April and May 2022. .	

Fiscal Impact:
None

Background:

The Board gave the request to the SNACC Administrator on August 2015 to have the SNACC Budget presented in his monthly Administrator's Report. This was requested to inform the Board on the monthly SNACC expenses and to show what is currently available. This will be a reoccurring item.

Respectfully Submitted:



Jason Manzo

SNACC Administrator

SNACC ADMINISTRATOR'S REPORT

JUNE 15, 2022

SNACC UPDATES:

On Wednesday June 8th SNACC lost power to our office due to a construction project. We were informed that it would be at least 48 hours, before power would be restored. Because of our ups and generator there was no impact to the SNACC system. I would like to thank Clark County Automotive. I informed our Automotive technicians of the situation. Our generator has enough fuel to run for about 48 hours. Clark County Automotive put us on a rotating schedule and topped our fuel and looked over the generator every 12 hours to ensure no issues would arise during the extended power outage until normal power was restored.

The 2 new AC units have come in for Arden Peak. We placed the order for these units last December. We are scheduled to replace them on Monday June 20th.

SNACC has replaced the broken UPS at Elkhorn with a new Eaton UPS on June 1st.

Motorola will be upgrading our system to version 2021.1. Any dispatch center that has an AIS (Archive Interface Server) with a Verint or NICE recorder will need to make sure that their current recording device will be compatible with Motorola Astro version 2021.1. We have 8 dispatch centers with AIS's on our system. If their recorder is not compatible, then they may lose the ability to record radio traffic.

I sent this information to each of the following agencies on May 18th, 2021, September 21st 2021, and on March 1st 2022. SNACC's upgrade will take place from September 26, 2022 thru October 7th, 2022.

Site 02-FAO

Site 03- Las Vegas Detention Center

Site 04- Henderson

Site 10- Boulder City

Site 14- National Park Service

Site 16- UNLV

Site 17- Las Vegas Court House

Site 27- North Las Vegas

BUDGET VARIANCES:

March 2022

1. **Equipment Maintenance Repair** - \$4443.32 – (-44.8) – Locus USA warranty DiagnostX
2. **Console Maintenance** - \$184,224.62 - (-5.9) – this is to be reimbursed by the agencies with dispatch centers.
3. **Infrastructure Maintenance** - \$495,256.36 – 100% - SNACC infrastructure maintenance, that is all of our sites, microwaves and sites belonging to SNACC.
4. **Electricity** – \$1,184.87 – 7.4% - City of Boulder, Nevada Power Company
5. **Vehicle Maintenance** - \$2,093.41 – 10.5% - March 2022
6. **Telecommunications** - \$534.40 – 5.9% - United Teleservice and Telecom
7. **Print/Reproduction** - \$310.88 – 14.8% - Konica Minolta

April 2022

1. **Overtime** - \$1,324.52 – 17.7%
2. **Call Back** - \$392.04 – 15.7%
3. **Cleaning Custodial** - \$2,450 – (-32.4%) – Mr. Janitorial cleaning services
4. **Infrastructure Maintenance** - \$529,432.52 – (-77.1)
5. **Electricity** - \$2,460.48 –
6. **Vehicle Maintenance** - \$4,131.07 – 20.6% - April 2022
7. **Telecommunications** - \$1021.42 – 10.3% - United Teleservice and Telecom
8. **Print/Production** - \$175.50 – 8.4% - Konica Minolta
9. **CC Agreement, ERP, IT Support** - \$10,872.67 – County OH, ERP, IT

SYSTEM REPORTS:

April 2022

1. **Airtime** – 2,982.9 (hours)
2. **Push-To-Talks** – 2,161,734
3. **Busies** – 114 (2.66 minutes)

May 2022

1. **Airtime** – 3088.9 (Hours)
2. **Push-To-Talks** – 2,223,068
3. **Busies** – 135 (3.42 minutes)

These reports can be found on the SNACC Website: <http://SNACCOnline.com>

FUND 2520.000

Southern Nevada Area Communications Council

SNACC BUDGET REPORT: MARCH 2022

CATEGORY	BUDGET	ACTUALS YTD	MARCH	
			ACTUALS	% REMAINING
Annual Radio Fees and Buy Ins Billed	2,744,265.00	(2,725,464.80)		
Cost Recovery Billed (Console SUA II and Maintenance)	404,570.00	(415,702.27)	(414,890.17)	
Interest	40,293.00	(7,209.88)	(6,542.58)	
TOTAL REVENUES	3,189,128.00	(3,148,376.95)	(421,432.75)	-
Salaries & Benefits	460,269.00	298,703.76	32,467.61	35.1%
Overtime	7,500.00	2,641.28	326.70	64.8%
Call Back	2,500.00	588.06	-	76.5%
Professional services	1,780.00	96.00	96.00	94.6%
Cleaning/Custodial	2,720.00	1,150.00		57.7%
Equipment maintenance and repair	12,500.00	17,519.32	4,443.32	-40.2%
Console SUAII	230,568.00			100.0%
Console maintenance	174,002.00	184,224.62	184,224.62	-5.9%
Infrastructure SUAII	298,881.00			100.0%
Infrastructure maintenance	495,526.00	495,526.36	495,526.36	0.0%
Site rentals	14,466.00	7,303.02		49.5%
Office space (Water Reclamation)	12,000.00	12,000.00		0.0%
Business liability insurance	23,000.00	31,018.41		-34.9%
Operating and cleaning supplies	705.00	466.25		33.9%
Office supplies	5,900.00	407.84	(74.97)	93.1%
Minor equip (tools, cables)	13,264.00	228.86		98.3%
Computers and supplies	4,500.00	4,254.62		5.5%
Electricity	16,000.00	11,683.30	1,184.87	27.0%
Capital lease interest	68,048.00	36,483.08		46.4%
Capital lease principal	514,533.00	307,307.83		40.3%
Travel/Training	10,000.00			100.0%
Vehicle Maint.	20,000.00	15,013.99	2,093.41	24.9%
Telecommunications	9,881.00	5,410.65	534.40	45.2%
Print/Reproduction	2,100.00	1,524.79	310.88	27.4%
CC Agreement, ERP, IT Support, etc.	47,391.00	32,438.01		31.6%
Capital Projects	2,102,500.00	67,680.00	15,000.00	96.8%
TOTAL EXPENSES	4,550,534.00	1,533,670.05	736,133.20	66.3%

Appropriated EFB	2,240,953.00			100.0%
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Beginning FY fund balance	2,421,044
Fund balance as of report date:	5,968,796
Estimated FY22 ending fund balance:	4,607,390

SNACC BUDGET REPORT: APRIL 2022

CATEGORY	BUDGET	ACTUALS YTD	APRIL	
			ACTUALS	% REMAINING
Annual Radio Fees and Buy Ins Billed	2,744,265.00	(2,725,661.36)	(196.56)	
Cost Recovery Billed (Console SUA II _{and} Maintenanar	404,570.00	(415,702.27)		
Interest	40,293.00	(12,362.60)	(5,152.72)	
TOTAL REVENUES	3,189,128.00	(3,153,726.23)	(5,349.28)	-
Salaries & Benefits	460,269.00	330,265.98	31,562.22	28.2%
Overtime	7,500.00	3,965.80	1,324.52	47.1%
Call Back	2,500.00	980.10	392.04	60.8%
Professional services	1,780.00	96.00		94.6%
Cleaning/Custodial	2,720.00	3,600.00	2,450.00	-32.4%
Equipment maintenance and repair	12,500.00	17,519.32		-40.2%
Console SUAII	230,568.00			100.0%
Console maintenance	174,002.00	184,224.62		-5.9%
Infrastructure SUAII	298,881.00	529,432.52	529,432.52	-77.1%
Infrastructure maintenance	495,526.00	495,526.36		0.0%
Site rentals	14,466.00	7,303.02		49.5%
Office space (Water Reclamation)	12,000.00	12,000.00		0.0%
Business liability insurance	23,000.00	31,018.41		-34.9%
Operating and cleaning supplies	705.00	466.25		33.9%
Office supplies	5,900.00	407.84		93.1%
Minor equip (tools, cables)	13,264.00	228.86		98.3%
Computers and supplies	4,500.00	4,254.62		5.5%
Electricity	16,000.00	14,143.78	2,460.48	11.6%
Capital lease interest	68,048.00	36,483.08		46.4%
Capital lease principal	514,533.00	307,307.83		40.3%
Travel/Training	10,000.00			100.0%
Vehicle Maint.	20,000.00	19,145.06	4,131.07	4.3%
Telecommunications	9,881.00	6,432.07	1,021.42	34.9%
Print/Reproduction	2,100.00	1,700.29	175.50	19.0%
CC Agreement, ERP, IT Support, etc.	47,391.00	43,490.68	10,872.67	8.2%
Capital Projects	2,102,500.00	67,500.00		96.8%
TOTAL EXPENSES	4,550,534.00	2,117,492.49	583,822.44	53.5%
Appropriated EFB	2,240,953.00			100.0%
Beginning FY fund balance	2,421,044			
Fund balance as of report date:	5,414,974			
Estimated FY22 ending fund balance:	4,053,568			


**Southern Nevada Area Communications Council
Agenda Item**

Issue: Approve and authorize the administrator to sign the Aviat Quote for option 1 or two or take action as appropriate.	Date: June 15, 2022
Petitioner: Jason Manzo, SNACC Administrator	Agenda Item: 3
Recommendation - FOR POSSIBLE ACTION: Approve and authorize the administrator to sign the Aviat Quote for Option 1 or Option 2 or take action as appropriate.	

Fiscal Impact:
OPTION 1: \$1,291,651
OPTION 2: \$1,171,566

Background:
The newest SNACC Microwaves are about fifteen plus years old and the older microwaves are close to twenty, all of which are at end of life for support.

Respectfully Submitted:



Jason Manzo
SNACC Administrator

Aviat U.S., Inc.
860 N. McCarthy Blvd., Suite 200
Milpitas, CA 95035



Company **SNACC - CLARK COUNTY - USA**
Attn Jason Manzo
Communications Network Analyst
6000 E Rochelle Ave Las Vegas NV 89122
Office: 702-455-7390

Project Number : NA181003-55697
Project Date : 4/12/2022
Issue No : D
Territory Manager : Ali Hirsra
System Engineer : Girindra Lone
Sales Engineer : Sherry Lu
Terms : NET 30, pricing per State of NV RFP 3234
Delivery : 8-10 weeks for equipment ARO, 4-6 weeks for installation
Expiration : 90 days
Currency : USD
Freight : Prepaid & Bill, Destination

SNACC MW replacement: Option 1 - 8 hops
Aviat Networks Confidential and Proprietary Information

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT PRICE	SYSTEM		SNACC HQ		Arden Peak		Mandalay Bay		Suncoast	
				QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	
1.000	Eclipse Radios												
1.001	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP												
1.002	5.8-U6 GHz, Filter-non ACCP	EV206-AMT-AM0-410000	\$12,738	8	\$101,904	2	\$25,476	3	\$38,214	1	\$12,738		
1.003	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP L6 GHz, Filter-non ACCP	EV206-AEL-AE0-410000	\$17,967	2	\$35,934								
1.004	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV206-AMC-AM0-410000	\$12,738	2	\$25,476								
1.005	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP 11 GHz, Filter-non ACCP	EV206-AEB-AE0-410000	\$17,967	4	\$71,868					1	\$17,967	2	\$35,934
1.006	WG Extension Kit 6 GHZ												
1.007	1st Shelf												
1.008	WG EXT KIT IRU600 V3 6GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA101	\$343	5	\$1,715	1	\$343	1	\$343	1	\$343		
1.009	WG EXT KIT IRU600 V3 6GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB201	\$1,119	3	\$3,357	1	\$1,119	1	\$1,119				
1.010	WG EXT KIT IRU600 V3 6GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-CC301	\$2,200	1	\$2,200			1	\$2,200				
1.011	WG EXT KIT IRU600 V3 6GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-DD401	\$1,461										
1.012	WG Extension Kit 11 GHZ	179-530135-BB203	\$1,803										
1.013	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA121	\$506	3	\$1,518							1	\$506
1.014	WG EXT KIT IRU600 V3 11GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB221	\$1,028	3	\$3,084	1	\$1,028					1	\$1,028
1.015	WG EXT KIT IRU600 V3 11GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-CC321	\$1,321	2	\$2,642					1	\$1,321		
1.016	WG EXT KIT IRU600 V3 11GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-DD421	\$2,003										
1.017	EXT BRKT KIT IRU600 2 SHELF (179-530089-001_REV002)	179-530089-001	\$190	2	\$380							1	\$190
1.018	EXT BRKT KIT IRU600 3 SHELF (179-530089-002_REV002)	179-530089-002	\$380	2	\$760	1	\$380			1	\$380		
1.019	EXT BRKT KIT IRU600 4 SHELF (179-530089-003_REV002)	179-530089-003	\$569	2	\$1,138			1	\$569				
2.000	Eclipse Indoor Unit and Data Cards												
2.001	INUe												
2.002	ECLIPSE, INTELLIGENT NODE UNIT 2RU, INC IDCE, FAN, NCCV2, HIGH OUTPUT	EXX-000-204	\$1,778	16	\$28,448	2	\$3,556	3	\$5,334	2	\$3,556	2	\$3,556
2.003	NODE PROTECTION CARD, HIGH OUTPUT	EXS-002	\$232	16	\$3,712	2	\$464	3	\$696	2	\$464	2	\$464
2.004	KIT BRACKET 2RU COMMON BREAKERS & BLANKING PLUGS PER RACK PER	179-530064-001	\$11	16	\$176	2	\$22	3	\$33	2	\$22	2	\$22
2.005	DRAWING	COMMON-BREAKERS-RACK	\$129	8	\$1,032	1	\$129	1	\$129	1	\$129	1	\$129
2.006	SIPO-CABLES	SIPO-CABLES	\$3	8	\$24	1	\$3	1	\$3	1	\$3	1	\$3
2.007	Aux Card and Cables												
2.008	AUX, ALARM I/O CARD	EXA-001	\$340	8	\$2,720	1	\$340	1	\$340	1	\$340	1	\$340
2.009	M66 Punch-Down Block Kit	179-530132-001	\$42	8	\$336	1	\$42	1	\$42	1	\$42	1	\$42
2.010	CABLE, ALARM I/O HD15 TO WIREWRAP, 15M (037-579470-015V, RE	037-579470-015	\$123	8	\$984	1	\$123	1	\$123	1	\$123	1	\$123
2.011	RADIO CARD												
2.012	RAC 70, OPSK-4096QAM, NO XPIC, ACM	EXR-700-002	\$652	32	\$20,864	4	\$2,608	6	\$3,912	4	\$2,608	4	\$2,608
2.013	DAC GE3 GIGABIT ETHERNET SWITCH CARD												
2.014	DAC GE3 GIGABIT ETHERNET SWITCH CARD	EXD-181-002	\$735	32	\$23,520	4	\$2,940	6	\$4,410	4	\$2,940	4	\$2,940
2.015	CABLE PROT / BRIDGEING GE3, DIRECT FIT, 1M	037-579461-001	\$91	12	\$1,092	1	\$91	3	\$273	1	\$91	1	\$91
2.016	XCVR ELECTRICAL SFP, GE3 ONLY, W/LOS 3V3 COM (ABCU-5730RZ)	083-845434-001	\$135	24	\$3,240	2	\$270	6	\$810	2	\$270	2	\$270

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT PRICE	SYSTEM	
				QTY	PRICE
7.025	WALL SHELF FOR RFS DEHYDRATORS APD-D SERIES (SHELF-APD-D)	RFS-SHELF-APD-D	\$105	7	\$735
7.026	DISTRIBUTION MANIFOLD,4-PORT,0-5.0 PSIG,25 FEET OF TUBING PER PORT,WALL MOUNTABLE (L6600D-4)	AND-L6600D-4	\$439	7	\$3,073
8.000 Services					
8.010	RADIO INTEGRATION	SVCS-IN-SIPO-RI	\$22,016	1	\$22,016
8.011	VENDOR INTEGRATION	SVCS-IN-SIPO-VI	\$8,302	1	\$8,302
8.012	FACTORY ACCEPTANCE TEST (FAT)- With Customer, 2 days	SVCS-IN-SIPO-AT	\$4,612	1	\$4,612
8.013	PROGRAM MANAGEMENT	SVCS-IN-PM-PM	\$35,181	1	\$35,181
8.014	NETWORK/SYSTEM ENGINEERING	SVCS-PN-EN-SE	\$26,252	1	\$26,252
8.015	Transmission Engineering-Path Surveys/Design Finalization	SVCS-PN-EN-XE	\$25,006	1	\$25,006
8.016	LICENSE APPLICATIONS	SVCS-PN-EN-XE-LA	\$12,274	1	\$12,274
8.017	Project Engineering-Site Surveys	SVCS-IN-SS-PE	\$15,806	1	\$15,806
8.018	Project Engineering-Day to Day	SVCS-IN-SS-PE	\$18,442	1	\$18,442
8.019	CONFIG ENG / DOCUMENTATION / DRAFTING	SVCS-IN-SS-CEDFT	\$9,595	1	\$9,595
8.020	NI - Provision installation and final radio testing	SVCS-IN-IC-FI	\$24,180	1	\$24,180
8.021	FIELD INSTALLATION - Radios and DC power	SVCS-IN-IC-FI	\$118,418	1	\$118,418
8.022	Field Install (Antenna Installation)	SVCS-IN-IC-AS	\$227,928	1	\$227,928
8.023	Equipment Removal - Antenna/WG, radio and DC power system (Decomm and Transport)	SVCS-IN-IC-AS	\$49,192	1	\$49,192
8.024	Warehousing	SVCS-IN-IC-AS	\$8,580	1	\$8,580
8.025	Training for IRU600/ODU600, CTR8540 and Provision, 5 days	TR-WW-GEN5-01C	\$15,900	1	\$15,900
Grand Total (Excluding Applicable Taxes and Freight)					\$1,364,022
8.026	FREIGHT	FREIGHT	\$36,751	1	\$36,751
8.027	Additional Executive loyalty Discount for turnkey projects	EQ DISCOUNT	-\$109,122	1	-\$109,122
Grand Total (Excluding Applicable Taxes)					\$1,291,651
OPTIONAL EXTENDED WARRANTY					
9.000	Warranty, 5 years				
9.001	WARRANTY PLUS IW - NA&C, 24 MONTHS, IRU-600	SNA-BWXXA1002438	\$202	36	\$7,272
9.002	WARRANTY PLUS NW - NA&C, 36 MONTHS, IRU-600	SNA-BNWXA1003638	\$760	34	\$25,840
9.003	MW EQUIPMENT INSTALLATION AUDIT	SVCS-IN-SS-IA		5	
TOTAL FOR OPTIONAL EXTENDED WARRANTY					\$33,112

SNACC HQ		Arden Peak		Mandalay Bay		Suncoast		
QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY
1	\$105	1	\$105	1	\$105	1	\$105	
1	\$439	1	\$439	1	\$439	1	\$439	
\$109,290		\$121,684		\$87,120		\$86,538		
\$109,290		\$121,684		\$87,120		\$86,538		
4	\$808	6	\$1,212	4	\$808	4	\$808	
4	\$3,040	6	\$4,560	2	\$1,520	4	\$3,040	
1				4				
\$3,848		\$5,772		\$2,328		\$3,848		

Aviat U.S., Inc.
 860 N. McCarthy Blvd., Suite 200
 Milpitas, CA 95035

Company **SNACC - CLARK COUNTY - USA**
 Attn Jason Manzo
 Communications Network Analyst
 6000 E Rochelle Ave Las Vegas NV 89122
 Office: 702-455-7390



Project Number : NA181003-55697
 Project Date : 4/12/2022
 Issue No : D
 Territory Manager : Ali Hirsra
 System Engineer : Girindra Lone
 Sales Engineer : Sherry Lu
 Terms : NET 30, pricing per State of NV RFP 3234
 Delivery : 8-10 weeks for equipment ARO, 4-6 weeks for installation
 Expiration : 90 days
 Currency : USD
 Freight : Prepaid & Bill, Destination

SNACC MW replacement: Option 2 - 7 hops
Aviat Networks Confidential and Proprietary Information

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT PRICE	SYSTEM		SNACC HQ		Arden Peak		Mandalay Bay		Suncoast		Brook
				QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY
1.000	Eclipse Radios													
1.001	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 5.8-UG GHz, Filter-non ACCP	EV206-AMT-AM0-410000	\$12,738	6	\$76,428									
1.002	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP L6 GHz, Filter-non ACCP	EV206-AEL-AE0-410000	\$17,967	2	\$35,934									1
1.003	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV206-AMC-AM0-410000	\$12,738	2	\$25,476									
1.004	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP 11 GHz, Filter-non ACCP	EV206-AEB-AE0-410000	\$17,967	4	\$71,868					1	\$17,967	2	\$35,934	1
1.005	WG Extension Kit 6 GHZ													
1.006	1st Shelf													
1.007	WG EXT KIT IRU600 V3 6GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA101	\$343	4	\$1,372	1	\$343	1	\$343	1	\$343			
1.008	WG EXT KIT IRU600 V3 6GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB201	\$1,119	3	\$3,357	1	\$1,119	1	\$1,119					1
1.009	WG EXT KIT IRU600 V3 6GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-CC301	\$2,200											
1.010	WG EXT KIT IRU600 V3 6GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-DD401	\$1,461											
1.011	WG Extension Kit 11 GHZ													
1.012	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA121	\$506	3	\$1,518							1	\$506	1
1.013	WG EXT KIT IRU600 V3 11GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB221	\$1,028	3	\$3,084	1	\$1,028					1	\$1,028	
1.014	WG EXT KIT IRU600 V3 11GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-CC321	\$1,321	2	\$2,642					1	\$1,321			
1.015	WG EXT KIT IRU600 V3 11GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-DD421	\$2,003											
1.016	EXT BRKT KIT IRU600 2 SHELF (179-530089-001_REV002)	179-530089-001	\$190	2	\$380							1	\$190	1
1.017	EXT BRKT KIT IRU600 3 SHELF (179-530089-002_REV002)	179-530089-002	\$380	2	\$760	1	\$380			1	\$380			
1.018	EXT BRKT KIT IRU600 4 SHELF (179-530089-003_REV002)	179-530089-003	\$569	2	\$1,138			1	\$569					
1.019														
2.000	Eclipse Indoor Unit and Data Cards													
2.001	INUe													
2.002	ECLIPSE, INTELLIGENT NODE UNIT 2RU, INC IDCE, FAN, NCCV2, HIGH OUTPUT	EXX-000-204	\$1,778	14	\$24,892	2	\$3,556	2	\$3,556	2	\$3,556	2	\$3,556	2
2.003	NODE PROTECTION CARD, HIGH OUTPUT	EXS-002	\$232	14	\$3,248	2	\$464	2	\$464	2	\$464	2	\$464	2
2.004	KIT BRACKET 2RU COMMON BREAKERS & BLANKING PLUGS PER RACK PER DRAWING	179-530064-001	\$11	14	\$154	2	\$22	2	\$22	2	\$22	2	\$22	2
2.005	COMMON BREAKERS & BLANKING PLUGS PER RACK PER DRAWING	COMMON-BREAKERS-RACK	\$129	7	\$903	1	\$129	1	\$129	1	\$129	1	\$129	1
2.006	SIPQ-CABLES	SIPQ-CABLES	\$3	7	\$21	1	\$3	1	\$3	1	\$3	1	\$3	1
2.007	Aux Card and Cables													
2.008	AUX, ALARM I/O CARD	EXA-001	\$340	7	\$2,380	1	\$340	1	\$340	1	\$340	1	\$340	1
2.009	M66 Punch-Down Block Kit	179-530132-001	\$42	7	\$294	1	\$42	1	\$42	1	\$42	1	\$42	1
2.010	CABLE, ALARM I/O HD15 TO WIREWRAP, 15M (037-579470-01)	037-579470-015	\$123	7	\$861	1	\$123	1	\$123	1	\$123	1	\$123	1
2.011	RADIO CARD													
2.012	RAC 70, QPSK-4096QAM, NO XPIC, ACM	EXR-700-002	\$652	28	\$18,256	4	\$2,608	4	\$2,608	4	\$2,608	4	\$2,608	4
2.013	DAC GE3 GIGABIT ETHERNET SWITCH CARD													
2.014	DAC GE3 GIGABIT ETHERNET SWITCH CARD	EXD-181-002	\$735	28	\$20,580	4	\$2,940	4	\$2,940	4	\$2,940	4	\$2,940	4
2.015	CABLE PROT / BRIDGEING GE3, DIRECT FIT, 1M	037-579461-001	\$91	9	\$819	1	\$91	1	\$91	1	\$91	1	\$91	1

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT PRICE	SYSTEM	
				QTY	PRICE
4.039	NCM LOOP SWITCH License to support up to 50E1/63T1 TDM circuits	EZF-14	\$1,961	1	\$1,961
5.000 RACK					
5.001	RACK ASSY CRATED, 7' CHATSWORTH ALUMINUM, 1 BREAKER PNL W/10 BLANK COVERS AND NO BREAKERS Installation Kit, Aluminum Rack, Concrete Floor (AV179-530119-001WA)	179-530307-0113	\$1,787	8	\$14,296
5.002	COMMON BREAKERS & BLANKING PLUGS PER RACK PER DRAWING	179-530119-001	\$717	8	\$5,736
5.003	COMMON BREAKERS & BLANKING PLUGS PER RACK PER SIPO-CABLES	COMMON-BREAKERS-RACK	\$86	8	\$688
5.004	JACKFIELD, LOADED 64 DSX-1 CIRCUITS, FRONT BELOW CROSSCONNECT 1-32A AND 1-32B, REAR WIREWRAP, 19" OR 23"W, 4 RU, 8"D, -48VDC, RED LED (DI-R2GU1)	SIPO-CABLES	\$2	8	\$16
5.005		COM-DI-R2GU1	\$1,816	9	\$16,344
6.000 Power Supply					
6.001	EMPTY CHASSIS, FLATPACK S INTREPID POWER SYSTEM, NO CONTROLLER, -48VDC, REAR ACCESS, 200 AMP MAX, LVBD & SHUNT, 2RU, 19", MID/FLUSH MOUNT, 6 EMPTY RECTIFIER POSITIONS, 4 LOAD BREAKER, 2 BATTERY BREAKER AND 10 GMT POSITIONS (NOT INCLUDED) SMARTPACK S CONTROLLER WITH A01 PROFILE: 48V FP S, 2RU STANDARD CONFIGURATION, SNMP	ELT-FPSK59I-ANL-VC	\$1,491	7	\$10,437
6.002	RECTIFIER, FOR FLATPACK S INTREPID, 1 RU, 100-250 VAC INPUT, 48 VDC OUTPUT, 1800 WATTS, 37.5 AMP @ 220 VAC INPUT, 20 AMP @ 110 VAC INPUT	ELT-SPS-FPS200-A01-VV	\$695	7	\$4,865
6.003	FLATPACK S BLANK PANEL FOR EMPTY SLOT	ELT-241122.125.VC	\$596	15	\$8,940
6.004	CABLE, ALARM CABLE FOR FLATPACK S POWER SYSTEM, SOLID WIRE, 50 FEET	ELT-331E00116500	\$24	27	\$648
6.005	THERMAL PROBE KIT, BATTERY THERMAL PROBE KIT FOR FLATPACK S INTREPID POWER SYSTEM (PROBE INCLUDED), 5/16" LUG, 10 FEET	ELT-308E33743400	\$149	7	\$1,043
6.006	CIRCUIT BREAKER, 30 AMP PLUG-IN BULLET, MIDTRIP PULLER, FOR BULLET BREAKER	ELT-340522	\$96	7	\$672
6.007	LINE CORD, INDIVIDUAL AC INPUT FOR FLATPACK S POWER SYSTEM, AMP SHELF CONNECTOR, UNTERMINATED AC SOURCE CONNECTOR, 20 FEET LENGTH, 10 AWG WIRE GAUGE (LA2010-UU)	ELT-CBB030M	\$38	14	\$532
6.008	CIRCUIT BREAKER, 80 AMP PLUG-IN BULLET, MID-TRIP (CBB080M)	ELT-BBPULR-01	\$46	14	\$644
6.009	BATTERY SYSTEM, VRLA, RACK MOUNTING, 19 INCHES WIDTH, 4 CELLS, TEL, 1 TRAY, 111-2019-02A, -48VDC OUTPUT, 90AH, 10 YEARS (H48TEL12-90-19)	ELT-LA2010-UU	\$112	14	\$1,568
6.010	BATTERY SYSTEM, VRLA, 4 CELLS TEL12-180F, -48VDC OUTPUT, 180AH, 10 YEARS, 575 LBS, RACK MOUNTING, 19" WIDTH, 16 RU MINIMUM, 21.12" DEPTH, FRONT ACCESS, EQUIPPED WITH 2 TRAYS PART NUMBER RD02341 (17.12" W x 21.12" D), #6 CABLE AND LUGS (H48TEL12-180F-19)	ELT-CBB080M	\$38	7	\$266
6.011					
6.022					
6.023		CDT-H48TEL12-90-19	\$2,228	1	\$2,228
6.024		CDT-H48TEL12-180F-19	\$4,216	6	\$25,296
7.000 Antenna ,Waveguides					
7.001	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), PRIMELINE, UHP, HIGH XPD, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-6.875 GHZ, RADOME (STD: WHITE), CPR137G DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR, 200 KMPH, 190 KMPH (UXA6-W59BC)	RFS-UXA6-W59XC	\$4,568	8	\$36,544
7.002	TERMINATION LOAD, WAVEGUIDE, 06 GHZ, CPR137 (915422) LEG MOUNT, UP TO 6 FEET ANTENNA DIAMETER, UP TO 8 INCHES DEPTH, AMETER LEG (MTC3513LMS)	RFS-915422	\$124	8	\$992
7.003	SWAY BAR FOR PARABOLIC ANTENNA, 6 FEET (SMA-SK-6)	179-530147-001	\$1,114	8	\$8,912
7.004	WG and accessories 6 GHZ WAVEGUIDE, STANDARD ELLIPTICAL, 5.9 - 7.125 GHZ, 23.1 RETURN LOSS (E65)	RFS-SMA-SK-6	\$370		
7.005	Hardware-KIT (One kit per 100ft) (HARDWARE-KIT-WG)	RFS-E65	\$7	890	\$6,230
7.006	E65 INSTALL-KIT (One kit per waveguide run) (E65-C137-INST-KIT)	RFS-HARDWARE-KIT-WG	\$287	9	\$2,583
7.007	WAVEGUIDE BOOT FOR EW63, 4 IN (WGB4-63)	RFS-E65-C137-INST-KIT	\$922	9	\$8,298
7.008		AND-WGB4-63	\$56	7	\$392
7.009					
7.010					

SNACC HQ		Arden Peak		Mandalay Bay		Suncoast		Brook	
QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE
1	\$1,787	1	\$1,787	1	\$1,787	1	\$1,787	1	\$1,787
1	\$717	1	\$717	1	\$717	1	\$717	1	\$717
1	\$86	1	\$86	1	\$86	1	\$86	1	\$86
1	\$2	1	\$2	1	\$2	1	\$2	1	\$2
2	\$3,632	2	\$3,632	1	\$1,816	1	\$1,816	1	\$1,816
1	\$1,491	1	\$1,491	1	\$1,491	1	\$1,491	1	\$1,491
1	\$695	1	\$695	1	\$695	1	\$695	1	\$695
2	\$1,192	3	\$1,788	2	\$1,192	2	\$1,192	2	\$1,192
4	\$96	3	\$72	4	\$96	4	\$96	4	\$96
1	\$149	1	\$149	1	\$149	1	\$149	1	\$149
1	\$96	1	\$96	1	\$96	1	\$96	1	\$96
2	\$76	2	\$76	2	\$76	2	\$76	2	\$76
2	\$92	2	\$92	2	\$92	2	\$92	2	\$92
2	\$224	2	\$224	2	\$224	2	\$224	2	\$224
1	\$38	1	\$38	1	\$38	1	\$38	1	\$38
1	\$4,216	1	\$4,216	1	\$4,216	1	\$4,216	1	\$4,216
2	\$9,136	2	\$9,136	1	\$4,568				
2	\$248	2	\$248	1	\$124				
2	\$2,228	2	\$2,228	1	\$1,114				
225	\$1,575	120	\$840	275	\$1,925				
2	\$574	2	\$574	2	\$574				
2	\$1,844	3	\$2,766	1	\$922				
2	\$112	1	\$56	1	\$56				

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT PRICE	SYSTEM	
				QTY	PRICE
7.020	Hardware-KIT (One kit per 100ft) (HARDWARE-KIT-WG) WAVEGUIDE CUSHION HANGER, KITS, EW90, 3-HOLE (BAG OF 5 KITS) (SREW903-K)	RFS-HARDWARE-KIT-WG	\$287	8	\$2,296
7.021	VAL EW/P90 X3 HOLES 4" BOOT KIT (BAEW903)	018-510090-003	\$58	54	\$3,132
7.022	Dehydrator	VLT-BAEW903	\$39	6	\$234
7.023	DEHYDRATOR, AUTOMATIC, OPERATIONAL PRESSURE 3 PSIG/5 PSIG, HIGH PRESSURE ALARM - 6 PSIG, 30% REL. HUMIDITY (APD20-D-35DH0R01S0)	RFS-APD20-D-35DH0R01S0	\$1,990	7	\$13,930
7.024	WALL SHELF FOR RFS DEHYDRATORS APD-D SERIES (SHELF-APD-D)	RFS-SHELF-APD-D	\$105	7	\$735
7.025	DISTRIBUTION MANIFOLD, 4-PORT, 0-5.0 PSIG, 25 FEET OF TUBING PER PORT, WALL MOUNTABLE (L6600D-4)	AND-L6600D-4	\$439	7	\$3,073
7.026					
8.000	Services				
8.010	RADIO INTEGRATION	SVCS-IN-SIPQ-RI	\$19,414	1	\$19,414
8.011	VENDOR INTEGRATION	SVCS-IN-SIPQ-VI	\$6,918	1	\$6,918
8.012	FACTORY ACCEPTANCE TEST (FAT)- With Customer, 2 days	SVCS-IN-SIPQ-AT	\$4,612	1	\$4,612
8.013	PROGRAM MANAGEMENT	SVCS-IN-PM-PM	\$30,783	1	\$30,783
8.014	NETWORK/SYSTEM ENGINEERING	SVCS-PN-EN-SE	\$25,324	1	\$25,324
8.015	Transmission Engineering-Path Surveys/Design Finalization	SVCS-PN-EN-XE	\$22,220	1	\$22,220
8.016	LICENSE APPLICATIONS	SVCS-PN-EN-XE-LA	\$11,104	1	\$11,104
8.017	Project Engineering-Site Surveys	SVCS-IN-SS-PE	\$15,806	1	\$15,806
8.018	Project Engineering-Day to Day	SVCS-IN-SS-PE	\$18,442	1	\$18,442
8.019	CONFIG ENG / DOCUMENTATION / DRAFTING	SVCS-IN-SS-CEDFT	\$9,595	1	\$9,595
8.020	NI - Provision installation and final radio testing	SVCS-IN-IC-FI	\$22,629	1	\$22,629
8.021	FIELD INSTALLATION - Radios and DC power	SVCS-IN-IC-FI	\$106,878	1	\$106,878
8.022	Field Install (Antenna Installation)	SVCS-IN-IC-AS	\$204,619	1	\$204,619
8.023	Equipment Removal - Antenna/WG, radio and DC power system (Decomm and Transport)	SVCS-IN-IC-AS	\$44,330	1	\$44,330
8.024	Warehousing	SVCS-IN-IC-AS	\$8,580	1	\$8,580
8.025	Training for IRU600/ODU600, CTR8540 and Provision, 5 days	TR-WW-GEN5-01C	\$15,900	1	\$15,900
Grand Total (Excluding Applicable Taxes and Freight)				\$1,237,548	
8.026	FREIGHT	FREIGHT	\$33,022	1	\$33,022
8.027	Additional Executive loyalty Discount for turnkey projects	EQ DISCOUNT	-\$99,004	1	-\$99,004
Grand Total (Excluding Applicable Taxes)				\$1,171,566	
9.000	Warranty, 5 years				
9.001	WARRANTY PLUS IW - NA&C, 24 MONTHS, IRU-600	SNA-BWXXA1002438	\$202	32	\$6,464
9.002	WARRANTY PLUS NW - NA&C, 36 MONTHS, IRU-600	SNA-BNWXA1003638	\$760	32	\$24,320
9.003	MW EQUIPMENT INSTALLATION AUDIT	SVCS-IN-SS-IA		1	
TOTAL FOR OPTIONAL EXTENDED WARRANTY				\$30,784	

SNACC HQ		Arden Peak		Mandalay Bay		Suncoast		Brook
QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY	PRICE	QTY
				2	\$574	3	\$861	1
				10	\$580	20	\$1,160	6
				1	\$39	1	\$39	1
1	\$1,990	1	\$1,990	1	\$1,990	1	\$1,990	1
1	\$105	1	\$105	1	\$105	1	\$105	1
1	\$439	1	\$439	1	\$439	1	\$439	1
\$109,290		\$89,555		\$87,120		\$86,538		
\$109,290		\$89,555		\$87,120		\$86,538		
4	\$808	4	\$808	4	\$808	4	\$808	4
4	\$3,040	4	\$3,040	4	\$3,040	4	\$3,040	4
1								
\$3,848		\$3,848		\$3,848		\$3,848		

Statement of Work

CLARK COUNTY - SNACC
SNACC MW replacement
NA181003-55697
Project Services

Release 1.3
6-15-2022

Issue Releases

Issue Number	Issue Release Date	Changes	Preparer
1.0	2/9/2021	Initial Release	G. Lone
1.1	3-16-2021	Initial Release (Training)	G. Lone
1.2	8-30-2021	Initial Release (Updated Design)	G. Lone
1.3	6015-2022	Remove last paragraph of page 33	S.Lu

TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	4
1.1.	Purpose of Document	4
1.2.	Project Scope	4
1.3.	Supporting Documents	5
1.4.	System Summary	7
1.5.	MPLS Design Scope for Projects with this Feature	14
1.6.	Validity of Quote	14
1.7.	Period of Performance	14
1.8.	Field Crew Mobilization	14
1.9.	Battery Storage and Charging for projects that include batteries.....	14
2.	PLANNING AND DESIGN SERVICES AND RESPONSIBILITIES	15
2.1.	Project Management	15
2.2.	Microwave Network Design	16
2.3.	Microwave Path Design	17
2.4.	Project Engineering	18
3.	INSTALLATION, INTEGRATION & TESTING	20
3.1.	Installation Services	20
3.2.	Integration Services	20
3.3.	Testing Services	20
3.4.	Installation, Integration, & Testing Responsibilities.....	20
3.5.	Aviat Networks Installation, Integration, & Testing Deliverables.....	24
4.	EQUIPMENT DECOMMISSION	25
4.1.	Decommission Services	25
5.	APPENDIX A: PROJECT MANAGEMENT	26
6.	APPENDIX B: NETWORK ENGINEERING.....	28
7.	APPENDIX C: TRANSMISSION ENGINEERING.....	29
8.	APPENDIX D: PROJECT ENGINEERING	34
9.	APPENDIX E: INSTALLATION, INTEGRATION & TESTING	35
10.	APPENDIX F: ASSUMPTIONS & EXCLUSIONS.....	37
11.	APPENDIX G: FIELD CHANGE ORDER PROCEDURE.....	38
12.	STATEMENT OF WORK SIGN-OFF	40
13.	PROJECT COMPLETION SIGN-OFF	41
14.	AVIAT STANDARD DRAWINGS.....	42

1. EXECUTIVE SUMMARY

1.1. Purpose of Document

This Statement of Work (“SOW”) specifies the deliverables and defines the responsibilities and other relevant terms applicable to the planning and delivery of microwave and associated products from Aviat U.S., Inc. (“Aviat Networks” or “Aviat”) and its partners, as well as the professional services required to engineer and implement the proposed solution for CLARK COUNTY - SNACC (“Customer”).

Execution of the services listed in this SOW is governed by Aviat’s standard terms and conditions (“Agreement”). Neither party is obligated to provide any services until the Agreement is executed by both parties and an order has been placed for services by CLARK COUNTY - SNACC and accepted by Aviat Networks. Where the terms of the Agreement differ from the terms of the SOW, the terms in the SOW shall control. Any capitalized term not defined herein shall have the meaning ascribed to it in the Agreement.

1.2. Project Scope

This SOW applies to SNACC MW replacement project proposed by Aviat Networks and cannot be extended to other projects. Aviat Networks will provide the following services to CLARK COUNTY - SNACC:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Project Management | <input checked="" type="checkbox"/> Network Engineering |
| <input checked="" type="checkbox"/> Transmission Engineering | <input checked="" type="checkbox"/> Project Engineering |
| <input checked="" type="checkbox"/> Configuration Engineering/Drafting | <input type="checkbox"/> MPLS Network Services |
| <input checked="" type="checkbox"/> Factory Integration and Testing | <input checked="" type="checkbox"/> Antenna & Line Installation |
| <input checked="" type="checkbox"/> Radio Installation and Testing | <input checked="" type="checkbox"/> Network Integration |
| <input checked="" type="checkbox"/> Radio Decommission | <input checked="" type="checkbox"/> Antenna System Decommission |
| <input checked="" type="checkbox"/> DC Power System Installation and Testing | <input type="checkbox"/> DC Power System Decommission |
| <input type="checkbox"/> Civil Construction | <input checked="" type="checkbox"/> Field Technical Support |
| <input type="checkbox"/> Structural Mapping | <input type="checkbox"/> Structural Analysis |
| <input type="checkbox"/> Existing Radio Baseline Testing | <input checked="" type="checkbox"/> Waveguide Sweeps |
| <input type="checkbox"/> Tower/Monopole Design, Supply and Installation | <input type="checkbox"/> Shelter Supply and Installation |
| <input type="checkbox"/> Additional Scope | |

Prevailing Wages: Yes

Freight Terms: Destination

Any required services or material not specified in this SOW will be provided by CLARK COUNTY - SNACC and will not be considered part of Aviat Networks’ responsibilities. Aviat Networks reserves the right to quote and perform services not specified in this SOW in accordance with the terms and conditions of the Agreement. Once Aviat Networks approves the new services, the new services will be added to this SOW in a mutually signed amendment to this SOW and the release of a new services purchase order. For a full list of Aviat provided equipment, please refer to the project equipment list.

CLARK COUNTY - SNACC and Aviat Networks acknowledge that meeting the planned project completion date requires the cooperation of the parties. Any changes requested by CLARK COUNTY - SNACC before the design freeze date stated in Appendix B will be considered part of the design finalization phase of the project and not subject to a formal change order, if at Aviat Networks’ sole discretion, the requested change falls within the original scope and hours of the project. Any changes requested by CLARK COUNTY - SNACC after the design freeze date will be subject to review by Aviat Networks and may, at Aviat Networks’ sole discretion, result in a change order fee and/or a delay in delivery to the field. See Appendix B for more detail on the design freeze.

Completion and accuracy of all deliverables are subject to the integrity of the information provided by CLARK COUNTY - SNACC. Aviat Networks is not responsible for validating the accuracy of the information provided by CLARK COUNTY - SNACC. Any changes resulting from incorrect information provided by CLARK COUNTY - SNACC or any third party associated with Customer, will be charged to CLARK COUNTY - SNACC as a billable change order.

CLARK COUNTY - SNACC furthermore agrees that any delays caused by inadequate site readiness for which CLARK COUNTY - SNACC was responsible for may prohibit Aviat Networks from meeting the project completion date, and Aviat Networks may adjust the completion date. Unless otherwise agreed to in a mutually signed amendment to this SOW, any cost impact such delays might have on this SOW will be charged to CLARK COUNTY - SNACC as a billable change order. In the event of such delays, Aviat Networks and CLARK COUNTY - SNACC will make a reasonable effort to resolve the issue and mutually agree on new project milestones.

Documents, deliverables, and work submitted by Aviat Networks to CLARK COUNTY - SNACC shall be reviewed and approved in ten (10) working days from the date of receipt. If the documents, deliverables, or work submitted by Aviat Networks include equipment production or OEM ordering, Customer shall not review, approve, or comment on the documents, deliverables, or work, and the documents deliverables, or work shall, at Aviat's option, either be (i) placed on hold or (ii) deemed accepted.

Aviat shall invoice Customer for equipment upon shipment of the equipment. Aviat shall invoice Customer for services upon completion of the services. Customer shall pay all invoices issues by Aviat within thirty (30) days of Aviat's issuance of the invoice. If Customer does not pay an invoice within thirty (30) days of issuance of the invoice, Aviat shall assess a late penalty of the lesser of one-and-a-half percent (1.5%) or the greatest amount allowed by law.

Project Summary

Number of Hops	7+1	Number of Sites	8
Number of parallel RF Channels	0	Number of Sites	0
Radio Equipment Family(ies)	IRU600 v4	Frequency Band(s)	6, 11
Link Capacity(ies)	200 Mbps	Protection Type(s)	MHSB
Traffic Type(s)	T1 and IP	Project Locations (States)	Las Vegas

1.3. Supporting Documents

The following documents will be provided by Aviat Networks in support of this project and must be accepted by CLARK COUNTY - SNACC as part of the project completion. It is CLARK COUNTY - SNACC's responsibility to provide signed copies of the documents to Aviat Networks before the final project completion.

	<u>Document</u>	<u>Master Document</u>	<u>Requires Customer Acceptance/Sign-off?</u>
Planning	Project Schedule	Project Schedule	Yes
	Statement of Work	This document	Yes
	Statement of Work Sign-off	This document	Yes
Design	DC Power calculations	Design Freeze Package	No
	Design Freeze Package	Design Freeze Package	Yes
	Equipment List	Equipment List	No
	Frequency Datasheets	Path Survey Report	No
	Floor Plan	Installation Specifications	Yes
	IP Plan	Design Freeze Package	Yes
	NMS Plan	Design Freeze Package	Yes
	Path Calculations and Path Profiles	Path Survey Report	No
	Path Survey Report	Path Survey Report	Yes
	Rack Profiles and Wiring Diagrams	Installation Specifications	No
	Site Survey Report	Site Survey Report	Yes
	Synchronization Plan	Design Freeze Package	No
	System Layout	Design Freeze Package	No
Traffic Plan	Design Freeze Package	Yes	
Implementation	Antenna Installation Checklist	Installation Specifications	No
	Antenna Mounting Design	Installation Specifications	No
	Antenna System Audit Form	Installation Specifications	No
	As Built Record Sets	As Build Records	Yes
	Change Order Form	This document	Yes

	Equipment Installation Checklist	Installation Specifications	Yes
	Field Acceptance Test Plan	Installation Specifications	Yes
	Installation Specifications	Installation Specifications	No
	Injury and Illness Prevention	Installation Specifications	No
	Project Completion Sign-off	This document	Yes
	Punch List Completion Report	Installation Specifications	Yes
	Site Installation Completion Report	Installation Specifications	Yes
	Traffic Cutover Plan	Installation Specifications	Yes
	RF Cutover Plan	Installation Specifications	Not Quoted

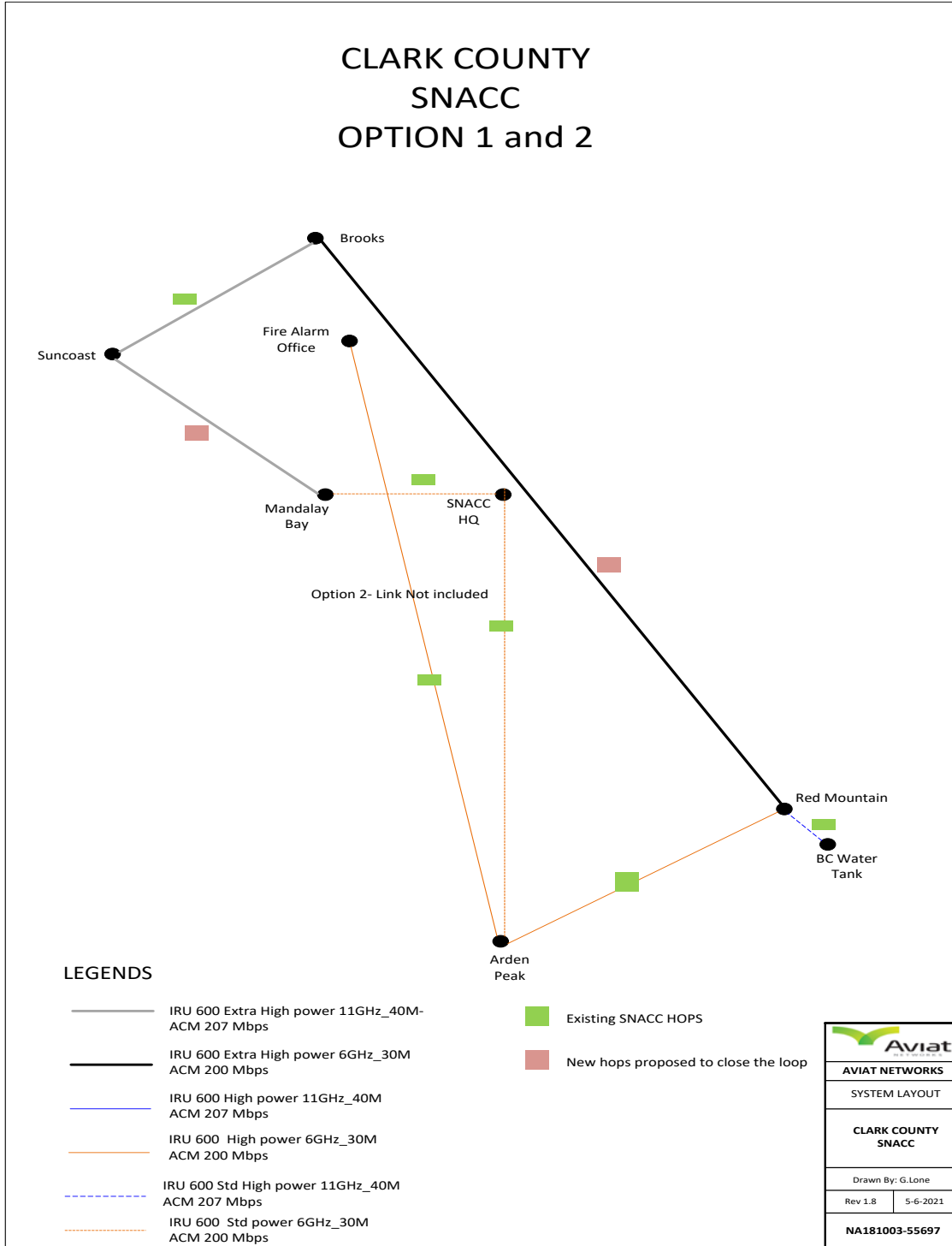
1.4. System Summary

Aviat networks is pleased to present a proposal to SNACC for 8 Microwave hops which includes IRU 600 V4 indoor radios , eclipse indoor unit, new racks, antennas, waveguide, batteries, and accessories.

Aviat's quotes includes two options

OPTION 1 - 8 Links

OPTION 2 – 7 Links, doesn't include link from FAO to ARDEN



Design Summary:

Each link is designed as a point-to-point microwave link supporting T1's and Ethernet. All links are proposed using ACM in 30/40 MHz channel providing 180 Mbps of bandwidth at 256 QAM. The reference modulation where the reliability if 99.999% is 256 QAM with bandwidth of 180 Mbps at 6 GHz and 178 Mbps at 11 GHz.

No layer 3 routers are included on this project, below are the hops that are included in Aviat Quote

HOP NO	SITE A	SITE B	Notes
1	Suncoast	Mandalay Bay	
2	SNACC HQ	Arden Peak	
3	Red Mountain	Brooks	
4	Red Mountain	BC Water Tank	
5	Mandalay Bay	SNACC HQ	
6	Red Mountain	Arden Peak	
7	Brooks	Suncoast	
8	Arden Peak	Fire Alarm Office	Optional hop

1.4.1 Below are the main components proposed for these system

➤ **IRU 600 Indoor RF Unit**

- Next Generation Radio for all-indoor applications, first introduced in 2009
- High Tx power performance
- Low power consumption
- Compact 2RU mechanical design for 1+0, 2+0, MHSB, MHSB/SD, Repeater, FD, SD split Tx, N+0, N+N,
- Flexible antenna coupling options
- Minimal sparing (one RFU per band)
- Simple system/capacity expansion

AVIAT IRU 600

5.8 (UL), L6, U6, 7, 8, 10, 11 GHz
frequency bands

Standard, High, and Extra High
Power options

Up to 400 Mbit/s per (40 MHz)

60/80 MHz channel-ready

Full native IP or hybrid mixed mode

48VDC operation, optional 24VDC

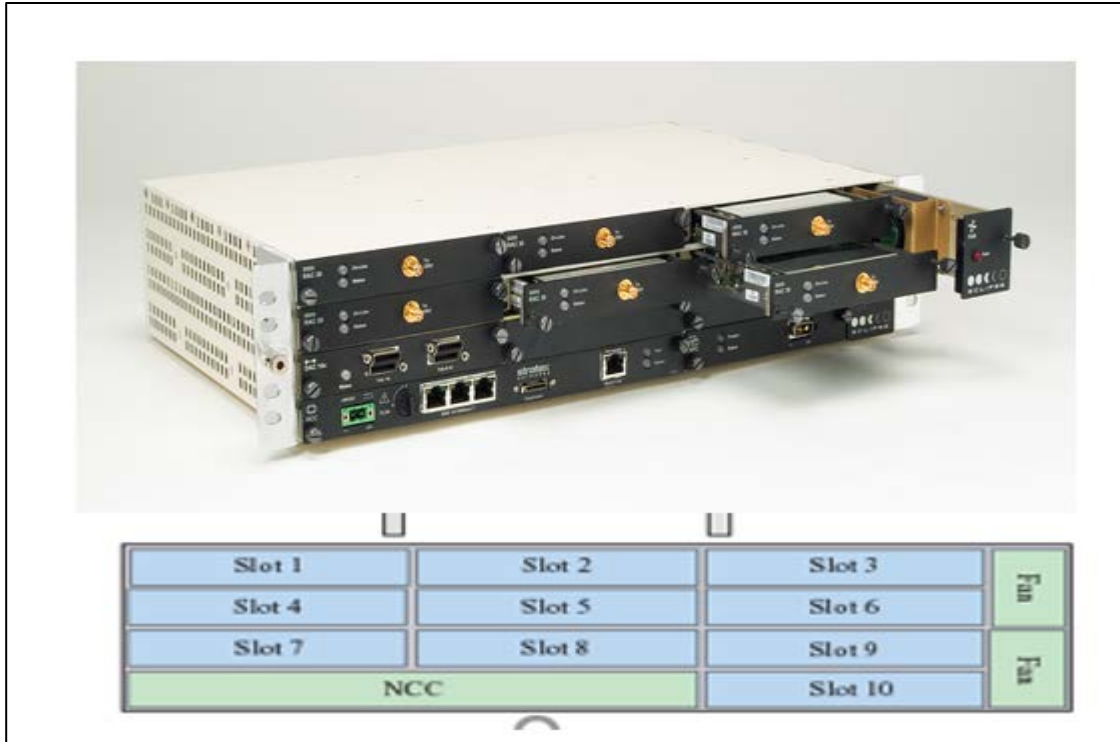
NEBS Level 3 compliant



➤ INDOOR DATA UNIT

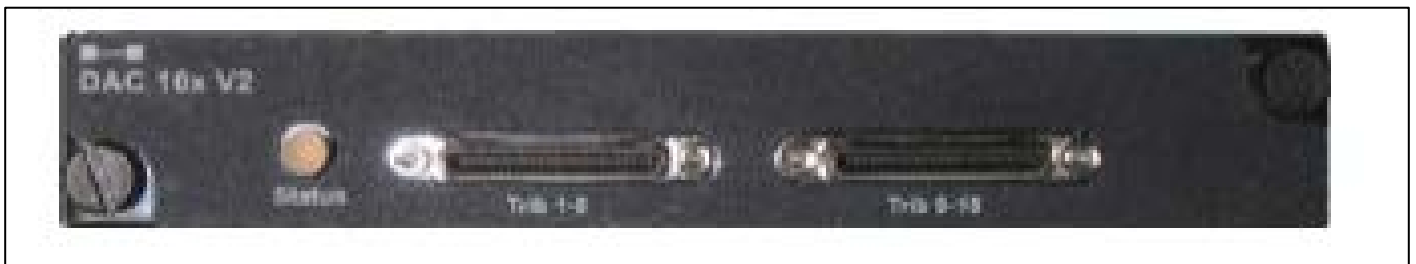
Eclipse Intelligent Nodal Unit (INUe)

- 2RU with 10 option slots
- Supports:
 - 6 non-protected links, or
 - 1 protected and 4 non-protected, or
 - 2 protected and 2 non-protected, or
 - 3 protected



➤ **Protected T1 Card : To drop T1's**

- DAC 16xV2 supports 16xE1 or 16xDS1 tributaries on compact HDR connectors.
- Features additional to those provided by DAC 16x include:
 - Tributary protection
 - Ethernet over E1/DS1 tribs
 - Individual line code selection for AMI or B8ZS on DS1 tribs

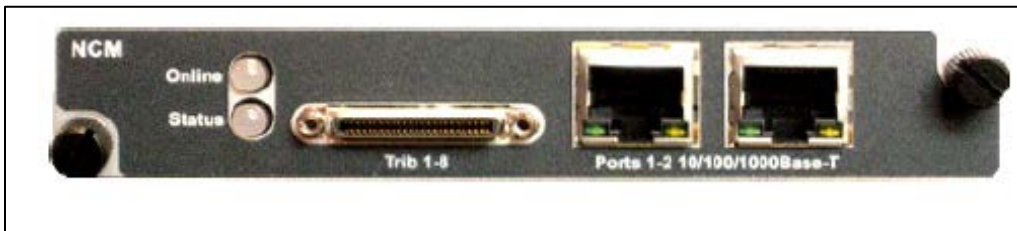


T1 Drops each hop: The demarcation point for T1's are the RJ 48 jack filed, below are the point to point T1 for each hop that can be dropped on each end.

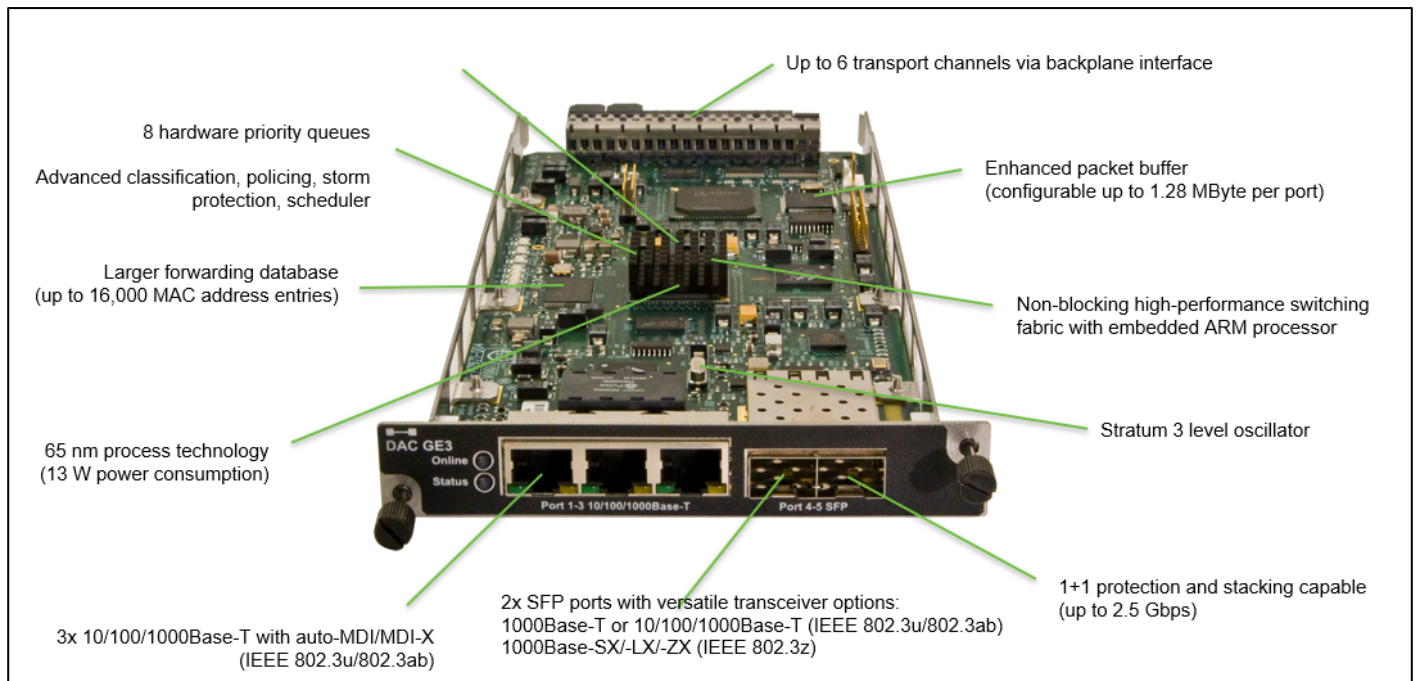
SNACC HQ	Arden Peak	64
Arden Peak	Red Mountain	16
Geneva	Henderson PD	16
SNACC HQ	Mandalay Bay	16
Brooks	Suncoast	16
Red Mountain	BC Water Tank	16
Fire Alarm Office	Arden Peak	32

➤ **The NCM (Network Convergence Module) Provides DS1 Loop-Switch Capability**

For TDM loop protection each INUe is equipped with protect NCM card.



➤ **Protected Ethernet Card Dac GE 3 to drop layer 2 ethernet traffic:**



1.4.2 Network Management System

- For System monitoring, Aviat has proposed new redundant EMS system i.e. Provision. The ProVition client software is installed on the WAN client server. The WAN clients are set up by installing a Windows Terminal Server (WTS) or an equivalent remote client solution such as Citrix Presentation Server.

- ProVision EMS provides full management solutions for all of Aviat Networks' new and legacy product platforms and can also provide fault management of any SNMP managed third party devices if preferred eliminating the need to maintain multiple management platforms in a single network.
- ProVision EMS provides comprehensive remote management and fault monitoring of a proposed Eclipse network including Network Element Auto Discovery, Radio and Ethernet link performance data collection, Network Health reporting, Carrier Ethernet VLAN, EOAM, Alarm and Events notifications via e-mail, SMS, or audible notifications and pop-up messages on PV Client users, Inventory management, Capacity management and Performance trends analysis tools, and End to End Circuits management and performance monitoring

1.4.3 Power System

- Aviat has proposed DC rectifier with -48VDC batteries on all sites. These rectifiers and batteries are used to power Aviat provided equipment only.

➤ Charger System:

Each Eltek charger has six slots for rectifier. We have quoted 1000 W/ 20 AMP rectifier at 110 VAC in a non-protected configuration. Each chassis gets 2 rectifier modules. (N+1) Redundant.

The charger capacity can be increased by adding rectifier modules in the empty slots.

The charger can be used in parallel with another charger, but it depends on the configuration of the other charger.

FlatpackS Power System



➤ Battery System

The proposed batteries are 48 VDC TEL 10 years batteries. These are 19-inch rack mountable batteries.

The power system is designed for 8 hrs backup and with 24 hrs recharge time.

There is no battery proposed at FAO

1.4.3 Antenna system

New RFS antenna and waveguide are proposed for all the new hops mentioned below. All the antennas would be labeled using black color paint and stencils.

HOP NO	SITE A	SITE B	New Antenna	Decommissioning of Existing Antenna
1	Suncoast	Mandalay Bay	YES	NOT APPLICABLE
2	SNACC HQ	Arden Peak	YES	YES
3	Red Mountain	Brooks	YES	NOT APPLICABLE
4	Red Mountain	BC Water Tank	YES	YES
5	Mandalay Bay	SNACC HQ	YES	YES
6	Red Mountain	Arden Peak	YES	YES
7	Brooks	Suncoast	YES	YES
8	Arden Peak	Fire Alarm Office	YES	YES

New Waveguide, dehydrator is proposed for all the hops.

1.4.4 Assumptions

- There is enough space to accommodate new racks on each location.
- Customer to provide its own routers.

1.4.5 Training

Aviat proposal includes 5 days training class on IRU600 and Provision.

1.5. MPLS Design Scope for Projects with this Feature

NOT PART OF THIS PROPOSAL.

1.6. Validity of Quote

A Quote is an invitation for an offer and a notice to Customer of these Conditions which automatically expires after one hundred and eighty (180) days from the date of Quote, (i) if Customer has not issued Aviat US a purchase order or (ii) if the Quote is not signed by Customer and returned to Aviat US within such time frame.

1.7. Period of Performance

This project Period of Performance is 28 weeks After Receipt of Order (ARO), any delays beyond Aviat's control will be addressed as a change order to CLARK COUNTY - SNACC, this includes any changes to the design, field implementation and coordination requiring additional hours for Network Engineer, Configurations Engineer, Drafter, Transmission Engineer, Program Manager, Project Engineer, and field crews.

1.8. Field Crew Mobilization

Aviat has included one (1) field crew mobilization(s) for the duration of field implementation phase, additional mobilizations will be billed on a time-and-expenses basis.

1.9. Battery Storage and Charging for projects that include batteries

Storage Location

If the battery is not to be installed at the time of receipt, it is recommended that it be stored indoors in a cool [77°F (25°C) or less], clean, dry location. Do not stack pallets or cell terminal damage may occur.

The storage interval from the date of battery shipment to the date of installation and initial charge should not exceed six (6) months. If extended storage is necessary, the battery should be charged at regular intervals until installation can be completed and float charging can be initiated. When in extended storage, it is advised to mark the battery pallets with the date of shipment and the date of every charge. If the battery is stored at 77°F (25°C) or below, the battery should be given a freshening charge within 6 months of the date of shipment and receive a freshening charge at 6-month intervals thereafter. Storage at elevated temperatures will result in accelerated rates of self-discharge. For every 18°F (10°C) temperature increase above 77°F (25°C), the time interval for the initial freshening charge and subsequent freshening charges should be halved. Thus, if a battery is stored at 95°F (35°C), the maximum storage interval between charges would be 3 months (reference Appendix B). Storage beyond these periods without proper charge can result in excessive sulphation of plates and positive grid corrosion which is detrimental to battery performance and life. Failure to charge accordingly may void the battery's warranty. Initial and freshening charge data should be saved and included with the battery historical records.

2. PLANNING AND DESIGN SERVICES AND RESPONSIBILITIES

2.1. Project Management

2.1.1. Project Management Services Provided by Aviat

Assigns an Aviat Networks Project Manager to manage the project

Yes

No

2.1.2. Project Management Responsibilities

Planning:		
	Develop project schedule for Aviat engineers	Yes
	Develop project schedule for CLARK COUNTY - SNACC's supporting vendors	Customer
	Establish an action register	Aviat
	Establish a communications plan	Aviat and Customer
	Establish a change management plan	Aviat and Customer
	Establish a risk management strategy	Aviat
	Provide quality standards and procedures document	Aviat
	Establish a resource management plan for Aviat resources	Aviat
	Develop a responsibility matrix, detailing principle team members by function	Aviat
	Provide details of CLARK COUNTY - SNACC's principle team members by function	Customer
	Provide details of CLARK COUNTY - SNACC's single point of contact for Aviat	Customer
Execution:		
	Act as primary point of contact for CLARK COUNTY - SNACC	Aviat
	Finalize project terms and scope with CLARK COUNTY - SNACC	Aviat
	Chair meetings to assign tasks, evaluate progress and address issues	Aviat
	Coordinate Aviat Networks' day-to-day activities through to project signoff	Aviat
	Coordinate CLARK COUNTY - SNACC's supporting vendors' day-to-day activities	Customer
	Monitor progress against the agreed-upon project milestones	Aviat
	Report on progress as agreed to in the communications plan	Aviat
	Manage project risk through risk identification, quantification and mitigation	Aviat
	Ensure the terms and conditions of the contract are complied with	Aviat
Closeout:		
	Manage project close-out activities	Aviat
	Sign off on close-out activities and final deliverables	Customer

2.1.3. Aviat Networks Project Management Deliverables

- | | |
|--|--|
| <input checked="" type="checkbox"/> Project Schedule | <input checked="" type="checkbox"/> Action Register |
| <input type="checkbox"/> Risk Management Strategy | <input checked="" type="checkbox"/> Communication Plan |
| <input checked="" type="checkbox"/> Change Management Plan | <input checked="" type="checkbox"/> Progress Reports (as required) |

Refer to **Appendix A** for further details regarding the Project Manager's role.

2.2. Microwave Network Design

Copies of equipment datasheets/user manuals	Aviat
---	-------

2.2.1. Network Design Responsibilities

Planning:	
Microwave system requirements	Customer
Existing traffic, IP and NMS plans	Customer
Anticipated channel plan requirements	Customer
Preliminary system design during or after initial proposal	Aviat
Preliminary path calculations for selected Aviat Networks radios	Aviat
Design:	
Final equipment list	Aviat
Final path calculations and path profiles	Aviat
Site specific diagram (RP's and wiring diagrams)	Aviat
DS0 traffic plans	Customer
DS1/DS3/OC3 traffic plans	Aviat
IP traffic plans	Aviat
NMS plan	Aviat
Synchronization plan	Customer
DC power calculations	Aviat
Traffic cut-over plan and method of procedure	Aviat
Field acceptance test plan	Aviat
Sign-off:	
CLARK COUNTY - SNACC sign-off on final network design (design freeze)	Customer

2.2.2. Aviat Networks Design Deliverables

- Equipment List
- Design Freeze Package

Refer to **Appendix B** for further details regarding the network design.

2.3. Microwave Path Design

Path reliability	<input type="text" value="99.999>"/>	%
BER	<input type="radio"/> 10 ⁻³	<input checked="" type="radio"/> 10 ⁻⁶
CLARK COUNTY - SNACC exempt from FCC license fee	<input checked="" type="radio"/> Yes	<input type="radio"/> No

2.3.1. Path Design Services Provided by Aviat

RF interference paper study	Aviat
RF field measurements	Not Quoted

2.3.2. Path Design Responsibilities

Planning:	
Documents relating to tower or structural analysis and drawings	Customer
Documents relating to previous path surveys and frequency coordination	Customer
Historical path performance details on a per link basis	Customer
Path clearance objective for each path	Customer
Federal registration number (FRN) and username and password	Customer
Design:	
Path surveys to confirm path reliability objectives	Aviat
Site elevation and coordinates	Customer
Existing antenna mounting structure description and information (tower type)	Aviat
Existing building description and information	Aviat
Site plan (drawing with major landmarks for location purposes)	Customer
Final path calculations and path profiles for each hop	Aviat
Identify locations of possible sources of spectral reflection	Aviat
Information concerning possible obstructions or obstacles	Aviat
Recommend antenna size, type, and mounting height	Aviat
Radio frequency coordination	Aviat
Tower permit application	Customer
Prepare and submit FCC license application (where applicable – Form 601)	Aviat
Prepare and submit environmental impact data	Customer
Provide required environmental approvals or permits	Customer
File FCC construction completion notice	Aviat
Sign-off:	
Approve recommended antenna size, type and mounting height	Customer
CLARK COUNTY - SNACC sign-off on final path design	Customer

2.3.3. Aviat Networks Path Design Deliverables

- Microwave Path Survey Report
- Frequency Datasheets

Refer to **Appendix C** for further details regarding the path design.

2.4. Project Engineering

2.4.1. Project Engineering Services Provided by Aviat

Floor plan for Aviat installation scope	Aviat
Traffic cutover plan	Aviat
RF cutover plan	Not Quoted
Field acceptance test plan	Aviat
Installation specifications	Aviat
Manage civil construction	No
Manage field installation	Aviat

2.4.2. Project Engineering Responsibilities

Planning:	
Documents relating to tower or structural analysis and drawings	Customer
Site access policies and procedures	Customer
Site access as required	Customer
Building/shelter/enclosure access as required	Customer
Design:	
Site surveys	Aviat
Existing tower description and information (tower type)	Aviat
Existing building description and information	Aviat
Site plan (drawing with major landmarks for location purposes)	Customer
Environmental data (if required)	Customer
Flooring, ceiling, racking data, and requirements to mount new hardware	Customer
All power, existing and future, with breaker assignments	Customer
Recommendation for placement of new equipment	Aviat and Customer
Identify and define antenna mounting hardware	Aviat
Identify any grounding issues and recommend improvements	Aviat
Identify demarcation types and location between new and existing equipment	Customer
Existing waveguide dehydrator information and their associated cabling	Aviat
All structural information regarding power generator	Customer
Recommendation for any site or shelter upgrades	Customer
Recommendation for tower upgrades	Customer
Execution:	
Coordinate day-to-day field install activities through to project signoff	Aviat
Monitor field installation progress against the agreed-upon project milestones	Aviat
Report on field installation progress as agreed to in the communications plan	Aviat
Ensure proper site readiness prior to the install start date	Customer
Coordinate Aviat change orders until project completion	Aviat
Coordinate system acceptance and project completion	Aviat
Coordinate finalization of project close-out drawings and documents	Aviat
Review quality checklists and photos for defects	Aviat

2.4.3. Aviat Networks Project Engineering Deliverables

- Microwave Site Survey Report
- Traffic Cutover Plan
- RF Cutover Plan
- Field Acceptance Test Plan
- Installation Specification
- Project Closeout Package

Refer to **Appendix D** for further details regarding Project Engineering.

3. Installation, Integration & Testing

3.1. Installation Services

Tower installation	Customer
Antenna system installation	Aviat
Transmission line installation	Aviat
Shelter installation	Customer
Indoor equipment and rack installation	Aviat
AC power equipment	Customer
DC power equipment	Aviat
Ground installation	Customer
Antenna alignment	Aviat

3.2. Integration Services

Microwave equipment integration	Aviat
Dehydrator integration	Aviat
Integrate new equipment into existing NMS	Aviat

3.3. Testing Services

Station test	Aviat
Hop test	Aviat
System test	Aviat
Traffic cutover	Aviat
RF cutover	Not Quoted

3.4. Installation, Integration, & Testing Responsibilities

General project responsibilities:	
Obtain all necessary environmental and public agency approvals/documentation	Customer
Obtain all necessary construction permits and documentation	Customer
Access to sites in accordance with the project schedule	Customer
Normal road access for all project related vehicles	Customer
Transport of Aviat Networks supplied equipment to Customer warehouse	Aviat
Transport of Aviat Networks supplied equipment to sites	Aviat
Transport of Aviat Networks personnel to and from sites	Aviat
Safety and first aid material and supplies to Aviat Networks personnel	Aviat
Site & civil services:	
Leasing, zoning, permits and inspections	Customer
Soil analysis or provide report	Customer
Foundation design for tower/shelter	Customer
Site construction (demolition, grading, erosion control, drainage, etc.)	Customer
Civil documentation for existing shelters and towers	Customer
Structural design package required to support proposed antenna system	Customer
Structural analysis report for the existing and new antenna system	Customer
Site layout drawings, plot plans or applicable architectural blueprints	Customer
Locate and mark all site boundaries and features	Customer

	Secure storage for all equipment including radios, antennas and racks	Optional
	Standard equipment packaging	Aviat
	Unpack Aviat Networks equipment and remove packing material from site	Aviat
	Verify packing list to specifications	Aviat
Installation services:		
	Tower installation:	
	Antenna system support structures: towers, monopoles and tripods	Customer
	Ground resistivity measurements and report of newly installed ground system	Customer
	Install tower foundation	Customer
	Tower painting	Customer
	Provide and install tower lights	Customer
	Provide and install safety climb and safety climb ladder	Customer
	Provide and install lightning rod	Customer
	Provide and install platform	Customer
	Provide and install footing hardware and penetrations for structure on rooftops	Customer
	Adequate earth ground in accordance with EIA/TIE standard 222G	Customer
	Connect tower ground to site ground, in accordance with EIA/TIA standard 222G	Customer
	Provide and install standard tower leg pipe mounts	Aviat
	Provide and paint antennas to match structure or specific color	Not Quoted
	Provide and paint lines to match structure or specific color	Not Quoted
	Provide and install tower or rooftop pole mounts	Customer
	Provide and install any required steel support members for side braces	Aviat
	Provide and install specialized antenna mounts	Not Quoted
	Provide and install standard face mounts	Not Quoted
	All RF/microwave antenna mounting brackets	Aviat
	Antenna feeder window/bridge and cable tray supports	Customer
	Antennas and radomes at specified centerlines	Aviat
	Ice shields at specified locations	Not Quoted
	Manlift rental for BC Water Tank and Geneva sites	Aviat
Transmission line installation:		
	Waveguide ladders	Customer
	Waveguide bridges	Customer
	Rooftop sleepers for transmission lines and ground plates	Customer
	Provide and install cable trays	Customer
	Provide and install transmission lines	Aviat
	Provide and install hanger kits and ground kits	Aviat
	Penetrate building walls or roof and install waveguide ports and entry plates	Customer
	Provide and install waveguide or coax boots at entry plates	Aviat
	Provide and install lightning protector at entry points	Aviat
	Provide and install conduit	Customer
	Terminate and label waveguide or coax runs	Aviat
Shelter installation:		
	Provide shelters, cabinets or enclosures	Customer
	Provide and install shelter foundation	Customer

	Shelter installation	Customer
Indoor equipment and rack installation:		
	Provide and install cable ladders or trays	Customer
	Provide and install new racks in specified locations	Aviat
	Provide and install bracing supports	Aviat
	Provide and install pressurization equipment	Aviat
AC/DC power equipment and/or ground installation:		
	Perform electrical (underground conduits, trenching, AC power source, etc.)	Customer
	Provide and install ground ring	Customer
	Provide and install generator and fuel tank	Customer
	Provide and install AC circuit breakers to support Aviat Networks equipment	Customer
	Provide and install AC feeds from AC distribution to charger or UPS equipment	Customer
	Provide and install DC circuit breakers to support Aviat Networks equipment	Aviat
	Provide and install charger racks	Aviat
	Provide and install battery into charger rack or on floor as required	Aviat
Field integration services		
	Integrate Aviat Networks microwave equipment	Aviat
	Integrate rack ground to ground distribution in shelter	Aviat
	Integrate DC wiring to specified distribution panels	Aviat
	Integrate payload wiring to designated demarcation	Aviat
	Integrate Ethernet wiring to designated demarcation	Aviat
	Integrate alarm contacts to designated demarcation	Aviat
	Integrate battery wiring to designated chargers	Aviat
	Connect radio antenna ports to waveguide flex sections	Aviat
	Set dehydrator pressure to 4psi	Aviat
	Integrate new equipment into existing NMS	Aviat
	Customize NMS alarm designations	Aviat
Testing services:		
	Review and approve Aviat field acceptance test plan	Customer
Station test:		
	Perform grounding inspection	Customer
	Perform equipment inspection	Customer
Hop test:		
	Perform antenna system test	Aviat
	Measure return loss and distance-to-fault of waveguide terminated at antenna within antenna frequency range	Aviat
	Verify airtightness, by turning pressurization valve off for 4 hours and measuring pressure drop on each line (<0.5 PSI)	Aviat
	Perform DC power system test	Aviat
	Measure charger floating/equalization voltages	Aviat
	Measure voltages on each battery cell	Aviat
	Verify charger/battery switching	Aviat
	Perform microwave equipment test	Aviat
	Perform transmit power output test	Aviat
	Perform receive signal level test	Aviat

	Perform receiver threshold (fade margin) test	Aviat
	Perform transmitter/receiver switching test	Aviat
	Perform Layer 1 link aggregation test	Not Quoted
	Perform Layer 2 link aggregation test	Not Quoted
	Perform adaptive modulation test	Aviat
	Perform Ethernet test	Aviat
	Perform AUX alarm/data card test	Aviat
	Perform channel bank test	Customer
	Verify VF continuity/level at 1KHz	Customer
	Verify operation of E/M signaling	Customer
	Perform multiplexer test	Not Quoted
	Perform IP phone test	Not Quoted
	Perform dehydrator test	Not Quoted
	Perform 1-hour BER test on primary radio and 1-hour BER test on standby radio	Not Quoted
System test:		
	Perform ring wrapping or Ethernet Ring Protection (ERP) tests	Aviat
	Perform IP phone test	Not Quoted
	Perform network continuity test	Aviat
	Perform provision element manager test	Aviat
	Perform 12-hour BER test on primary side	Aviat
	Perform 12-hour BER test on standby side	Aviat
Traffic/RF cutover:		
	Provide technical personnel familiar with existing equipment and cutover plan	Customer
	Schedule cutover of all complete traffic immediately following installation	Aviat and Customer
	Transfer circuit wiring	Aviat
	Verify integrity of circuits being cutover	Customer
	Perform RF cutover	Not Quoted
	Perform traffic cutover	Aviat
Final site acceptance procedure:		
	Notify all parties involved of site completion	Aviat
	Perform site installation inspection	Customer
	Complete indoor quality checklist	Aviat
	Complete tower quality checklist	Aviat
	Submit final punch list of all deficiencies to be corrected to Aviat	Customer
	Identify all critical punch list items	Customer
	Review, agree and sign off on final punch list	Aviat and Customer
	Sign off on Aviat Networks site installation checklist form	Customer
Final system acceptance procedure		
	Sign off on Aviat Networks field acceptance test results	Customer
	Resolution of Customer vendor issues affecting completion or project	Customer
	Sign off on Aviat Networks installation completion report	Customer
	Sign off on project acceptance based on acceptance criteria of project	Customer
	Issue final invoice for services upon acceptance of the system	Aviat

Provide as-built drawings for Aviat provided equipment	Aviat
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3.5. Aviat Networks Installation, Integration, & Testing Deliverables

- Site Installation Completion Report
- Quality Checklists
- System Installation Completion Report
- Field Acceptance Test Report (completed)
- Punch List Completion Report
- As-built Record Sets

Refer to **Appendix F** for further details regarding the installation, integration, and testing services.

4. Equipment Decommission

4.1. *Decommission Services*

Antenna system, qty 14 antennas	Aviat
Transmission line, qty 14 lines	Aviat
Pipe mount, qty 14	Aviat
Radios for replacement links	Aviat
DC chargers for ones being replaced	Not Quoted
Battery for ones being replaced	Not Quoted
Dispose decommissioned equipment	Aviat

5. APPENDIX A: PROJECT MANAGEMENT

Responsibilities

Aviat Networks will assign an Aviat representative to be the primary point of contact for this SOW ("Project Manager") for the duration of the project. The Project Manager will work with CLARK COUNTY - SNACC to facilitate effective resource management, escalations, approval processes, scheduling, communication, and reporting with Aviat engineers and other designated vendors as needed. The Project Manager is responsible for maintaining control of the project and assuring compliance with the project and Customer specifications. Aviat Networks will not be responsible for the resolution of CLARK COUNTY - SNACC vendor issues affecting the completion of the project. Any documentation and standards not listed in this SOW will default to Aviat Networks standards, where applicable.

Although face-to-face communication and on-site meetings with CLARK COUNTY - SNACC are essential elements of the service, some activities that do not require face-to-face contact will be performed in the Project Manager's Aviat Networks office in order to reduce travel and living costs. These activities are at the discretion of the Project Manager. Refer to section 2.1.2 for a full list of Project Management responsibilities.

Project Schedule

The project schedule for Aviat engineers, Aviat sub-contractors, and for CLARK COUNTY - SNACC's supporting vendors will be developed (or updated if a schedule is included with this proposal) and maintained in Microsoft Project and will identify project deliverables, key milestones, resource assignments, and track project progress against each milestone. CLARK COUNTY - SNACC and Aviat Networks agree to collaboratively review and agree to the project milestones and deliverable dates prior to the execution of any services on the project. A copy of the project schedule will be available upon request in .pdf or .mpp format.

It will be the responsibility of CLARK COUNTY - SNACC to track and deliver against all CLARK COUNTY - SNACC internal (including CLARK COUNTY - SNACC sub-contractors) milestones. The overall project plan generated by the Aviat Networks Project Manager will show major deliverable milestones, but not internal milestones of CLARK COUNTY - SNACC or their contractors. Tracking of CLARK COUNTY - SNACC and CLARK COUNTY - SNACC's contractor internal milestones will remain the responsibility of the CLARK COUNTY - SNACC.

Communications Plan

Establishment of a communications plan will be done in accordance with the principles of project management established by the Project Management Institute (PMI®) unless otherwise agreed to. The plan will involve representatives from Aviat Networks and CLARK COUNTY - SNACC and any other entities as mutually agreed between the parties for project kickoff meetings, periodic progress meetings, or problem escalations as needed. The plan will include the location and frequency of any such meetings, the format for formal communication and meeting minutes, attendee or distribution lists with contact details, methods of communication, and escalation and management level lists.

CLARK COUNTY - SNACC will make appropriate staff available for regular consultation and meetings with the Aviat Networks Project Manager. Customer's failure to attend regular meetings or respond to Aviat Networks questions in a timely manner could result in a delay of the project deliverables and a billable change order.

Change Management Plan

Establishment of a change management plan will be done in accordance with the principles of project management established by the Project Management Institute (PMI®) and will include confirmation from Aviat Networks and CLARK COUNTY - SNACC's understanding of the process. Each party will work closely with the other to manage any scope changes through the term of the project and understand their impact on the project performance from a cost, quality, and schedule perspective. Any such change may be subject to a change order fee and will be communicated to CLARK COUNTY - SNACC prior to the implementation of the change. Any change order approvals will be submitted in writing. Refer to section 1.2 and Appendix B for more details on change orders.

Quality Standards and Procedures

Quality standards and procedures documents will be provided by CLARK COUNTY - SNACC prior to execution of this SOW. If no documentation is provided by CLARK COUNTY - SNACC prior to execution of this SOW, the standards and procedures will default to Aviat Networks best practices guide.

Resource Management Plan

Establishment of a resource management plan will be done in accordance with the principles of project management established by the Project Management Institute (PMI®), identifying principle team members by function, including backup resources (if required).

Closeout Activities

During the project closeout, all quality photos will be reviewed, completion documents will be signed with no exceptions, RMA completed, and final billing and invoicing released. It is recommended that CLARK COUNTY - SNACC provide Aviat Networks with performance feedback during this time to promote continuous improvement within Aviat Networks.

CLARK COUNTY - SNACC Responsibilities

CLARK COUNTY - SNACC shall:

- Provide details of CLARK COUNTY - SNACC's principle team members by function during the project kickoff meeting.
- Provide details of CLARK COUNTY - SNACC's single point of contact for Aviat during the project kickoff meeting.
- Provide all other relevant documentation or resources to assist in gathering information not stated in this SOW.
- Provide access to sites, shelters, buildings, enclosures, facilities or any other areas as required.
- Provide updates as necessary of any site readiness issues to be resolved prior to start of work. This includes, and is not limited to, permitting, leasing, zoning, insurance, etc.
- Provide security clearances and/or escorts as required for field survey and installation activities.
- Provide access to pertinent databases, planning requirements, including strategic plans, expansion scenarios, growth projections, introduction of new services and wireless technology.

Deliverables

Refer to section 2.1.3 for a full list of Aviat Networks project management deliverables.

6. APPENDIX B: NETWORK ENGINEERING

Microwave System and Network Design

The Aviat Networks representative who oversees the network (“Network Engineer”) will provide the overall technical direction of the system design and will work with CLARK COUNTY - SNACC to insure system integrity, verify that all sub-systems and Aviat Networks furnished OEM equipment is compatible, and that the desired performance of the system is realized.

The network design portion of the project consists of three phases:

1. Preliminary design
2. Final design
3. Design freeze

Preliminary Design Phase

During the preliminary design phase, the Network Engineer will gather data to establish the design criteria and any special Customer requirements that need to be incorporated into the final design. The Network Engineer will review and translate the system configuration into specific hardware requirements. Equipment selection will be based on the requirements, input and requests from CLARK COUNTY - SNACC, functionality of the equipment, and recommendations from the Network Engineer. Aviat Networks will provide CLARK COUNTY - SNACC with a summary of the preliminary system design prior to commencing field surveys. All preliminary designs are subject to change. Changes can include, but are not limited to changes based on:

- Survey results.
- Vendor shortages or long lead times.
- Customer requests.
- Engineering recommendations.

Design Finalization Phase

After receipt of the order and the project kickoff meeting, Aviat Networks and CLARK COUNTY - SNACC enter into the design finalization phase. During this phase, the Network Engineer will incorporate any required changes stemming from the path and/or site surveys into the design and confirm the final design details. Changes can include but not limited to:

- Antennas (types, sizes, models, quantities, and mounts).
- Waveguide (types and lengths), waveguide accessories and dehydrators.
- Power systems, cabling, and other material that could not be finalized prior to conducting the field surveys.

During this phase, CLARK COUNTY - SNACC may also request changes to the system design if the changes fall within the original scope and hours of the projects. Any changes outside of the original scope or agreed schedule are subject to review and acceptance by Aviat Networks to determine the impact and cost on the overall project.

Aviat Networks will provide a formal submission detailing the final system design and equipment list and highlight changes needed to the preliminary design. CLARK COUNTY - SNACC shall review the data and schedule a meeting, if necessary, to discuss any concerns. If no concerns are noted, it is CLARK COUNTY - SNACC’s responsibility to approve the final design in writing (email is acceptable) before the design is frozen and equipment is placed on order (unless otherwise agreed to in this SOW or with the Project Manager). Any delay in the approval of the final design could result in a delay in material delivery to the field. This might require a review by CLARK COUNTY - SNACC and Aviat Networks of the project schedule and deadlines.

Design Freeze Phase

As part of the Design Finalization Phase, a date will be set for the design freeze at which the final design and all changes must be approved and accepted by both parties. Following the design freeze, the Bill of Materials and documentation will be submitted to Aviat’s factory and the system will be scheduled for manufacturing. The Network Engineer will concurrently review all design documents and finalize any traffic plans, NMS plans, synchronization plans, traffic cutover requirements, as well as any special factory and field acceptance testing requirements for the project. During the Design Freeze Phase, the design is frozen and no further changes to the system design will be accepted without a formal change order and reevaluation of the project and delivery schedules. Refer to the project schedule for details on the planned start and finish dates for each of these phases.

Deliverables

Refer to section 2.2.3 for a full list of Aviat Networks design deliverables.

- The equipment list refers to the final bill of material (“BOM”).
- The design freeze package refers to the final path calculations, path profiles, rack profile and system drawings, traffic plans, IP plans, NMS plans, synchronization plans, and/or DC power calculations.

7. APPENDIX C: TRANSMISSION ENGINEERING

Microwave Path Design

The Aviat Networks representative who oversees transmission (“Transmission Engineer”) ensures the delivery of the best possible network solution by providing the technical direction for the over-the-path RF performance of Aviat Networks system implementation. All microwave paths designs are preliminary, pending final path surveys and frequency coordination. This includes:

- Antenna selections, antenna centerlines, and antenna mounts.
- Total transmission line lengths.
- Path calculations and profiles.
- The size, type, quantity and configuration of each component.

Equipment proposals are simply a reflection of these preliminary designs and subject to change. It is further understood that any changes to existing or proposed antenna centerlines could justify the need for tower stress analysis or, if modification is impractical, construction of a new tower. Any such requirements will be the responsibility of CLARK COUNTY - SNACC unless otherwise stated in the Agreement.

In the event that CLARK COUNTY - SNACC elects not to use Aviat Networks to perform path surveys, the performance of the microwave system will not be guaranteed by Aviat Networks and it will be up to CLARK COUNTY - SNACC to resolve any path reliability or obstruction issues. Refer to the [Warranty of Path Engineering Services](#) section below for further detail.

In the event that Customer selects Aviat Networks to perform the path surveys, a formal submission detailing the results of the path survey and highlight changes needed to the preliminary design will be submitted to CLARK COUNTY - SNACC. It is expected that CLARK COUNTY - SNACC review the path survey data and schedule a meeting, if necessary, to discuss any concerns or alternate means of providing path continuity/system reliability. If no feedback is received from CLARK COUNTY - SNACC before the final system design approval, Aviat Networks will assume CLARK COUNTY - SNACC’s acceptance of the survey data, and will immediately proceed with frequency coordination (if applicable).

Microwave Path Survey, Frequency Planning and Licensing

The microwave path survey shall include the following services:

- Identify geographical location of sites and antenna, waveguide length and tower requirements.
- Verify path clearance objectives for each of the paths from existing or new tower locations.
- Document obstruction, critical points, and reflection points in each of the paths.
- Verify tower coordinates and site elevations.
- Establish coordinates and height requirements for new towers, as needed for governmental agency registration and licenses filed by CLARK COUNTY - SNACC.
- Confirm antenna centerlines and waveguide length requirements. Catalog antennas on the existing structures noting any space limitations in the survey report. An Aviat engineer will review the tower for new antenna design space limitations specific to this project only but will not perform a complete tower audit.
- Perform frequency coordination based on available FCC records to reduce the potential for interference between internal or external radio sources on a given system or network.
- Aviat Networks, upon receipt of CLARK COUNTY - SNACC’s authorization, will prepare the FCC License Application Form 601 with the appropriate technical data. Information such as site location, radio type, and frequency will be listed. Aviat Networks will complete and submit the Construction Complete Form 601 on line via FCC Universal Licensing System (“ULS”).
- File Antenna Structure Registration (“ASR”) form for towers over 200 feet.

The results of the survey will be utilized by Aviat Networks for preparation of final performance calculations, frequency coordination, government licensing, and tower registration requirements. In the event where Aviat Networks will not be performing the path survey, CLARK COUNTY - SNACC shall provide all the documents needed for Aviat Networks to complete the frequency coordination, licensing, and final system design. Aviat Networks will not be held accountable for validating the accuracy of the information provided by CLARK COUNTY - SNACC and assumes no responsibility in any inaccuracies of any part of the path engineering based on the information provided by CLARK COUNTY - SNACC or any contact affiliated with CLARK COUNTY - SNACC. Any corrective action required as a result of this will be billed to CLARK COUNTY - SNACC as a billable change order.

Survey Procedures

Preliminary path profiles are drawn based on the supplied site coordinates and contour information extracted from the best available topographic mapping. A field site survey is conducted to verify site coordinates and elevations based on North American Datum 1983 (“NAD83”) and gather information related to the proposed radio equipment and antenna locations, site access, and site development constraints. A field path survey is then conducted to verify path profile elevations, measure all natural and manmade potential obstructions and assess the reflective potential of all natural and manmade surfaces. Antenna centerline heights were calculated for the proposed frequency band by applying suitable clearance criteria based on the propagation characteristics of the geographic area. The path survey report is considered to be a representation of the information gathered in the field and as such, reflects a snap-shot in time at the time of the survey. It is not intended to show the final as-built configuration if any of the parameters were changed or updated after the survey report has been released.

Path calculation sheets are then generated for each hop, based upon the recommended centerline heights. Antenna sizes and the choice of propagation protection diversity are chosen to meet the required fade margin and the desired path propagation reliability. Propagation outage and reliability calculations are based on the Vigants model (ref. "Space Diversity Engineering", BSTJ, 1/75).

Design Criteria

Path clearance criteria must be established for each path on the basis of total system performance objectives, economic considerations, and careful analysis of local atmospheric conditions derived from published climatological data, where available, and reported microwave transmission experience pertinent to the area. Antenna heights much greater than actually needed cause an unwarranted increase in system cost, and on paths with significant ground reflections, this can increase the exposure to multipath and ground reflection signal fading. It is desirable to locate the antennas high enough so that even under severe super-standard atmospheric refractive conditions (surface ducting) there is adequate clearance such that signal entrapment does not significantly degrade the fade margin of the path or generate excessive multipath fade activity. The choice of clearance criteria for a microwave path is a balance between cost and performance.

The path clearance criterion as applied to a given geographic area is a function of the degree and direction of atmospheric beam bending and can conveniently be defined by the equivalent earth radius K factor:

$$K = \frac{\text{Effective Earth's Radius}}{\text{Actual Earth's Radius}}$$

The median propagation value of $K = 4/3$ allows the normal microwave horizon to be slightly extended when compared to the optical horizon; however, under certain meteorological conditions (for example, during nighttime super-refractivity usually associated with temperature inversions) the value of K increases to 2 or greater for periods of several minutes to several hours. This increases the path clearance and results in the heavy multipath fade activity seen on some reflective paths and antenna decoupling power fading on others.

Clearance Criteria

The criteria used to design a radio path in regions where the C-factor is equal to or less than 1:

- Main to Main:
 - 100% first Fresnel zone radius over $K=4/3$, or
 - 60% first Fresnel zone radius over $K=1$, whichever is greater
- Main to Diversity:
 - 60% first Fresnel zone radius over $K=4/3$ (Not Applicable)

The criteria used to design a radio path in regions where the C-factor is greater than 1:

- Main to Main:
 - 100% first Fresnel zone radius over $K=4/3$, or
 - 30% first Fresnel zone radius over $K=2/3$, whichever is greater
- Main to Diversity:
 - 60% first Fresnel zone radius over $K=4/3$ (Not Applicable)

Microwave path performance calculations and warranties

The microwave path design models most frequently employed within the industry (e.g., Vigants, and ITU-R P-530) provide a reasonably accurate (and therefore usually guaranteed) estimate of the cumulative time a path will be out of service due to random atmospheric multipath fading under normal atmospheric conditions. **These models do not (and cannot) accommodate abnormal, unusual, anomalous, or otherwise unpredictable conditions of weather or atmospheric refractivity.**

Microwave frequency engineering/inter-system interference analysis

Aviat Networks will partner with Comsearch, a CommScope company, to provide cost-effective frequency planning and FCC licensing services for radio communications systems (if required). The planning software used, considers specific operating parameters of both the proposed microwave system and the environment microwave systems (license and proposed) to properly consider the interference potential of the new path or system. Parameters and data elements incorporated into the modeling include, but are not limited to:

- Antenna type, antenna height, elevation, antenna radiation pattern
- Receiver filter performance
- Terrain
- Radio modulation
- Path orientation
- Receiver threshold

These elements are required to accurately predict specific interfering levels into and from the existing microwave systems. The accuracy of the calculations is ensured by real-time maintenance of the Comsearch point-to-point microwave, earth station, radio equipment, antenna, interference objective, and contact database.

Microwave frequency selection

The interference analysis performed on the microwave system identifies available frequencies considering existing and proposed systems found in the Comsearch database. When applicable, an analysis of the systems in the adjacent bands can be done to ensure the microwave system does not receive unwanted threshold degradation. In bands shared with satellite systems, an analysis of potential interference with earth stations and with the geo-stationary satellite orbit can also be done. Additionally, co-located or nearby transmitters already licensed in the required frequency band can be identified in order to reduce the possibility of "bucking" an existing high/low frequency plan that could increase the possibility of receiver overload or reflective interference from a nearby system.

Microwave frequency coordination and FCC licensing

The majority of microwave bands subject to FCC Rule Part 101 require prior coordination with existing licensees. Aviat Networks will partner with Comsearch to perform the frequency coordination and FCC licensing on behalf of the Customer (if required). The procedure will include notification of the technical parameters of the proposed system to all existing and proposed licensees in the area and frequency band of operation. Frequency coordination will also be performed with Canadian and Mexican authorities in border areas when necessary. By FCC rule, recipients are given 30 days to respond, or in some cases an expedited response can be requested.

Upon completion of the prior coordination process, documentation required to satisfy FCC Rule Part 101.103 (d) can be prepared on behalf of the Customer. This will include any necessary exhibits, including supplemental showings required upon submittal of the requested license application. The FCC filing process includes:

- Filing of the FCC Form 601 microwave application upon written approval from Customer and providing an electronic copy of the application to Customer via email.
- Tracking the status of the application until the license is granted by the FCC. Amendments will be handled expeditiously on behalf of Customer for any questions or concerns from the FCC.
- Email notifications to the licensee when the license is granted by the FCC.
- Filing of the required completion of construction notification with the FCC upon written approval from the licensee and notification of the filing via email.

Special Considerations

On all microwave radio paths traversing urban areas there exists the possibility of multiple on- and off-path structural reflections which generate long-delayed echoes, as well as terrain scatter RF intra- and inter-system interference. Long delayed, low-level echoes have no effect on digital radio performance; however, the terrain scatter mechanism cannot be accurately predicted nor precisely measured without an extensive and expensive field trial. Consequently, this mechanism is specifically excluded from all current industry-wide path survey and frequency coordination performance guarantees.

The structure supporting the microwave antenna can take many forms. The antenna is most often mounted on a tower but can be mounted on a variety of structures such as roof tripods, penthouse wall, wooden telephone pole, or metal monopole. It is recommended that Customer conduct a structural analysis of the support structure to determine if the structure will support the additional loading imposed by the antenna and its mount. The structure must also meet the twist and sway requirements per EIA/ANSI 222G.

Site Access

Access to work sites will be made available by CLARK COUNTY - SNACC for a minimum of 10 hours per day, 5 days per week or per the agreed schedule in the project plan. All roads leading to work sites shall not require more than a 4-wheel drive vehicle unless stated otherwise and agreed to by both CLARK COUNTY - SNACC and Aviat Networks. Any delays or additional cost caused by poor road conditions or site access issues not discussed prior to the start of the surveys will be billed to CLARK COUNTY - SNACC as a billable change order and could have a negative impact on the project completion schedule.

FCC Rules for Filing Accuracy

CFR 47, Part 1.929 specifies that filing accuracy for site coordinates shall be (+/-) 1" latitude and longitude, and for ground elevation (+/-) 1 meter (3.28 ft.). Part 1.929(k) (covering modification of FCC licenses) specifies that any change in site coordinates >5" latitude or longitude shall require prior authorization and re-coordination. Therefore, wherever our survey results deviate more than (+/-) 5" latitude or longitude, or more than +3.28 ft. site elevation, frequency re-coordination will be recommended.

Terms and Conditions

When Aviat Networks performs reliability calculations or path studies (path profiles from mapping or digitized data only) based solely on information supplied by or on behalf of the Customer, these calculations and studies are provided solely for budgetary purposes and shall not be construed as or be used for an installable design.

When conducting a path survey, Aviat Networks will verify site coordinates and ground elevations, and record trees and man-made fixed obstructions on the path. This information will be recorded on the profile for that particular path. Aviat Networks will assign an appropriate growth factor to tree heights.

When Aviat Networks performs frequency planning based, in part or its totality, on data provided by the Customer at the time of the study, Aviat Networks will not be responsible for any interference case that might arise due to errors or omissions in such data. As

the usage of microwave bands increase and there is more sharing with satellite services, it may be necessary to perform frequency interference studies and additional path surveys (to determine blockage) to alleviate the possibility of interference from satellite earth stations.

Warranty of Path Engineering Services

Aviat Networks warrants that the installed radio communication path will conform to Customer's multipath performance reliability objectives when Aviat Networks has performed the path survey, recommended the path design, and implemented such recommendations. This warranty is for a period of fifteen (15) months from the date of the survey or one (1) year from the date of installation of the microwave path, whichever expires first. All Aviat Networks field activities and path propagation analysis will utilize current hardware, software, engineering practices and judgment with the goal of meeting normal Path Loss, as defined in TIA/EIA Standard RS-252-A.

Aviat Networks is not responsible for paths that it does not survey, nor for changes in path design beyond those specifically allowed in the path survey report or in writing after the field survey is completed, including but not limited to:

- Any change in path design;
- Any movement in site locations;
- Any building or other structure built on-path after date of survey;
- Any disturbance of the terrain which may cause blockage or reflection;
- Any additional frequency interference source;
- Any change of available antenna mounting space on tower.

Any one of these changes listed will nullify the warranty, and the Customer shall in such case bear the total cost of determining that such change was the cause.

Aviat Networks will not be responsible for degraded path performance when such degradation is due to such anomalous propagation conditions as:

- Long-term loss of fade margin due to antenna decoupling misalignment caused by widely-varying k-factor changes;
- Long-term loss of fade margin due to atmospheric boundary layering ("ABL") causing wave front defocusing (beam spreading), signal entrapment (blackout fading), ducting, and other such occurrence.
- Excessive rain outage rates beyond the published crane and/or chart data used in the calculation;
- Degradation resulting from certain types of multipath interference attributed to unidentifiable off-path terrain features or structures;
- Any other technological or atmospheric condition not foreseeable through the exercise of prudent engineering knowledge and judgment.

Additionally, Aviat Networks will not be responsible for degraded path performance when:

- Non-Aviat Networks radio equipment is installed on a surveyed path;
- Aviat Networks radio equipment is not installed by Aviat Networks;
- Existing antenna and waveguide system is used without test and inspection performed by Aviat Networks.

Aviat Networks designs the microwave path based upon engineering practices and standards common to the industry. When path loss or reliability objectives are not achieved, Customer's sole remedy, and Aviat Networks' exclusive liability in connection with path engineering, shall be that Aviat Networks will provide incremental labor and material to optimize the antenna system to meet the requirements created during initial installation.

Where anomalous propagation is suspected in an installed microwave path, Aviat Networks will work with the Customer to obtain reasonable evidence that such condition exists. The total retroactive costs for such study shall be the responsibility of the Customer, and Aviat Networks will provide in-office engineering support at Customer's expense. The cost of relocating towers, antennas, passive reflectors, or other measures required to remedy this type of problem shall solely be the responsibility of the Customer.

Deliverables

Refer to section 2.3.3 for a full list of Aviat Networks path design deliverables.

Limitations

THE LIMITED WARRANTY CONTAINED IN THIS SOW CONSTITUTES AVIAT NETWORKS' SOLE AND EXCLUSIVE LIABILITY HEREUNDER AND CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR DEFECTIVE OR NON-CONFORMING EQUIPMENT, SERVICES, AND SOFTWARE MEDIA OR LICENSED PROGRAMS. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES (EXCEPT AS TO TITLE), WHETHER ORAL, WRITTEN, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, ANY IMPLIED WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OR CONDITION ARISING OUT OF COURSE OF DEALING, COURSE OF PERFORMANCE, OR CUSTOM OR USAGE OF TRADE. CUSTOMER AGREES THAT NO CIRCUMSTANCE CAUSING CUSTOMER'S EXCLUSIVE AND LIMITED REMEDIES TO FAIL IN THEIR ESSENTIAL PURPOSE SHALL INCREASE OR EXTEND ANY AVIAT NETWORKS WARRANTY. THE TOTAL LIABILITY OF AVIAT NETWORKS AND ITS LICENSORS UNDER THIS WARRANTY SHALL IN ANY EVENT BE SUBJECT TO THE LIMITATIONS IN THIS SOW.

ANY WARRANTY CLAIM NOT SENT TO AVIAT NETWORKS IN WRITING DURING THE APPLICABLE WARRANTY PERIOD IS WAIVED BY CUSTOMER. REPLACEMENT EQUIPMENT, SERVICES, SOFTWARE MEDIA AND LICENSED AVIAT NETWORKS PROGRAMS ARE WARRANTED ONLY FOR THE BALANCE OF THE UNEXPIRED PORTION OF THE ORIGINAL WARRANTY PERIOD, IF ANY.

CUSTOMER IS EXPRESSLY NOTIFIED THAT UNDER NO CIRCUMSTANCES SHALL AVIAT NETWORKS BE LIABLE FOR (A) ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY PARTY, INCLUDING THIRD PARTIES, EVEN IF SUCH DAMAGES ARE FORESEEABLE, OR (B) LOSS OF REVENUE, LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE, LOST SAVINGS, OR LOST OR CORRUPTED DATA, OR (C) LOSSES RESULTING FROM SYSTEM SHUTDOWN, FAILURE TO ACCURATELY TRANSFER, READ OR TRANSMIT INFORMATION, FAILURE TO UPDATE OR PROVIDE CORRECT INFORMATION, SYSTEM INCOMPATIBILITY OR PROVIDING INCORRECT COMPATIBILITY INFORMATION OR BREACHES IN SYSTEM SECURITY EVEN IF AVIAT NETWORKS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION SHALL APPLY TO ANY CLAIM OR CAUSE OF ACTION WHETHER IN CONTRACT OR TORT (INCLUDING NEGLIGENCE, STRICT LIABILITY OR BREACH OF WARRANTY).

IN NO EVENT SHALL AVIAT NETWORKS' TOTAL LIABILITY TO CUSTOMER OR ANY PARTY CLAIMING THROUGH CUSTOMER EXCEED THE LESSER OF ONE HUNDRED THOUSAND UNITED STATES DOLLARS (\$100,000.00 USD) OR THE ACTUAL SALES PRICE PAID BY CUSTOMER FOR ANY EQUIPMENT, SOFTWARE OR SERVICES SUPPLIED UNDER THIS SOW.

8. APPENDIX D: PROJECT ENGINEERING

Microwave Site Design

The Aviat representative overseeing implementation (“Project Engineer”) will perform field site surveys to verify that telecommunications equipment can be installed, powered and commissioned effectively at each site, antennas, waveguide and accessories can be connected to radios (towers, shelters and buildings), and Customer traffic, alarms and dehydrator lines are fully engineered.

Microwave Site Survey

The microwave site survey is intended to gather data and identify the gap(s) between the site’s present state and the site readiness for equipment installation, document any visible issue with the existing infrastructure and equipment that would pose a quality or safety issue during installation, gather environmental data and requirements for telecommunication equipment to function properly (including but not limited to HVAC, temperature, humidity, the general state of the facility as well as seismic evaluation and compliance if required), record flooring, ceiling, racking data and requirements to mount new equipment (including floor plans, relay rack profiles, aisle numbering plans, and ceiling hangers, ladders, and anchor materials required to meet quality and safety standards.

The survey is also intended to record AC, DC, grounding (as is and to be), and breaker assignments and ensure power and grounding standards are met, identify demarcation types and location between new and existing equipment as well as the type of termination and the details required to terminate to the Customer provided equipment, identify existing radio equipment (fixed and mobile) as well as their operating frequencies, record existing waveguide, dehydrator component and their associated cabling, identify all required or existing tower structures, mounting structures, antenna mounting types, waveguide ladder systems, entryway into telecom shelters, and energy sources.

The results of the survey will be published and released in a site survey report and will be utilized by Aviat Networks for preparation of final power calculations, waveguide requirements, field OEM requirements, installation specifications, field test plans, and traffic cutover plans. In the event where Aviat Networks will not be performing the site survey, CLARK COUNTY - SNACC shall provide all the documents needed to Aviat Networks to complete the site engineering and final system design. Aviat Networks will not be responsible for validating the accuracy of the information provided by CLARK COUNTY - SNACC and assumes no responsibility in any inaccuracies of any part of the site engineering and microwave site design when such design is based on the information provided by CLARK COUNTY - SNACC or any contact affiliated with CLARK COUNTY - SNACC. Any corrective action required as a result of this will be billed to CLARK COUNTY - SNACC as a billable change order.

Site Access

Access to work sites will be made available by CLARK COUNTY - SNACC for a minimum of 10 hours per day, 5 days per week or per the agreed schedule in the project plan. All roads leading to work sites shall not require more than a 4-wheel drive vehicle unless stated otherwise in this SOW and agreed to by both CLARK COUNTY - SNACC and Aviat Networks. Any delays or additional cost caused by poor road conditions or site access issues not discussed prior to the start of the surveys will be billed to CLARK COUNTY - SNACC as a billable change order and may have a negative impact on the project completion schedule.

Field Installation Management

Aviat Networks will manage the day-to-day activities of the field installation with support from CLARK COUNTY - SNACC to ensure the project remains on schedule as per the agreed project schedule.

Deliverables

Refer to section 2.4.3 for a full list of Aviat Networks site design deliverables.

9. APPENDIX E: INSTALLATION, INTEGRATION & TESTING

The installation, integration, and testing services include design-supported methodologies, product expertise, and field-proven processes to help ensure a quality installation and testing of critical system paths and hardware so that the network performs according to its design. Aviat Networks will designate a primary point of contact to answer any CLARK COUNTY - SNACC questions, provide guidance, and address issues specific to this service.

This SOW is based on an Aviat Networks standard installation schedule of 10-hour days, 5 days per week. Aviat Networks will adjust this SOW for work week schedules outside of Aviat Networks' standard. Installation work performed during maintenance windows is not included in this SOW unless specifically identified. All work will be done in accordance with Aviat Networks' best practices guide.

Scope

Delivery of this service will utilize the design documentation developed as part of the planning and design phase. Field crews will utilize this documentation to:

- Install antenna systems
- Install transmission lines
- Install indoor microwave equipment, racks and components
- Install DC power equipment
- Perform antenna alignment
- Perform system integration
- Perform system testing

System implementation is predicated upon completion of civil construction and complete site readiness. Antenna, waveguide and equipment installation activities will be performed at the same time on a per-site basis. As part of the delivery of this service, Aviat Networks may choose to integrate equipment at the manufacturer's location to minimize onsite installation time and provide a common point for quality assurance inspections. If staging areas are utilized as part of the project, equipment and materials will be delivered from these facilities to site by the installation crews. ***It is recommended that CLARK COUNTY - SNACC provide maintenance technicians during any service affecting work.***

The successful completion of all installation, integration, and testing services are based on uninterrupted, contiguous-site installation and testing. Additional mobilizations are not included in the pricing and project schedule. If installation is delayed due to inclement weather, inaccessible sites(s), incomplete site preparation, or construction, the following charges may apply and will be billed to CLARK COUNTY - SNACC as a billable change order:

- Standby time for antenna installation teams will be charged at a rate of \$1,150 per person per day.
- Standby time for radio teams will be charged at a rate of \$1,250 per person per day.
- If re-mobilization of the installation crew is necessary, then a two-week advance notice is required.
- Re-mobilization will be billed on a time-and-expenses basis.
- Service costing assumes use of 4-wheel drive vehicles for all project related vehicles. Additional requirements such as ATVs may require additional service costs.
- If the field crew(s) is required to work out of contiguous sequence due to conditions beyond the control of Aviat Networks, a charge equal to one day for each crew person will be assessed to the Customer for each occurrence.

Site Access

Access to work sites will be made available by CLARK COUNTY - SNACC for a minimum of 10 hours per day, 5 days per week or per the agreed schedule in the project plan. All roads leading to work sites shall not require more than a 4-wheel drive vehicle unless stated otherwise in this SOW and agreed to by both CLARK COUNTY - SNACC and Aviat Networks. Any delays or additional cost caused by poor road conditions or site access issues not discussed prior to the start of the installation, integration or testing services will be billed to CLARK COUNTY - SNACC as a billable change order and could have a negative impact on the project completion schedule.

Site Services

All work permits, public agency approvals, leasing agreements, zoning permits or inspections required at each site, soil analysis, foundation design, civil documentation for existing shelters or towers, architectural blueprints, plot plans, structural analysis for new or existing antenna systems, location of all site boundaries and features (including locating and marking tower location, true North, property boundaries, paved areas, landscaping, fences and any other underground/overhead obstruction which could interfere with construction and access), and/or other related documentation for this project will be obtained, conducted, completed and made available to all parties involved prior to the start of any installation, integration or testing services. All other construction and installation work will be conducted in accordance with local city, county, state, and government laws and regulations.

All equipment including radios, antennas and racks will be stored by Customer in a secure location at the site or at a designated location. CLARK COUNTY - SNACC shall be responsible for the loss of any equipment, tools, or personal belongings from any secured location provided or monitored by CLARK COUNTY - SNACC.

Installation

CLARK COUNTY - SNACC shall verify that each site is ready for installation and commissioning activities, including CLARK COUNTY - SNACC supplied equipment installation and power up prior to the start of any such services and shall be responsible for any delay caused or cost incurred due to sites not being ready, as stated in the project scope of this SOW.

An inspection will be performed with CLARK COUNTY - SNACC after completing the physical installation. Workmanship deficiencies will be noted on a punch list for immediate correction. This inspection is not intended to verify operation of the new system or suitability of components, but rather to inventory and document that all equipment and materials from the schedule of values are installed to acceptable workmanship quality standards. Site drawings will be reviewed and red-lined to reflect the installed condition.

Testing

Test crews will begin work immediately after installation is complete. Testing, based on a standard set of Aviat Network test cases, will be performed on all provided equipment to confirm configuration, operation and manufacturer's specifications. Test data will be recorded on field test sheets, by technical field personnel who will also be responsible for documenting test results and any changes made to the design documentation.

The test crews will be trained on the equipment and utilize test equipment to perform all tests. Test equipment will have valid calibration certifications, which can be verified prior to commencing any tests. It is recommended that CLARK COUNTY - SNACC take the opportunity to have their maintenance technicians witness or participate in field commissioning testing to gain on-the-job training and experience on the new system components.

Commissioning tests will consist of a set of standard Aviat Networks test cases and include turn-up and performance verification tests and circuit tests to verify end-to-end continuity and equipment operation as well as any other tests documented in the field acceptance test plan. The field acceptance test plan shall be approved and agreed to by Aviat Networks and CLARK COUNTY - SNACC prior to test execution. Test results will be recorded on field test data sheets and submitted to CLARK COUNTY - SNACC. Refer to the field acceptance test document for details on the test to be performed.

System tests will be performed on a logical section/loop of the system. The system tests will be designed to demonstrate performance and functionality of system features as-well as end-to-end operation of individual circuits/services. System test results will establish benchmark system performance and operation prior to cut-over and acceptance. The test data sheets prepared during commissioning and system testing will become the base line document for maintenance and performance evaluation of the system over an extended period of time. CLARK COUNTY - SNACC will be required to review the commissioning and acceptance testing and results and red-lined drawings and provide approval of the data and authorization to proceed with cut-over activities.

Traffic Cut-over

Cut-over activities are anticipated to occur as DC, antenna and radio sub-systems are implemented. The Commissioning and system-level test activities verify that the new system is ready to accept traffic. Preparation, planning, logistics, and technical support are the critical elements in transferring existing services to a new system. CLARK COUNTY - SNACC infrastructure is utilized for control of mission critical infrastructure; therefore, processes must also be put in place to minimize interruptions as well as to restore the original service in the event of unforeseen situations.

Safety

The health and safety of all individuals, whether in the field, plant or office, takes precedence over all other concerns. Management's goal is to prevent accidents and to reduce personal injury and occupational illness and comply with all safety and health standards. A code of safe conduct is important to the efficiency of operations. To the greatest degree possible, CLARK COUNTY - SNACC will provide physical safeguards required for personal safety and health in keeping with the highest standards. Aviat Networks requires a written report from Customer for all accidents and incidents, no matter how small.

Safety and first aid material and supplies will be provided to all Aviat Network construction and installation personnel or made available at each site for the duration of this project. All safety and first aid material will be stocked at acceptable levels and will have not exceeded the expiration dates where applicable. CLARK COUNTY - SNACC will be responsible for providing Aviat Networks with the location and phone numbers of all local emergency agencies.

Deliverables

Refer to section 4.5 for a full list of Aviat Networks installation, integration, & testing deliverables.

10. APPENDIX F: ASSUMPTIONS & EXCLUSIONS

The following assumptions will govern the delivery of the project management service:

- This SOW and associated pricing is based on CLARK COUNTY - SNACC completing all items set forth in this SOW as being CLARK COUNTY - SNACC responsibility to ensure site readiness.
- Any inaccuracies in FCC data may drive additional services costs during field implementation. In addition, any other troubleshooting tasks related to frequency interference issues that are not directly attributable to Aviat Networks are subject to additional service fees at rates defined in this SOW.
- All equipment interconnections or termination points, unless specified otherwise, are estimated to be fifty (50) feet. This project does not include any cabling between buildings, rooms, or floors, unless specifically identified in this SOW.
- Customer provided construction drawings will have sufficient details for Aviat engineering to order antenna mounting or any other related material required. Any re-engineering to provide correct mounts or material required by Aviat Networks may increase cost to CLARK COUNTY - SNACC.

Unless otherwise stated in this SOW, the services provided by Aviat in this SOW shall be subject to the following terms:

- Aviat shall not be responsible for managing CLARK COUNTY - SNACC project responsibilities and deliverables.
- This SOW is a listing of roles and responsibilities to be provided by Aviat Networks. Aviat Networks shall not be responsible for the condition of existing equipment or the deficiencies of non-Aviat Networks provided labor. Only the labor addressed in this SOW shall be provided by Aviat Networks.
- On-site technicians will decline any CLARK COUNTY - SNACC request for work outside the scope of work defined and agreed upon in this SOW unless it is addressed in a change order.
- Aviat Networks proprietary documentation used by service delivery teams to perform this service is not available to CLARK COUNTY - SNACC.
- Aviat shall not provide proprietary information on methods, procedures, or tools to perform the services in this SOW.
- Aviat shall not perform any and services that are not specifically described within this SOW as being provided by Aviat Networks.
- Aviat Networks will not be responsible for the resolution of other vendor issues affecting the completion of the cutover. Aviat Networks can provide guidance and support to CLARK COUNTY - SNACC in resolving interoperability issues, where applicable.
- Aviat shall not repair equipment not in the engineering drawings. Equipment requiring repair that is not included in the engineering drawings but is still under warranty must follow Aviat's repair and return procedures.
- Additions or changes to ironwork, cable racks, or fiber ducts are not included and can be quoted separately after site visit information is collected
- AC power drop wiring within three (3) feet of DC power plants is excluded, unless specifically quoted

11. APPENDIX G: FIELD CHANGE ORDER PROCEDURE

Any change to the proposed system configuration, the number of sites, type of equipment, type of services or project responsibilities, or any other change to this SOW will be considered as a change in scope and will be subject to the following process:

- The Customer or Aviat Networks identifies a change of project scope of work.
- Aviat Networks Project Manager or Network Engineer will submit a proposed field change order authorization or an amendment to this SOW containing documentation of the proposed additional activity and an additional cost.
- An authorized Customer representative shall review and approve the field change order authorization or the amendment to this SOW in writing prior to changes to the scope of work being started.



Aviat Networks
200 Parker Drive, Suite C100A
Austin, Texas 78728
United States
Phone: (512) 582-4600
Fax: (512) 582-4605

CHANGE ORDER FORM

CLARK COUNTY - SNACC
SNACC MW replacement
NA181003-55697

This amendment hereby modifies and amends the Statement of Work ("SOW") between Aviat, U.S., Inc. ("Aviat Networks") and CLARK COUNTY - SNACC ("Customer") entered into on [insert SOW effective date here] as follows:

The following products **and** services are hereby **<added/deleted>** to the SOW at the specified prices. All other terms and conditions of the SOW remain unchanged.

Customer:	CLARK COUNTY - SNACC	Contract #:	
Phone:		Contract Date:	
Fax:		Change Order #:	
Email:		Aviat SO #:	

Line #	Description	QTY +/-	Unit Price	Ext Price +/-
1				
2				
3				
4				
5				
6				
7				
8				
9				
Subtotal Booking				\$
Tax (as applicable)				\$
Freight				\$
Other				\$
TOTAL THIS CHANGE				\$

Aviat U.S., Inc.		CLARK COUNTY - SNACC	
Approved By:		Approved By:	
Print Name:		Print Name:	
Title:		Title:	
Date:		Date:	

12. STATEMENT OF WORK SIGN-OFF

CLARK COUNTY - SNACC
SNACC MW replacement
NA181003-55697

Aviat Networks and CLARK COUNTY - SNACC agree that this SOW will govern the scope, roles, and responsibilities associated with the delivery of this project.

The parties also agree that material changes to the project scope or deviations from the assignment of responsibilities between Aviat Networks and CLARK COUNTY - SNACC shall require a change order or amendment to the project schedule.

Aviat U.S., Inc.		CLARK COUNTY - SNACC	
Approved By:		Approved By:	
Print Name:		Print Name:	
Title:		Title:	
Date:		Date:	



13. PROJECT COMPLETION SIGN-OFF

Complete one page for every site.

CLARK COUNTY - SNACC
SNACC MW replacement
NA181003-55697

<Site Name>

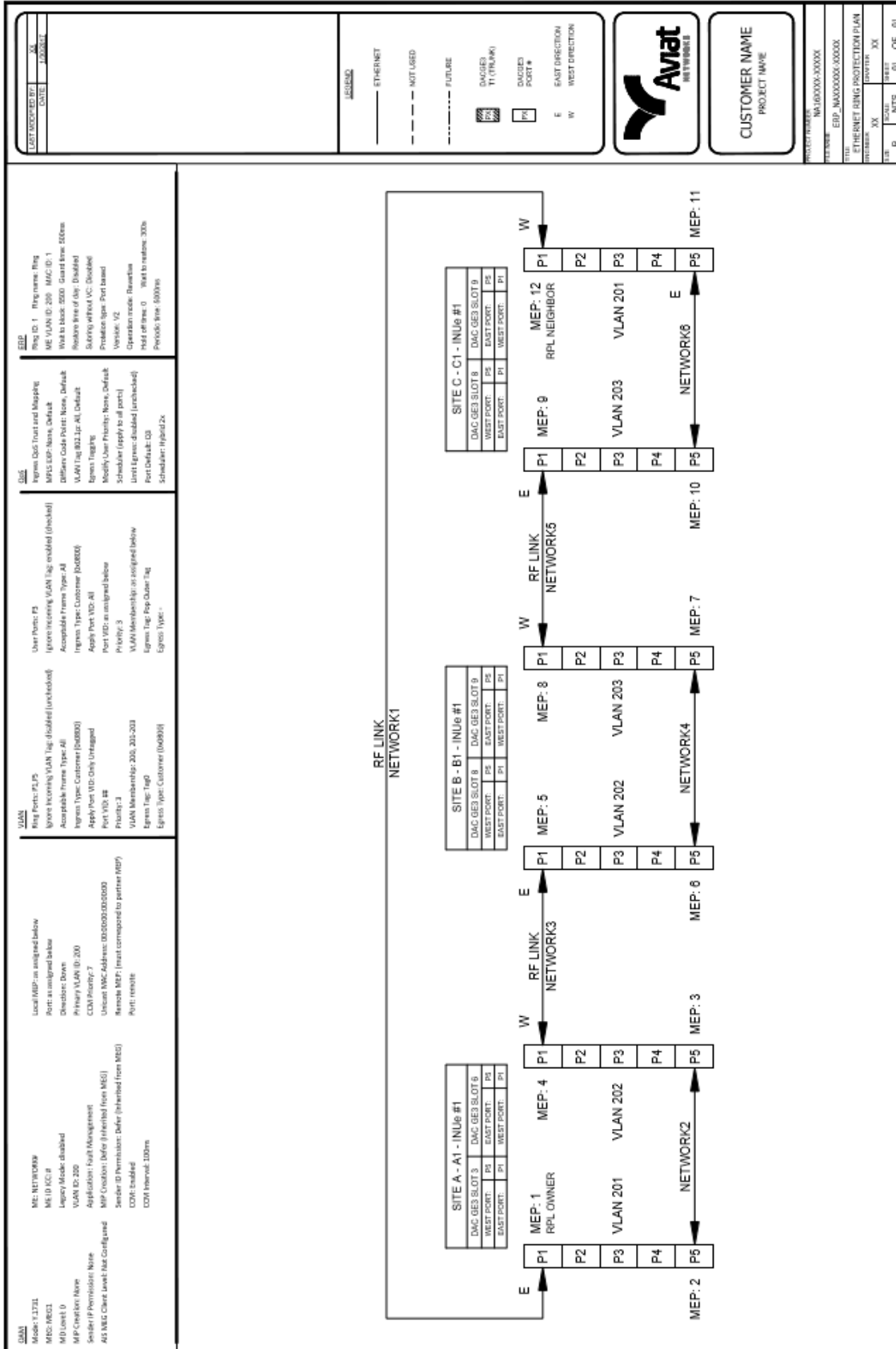
Equipment:

The Aviat Networks supplied microwave equipment has been completely installed and tested and has been accepted for traffic use with the following exceptions:

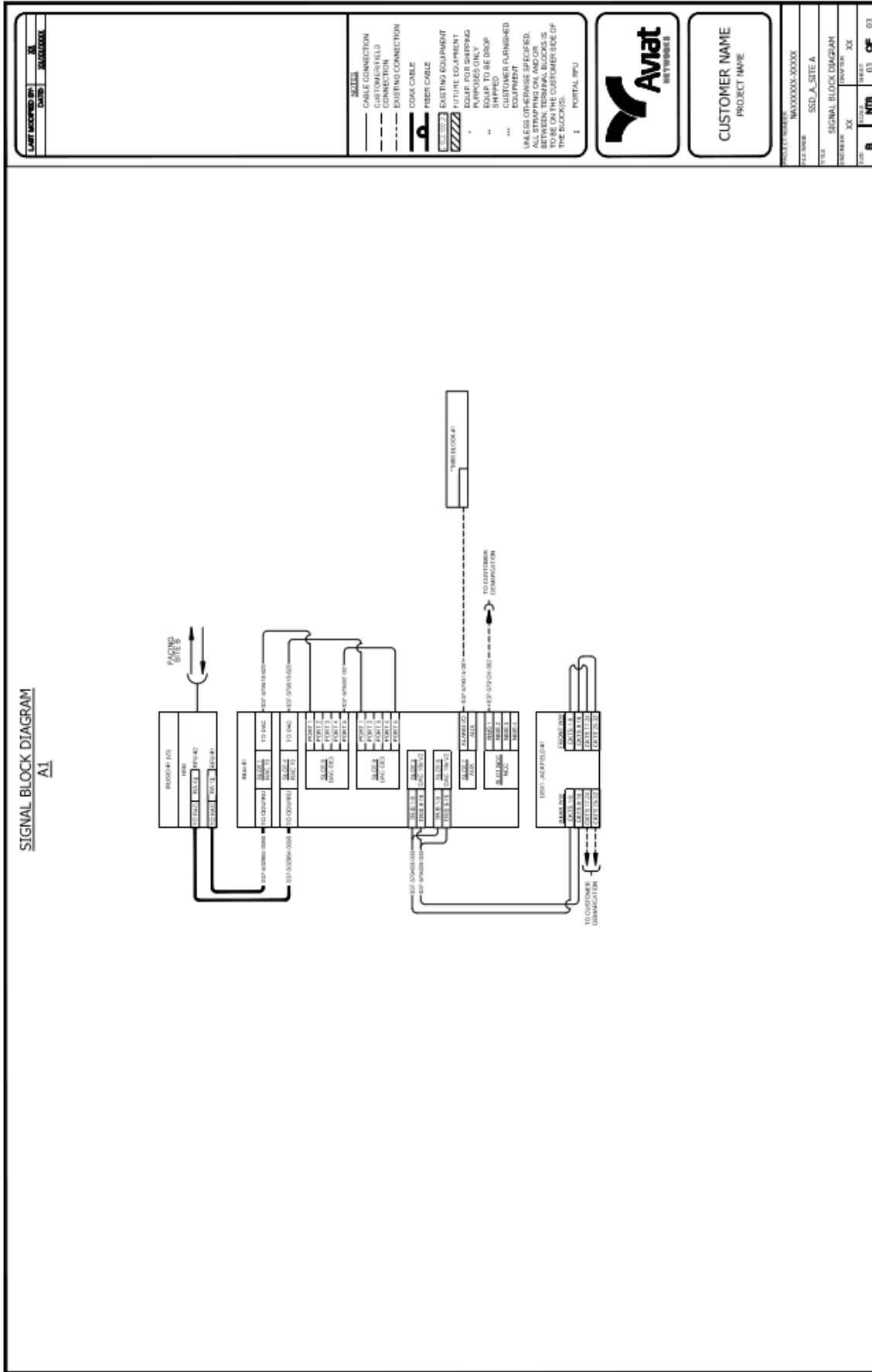
Exceptions (use additional sheets if required):

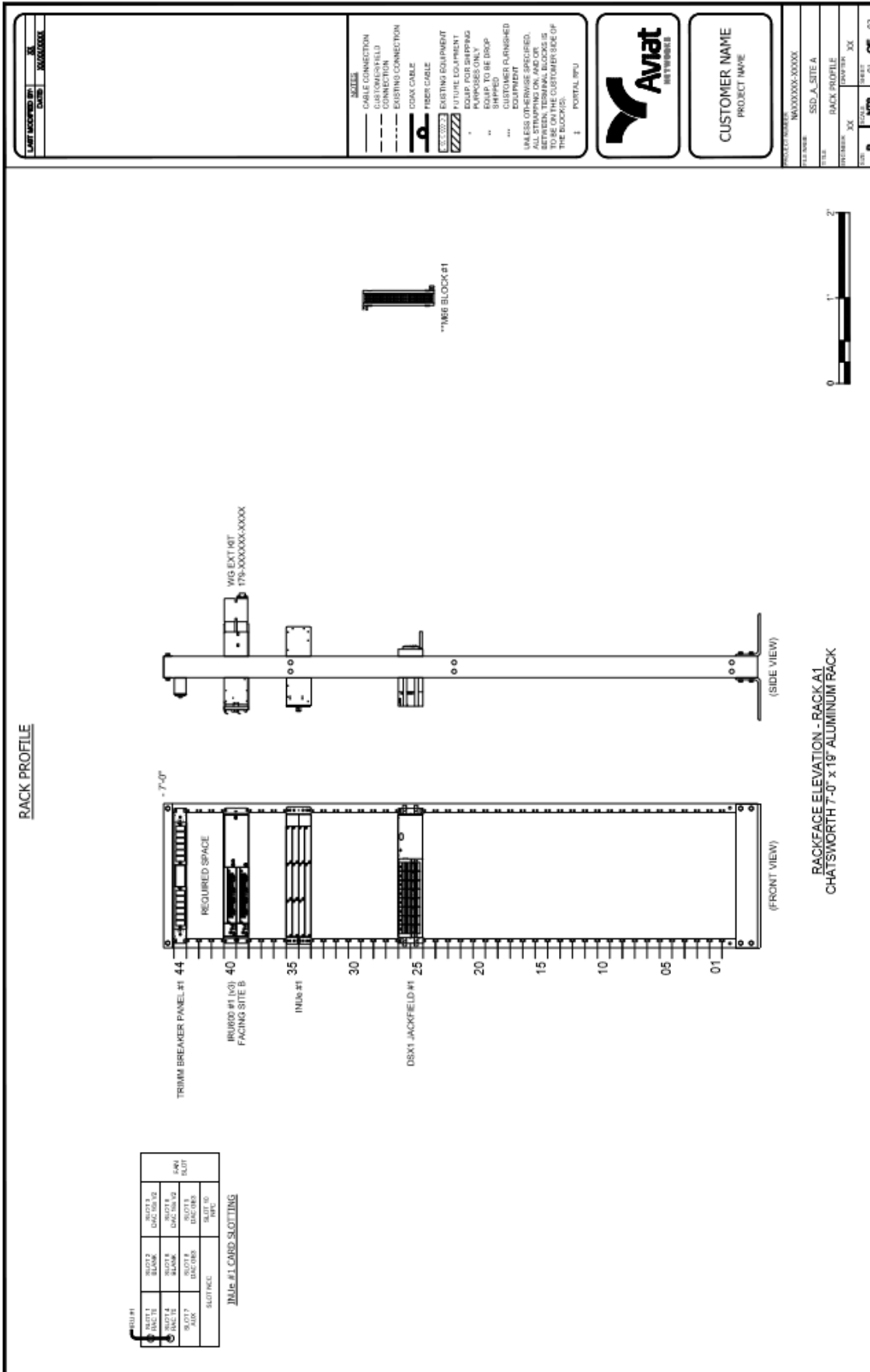
Please call Aviat’s customer service hotline at 1-800-227-8332 for service, equipment repair, training or miscellaneous sales or visit Aviat’s customer service website at <http://www.aviatnetworks.com>.

Aviat U.S., Inc.		CLARK COUNTY - SNACC	
Approved By:		Approved By:	
Print Name:		Print Name:	
Title:		Title:	
Date:		Date:	



Ethernet Ring Protection plan (ERP)





Sample Power Calculations



Eclipse Packet Node Power Consumption Calculation
Proposal #: NA130208-50689
Date: November 20, 2014
Network Engineer: M. Del Fierro

Site Name: Princeton

RFU / Module Type	Consumption	Manual Entry Qty
IRU600 1+1 High Power	124 W	1
RAC 60E	12 W	2
DAC GE V3	13 W	1
DAC 16X	2.5 W	2
NPC	8 W	1
INU or INUe	13 W	1
TOTAL		187.00 W

Total AMPS @ 48Vdc: **3.90 A**

Description	Consumption	Qty
TOTAL		0.00 W

Additional AMPS @ 48Vdc: **0.00 A**

Station Load (Amps)	3.90 A	Min. Battery Plant Size (AMP-HRS)	31
Recharge Time (Hours)	24	Min. Charger System Size (AMP Rating)	5
Battery Reserve (Hours)	8		
Ampere-Hour Multiplier	8.0		
Temperature Correction Factor	1	WATTS to BTU/HR	794
		(incl. charger and equipment)	

NOTE: Dehydrators operate with AC power

Hours Reserve=>	2	4	6	8	12	24	
Amp-Hour multiplier=>	2.8	4.7	6.4	8.0	10.9	19.3	
Temperature F(Deg)=>	0	10	20	40	60	70	77
Correction Factor=>	2.0	1.85	1.59	1.3	1.11	1.04	1.0
Battery Size (Min) =	Station Load	X	Amp-Hour Multiplier	X	Correction Factor		
Charger Size (Min) =	(1.15 X Battery Size / Recharge Time)	+	Station Load				

Sample IP Plan

EQUIPMENT		ACCESS & CONFIGURATION										ADDITIONAL RADIO					DATES				STATUS							
SITE NAME	Site Address	Vendor	Component	Tether	SSH	HTTP	TMS/MS	CRF/Reflex	Tether/Service	Default Ethernet IP Address	Default Ethernet Subnet Mask	Health (A/B/C)	Provisioned (A/B/C)	Enable Secret (A/B/C)	Access Methods (A/B/C)	System Name (A/B/C)	Read Write Config String	Write Write Config String	Peer Site Name Radio A (Far End Radio Site)	Peer Site Name Radio B (Far End Radio Site)	Display Name (A/B/C)	Radio Mgmt Date	Provision Mgmt Date	Launch Date	Element Update Date	Element Status	Current SW Revision	Reason for Provision
Princeton		Aviat	Edge	NA	NA	Yes	Yes	NA	NA	10.0.0.1	255.255.255.240 (/28)	default	default	default			terminal	terminal	Turquoise	Turquoise		11/20/2014	11/20/2014					N/A
Turquoise		Aviat	Edge	NA	NA	Yes	Yes	NA	NA	10.0.0.17	255.255.255.240 (/28)	default	default	default			terminal	terminal	Pinkston	Pinkston		11/20/2014	11/20/2014					N/A
Turquoise		Ascentra	SiteBosS550-E	NA	NA	Yes	Yes	NA	NA	10.0.0.18	255.255.255.240 (/28)	default	default	default			terminal	terminal	Turquoise	Turquoise		11/20/2014	11/20/2014					N/A
Tennessee Pass		Aviat	Edge	NA	NA	Yes	Yes	NA	NA	10.0.0.39	255.255.255.240 (/28)	default	default	default			terminal	terminal	Tennessee Pass	Tennessee Pass		11/20/2014	11/20/2014					N/A
Tennessee Pass		Ascentra	SiteBosS550-E	NA	NA	Yes	Yes	NA	NA	10.0.0.34	255.255.255.240 (/28)	default	default	default			terminal	terminal	Tennessee Pass	Tennessee Pass		11/20/2014	11/20/2014					N/A

**Southern Nevada Area Communications Council
Agenda Item**

Issue: For the Board to approve the quote from Motorola on the Juniper routers needed for the Microwave project.	Date: June 15, 2022
Petitioner: Jason Manzo, SNACC Administrator	Agenda Item: 4
Recommendation - FOR POSSIBLE ACTION: For the Board to approve the quote from Motorola on the Juniper routers needed for the Microwave project and/or take action as necessary.	

Fiscal Impact:
\$452,076

Background:

These routers are necessary for the microwave project as they are public safety grade and they can re-route the traffic back to the SNACC master site, if one of the microwave hops goes down.

Respectfully Submitted:


Jason Manzo
Jason Manzo
SNACC Administrator

SOUTHERN NEVADA AREA COMMUNICATIONS COUNCIL

MPLS BACKHAUL

April 1, 2022

The design, technical, pricing, and other information ("Information") furnished with this submission is proprietary and/or trade secret information of Motorola Solutions, Inc. ("Motorola Solutions") and is submitted with the restriction that it is to be used for evaluation purposes only. To the fullest extent allowed by applicable law, the Information is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the Information without the express written permission of Motorola Solutions.

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Motorola Solutions, Inc.
500 W Monroe Street
Chicago, IL 60661-3781
USA

April 1, 2022

Jason Manzo
Acting Administrator
Southern Nevada Area Communications Council
6000 East Rochelle Ave. Las Vegas, NV 89112

RE: Multi-Protocol Label Switching (MPLS) Juniper MX104 routers

Dear Mr. Manzo,

Motorola is pleased to offer a proposal on the request from the Southern Nevada Area Communications Council ("SNACC"), a solution for adding Multi-Protocol Label Switching (MPLS) to SNACC microwave backhaul using the Juniper MX104 routers, which supports Motorola's ASTRO 25 network.

This proposal shall remain valid for 90 days from the date of this letter, and is subject to the terms and conditions of the Contract previously entered into by the SNACC and Motorola effective December 1, 2014 (the "Contract"). Motorola's proposal is subject to the terms and conditions of the Contract and the enclosed payment milestones and applicable supplemental subscription terms. To accept Motorola's proposal, the SNACC may either issue a purchase order that incorporates by reference the Contract and Motorola's proposal dated April 1, 2022 or alternatively, SNACC and Motorola may execute a written change order to the Contract. Motorola would be pleased to address any concerns that you may have regarding the proposal.

Any questions the SNACC has regarding this proposal can be directed to Dane Mattoon, Sr. Account Executive, at (702) 400-2808, Dane.mattoon@motorolasolutions.com.

Our goal is to provide the SNACC with the best products and services available in the communications industry. We thank you for the opportunity to present our proposal, and we look forward to continuing to work with you to develop and implement a solution that meets your needs.

Sincerely,
Motorola Solutions, Inc.



Walter Whately
Area Sales Manager

TABLE OF CONTENTS

Section 1	
System Description	1-1
1.1 Introduction.....	1-1
1.2 MPLS Backhaul Network Design	1-1
1.3 Theory of Operation.....	1-1
1.4 MPLS Capabilities and Benefits.....	1-2
1.5 Juniper MPLS Router – MX104	1-3
Section 2	
Equipment List.....	2-1
Section 3	
Statement Of Work	3-1
3.1 Introduction.....	3-1
Section 4	
Project Schedule.....	4-1
Section 5	
Acceptance Testing	5-1
Section 6	
Warranty and Maintenance	6-1
6.1 OnSite Infrastructure Response.....	6-1
6.2 Juniper Care Next-Day Delivery	6-1
6.2.1 JTAC Access	6-1
6.2.2 Software Releases.....	6-1
6.2.3 CSC Online E-Support.....	6-2
6.2.4 Next-Day Delivery.....	6-2
Section 7	
Pricing Summary	7-1
7.1 Payment Terms	7-1
Section 8	
Contractual Documentation.....	8-1

SECTION 1

SYSTEM DESCRIPTION

1.1 INTRODUCTION

Based on the request from the Southern Nevada Area Communications Council (“SNACC”), Motorola Solutions Inc. (“Motorola”) is presenting this solution for adding Multi-Protocol Label Switching (MPLS) to SNACC microwave backhaul which supports Motorola’s ASTRO 25 network. The MPLS solution enable traffic engineering and shaping on the network.

1.2 MPLS BACKHAUL NETWORK DESIGN

Motorola Solution proposes a MPLS WAN Backhaul Network using the Juniper MX104 routers. These routers shall be deployed at each of the following SNACC sites to support the development of MPLS backhaul network. Each MX104 unit/chassis features a high level of redundancy through the inclusion of redundant power supplies, routing engines, and fans. This proposal includes MPLS equipment for following sites:

Table 1-1: Site and Equipment Listing

Name of the Site	Power	Equipment	Redundant / Non-Redundant MPLS Routers (Y/N)
Brooks	DC	MX104-PREM-DC	Y
Sun coast	DC	MX104-PREM-DC	Y
Fire Alarm Office	DC	MX104-MX5 (DC)	N
Mandalay Bay	DC	MX104-PREM-DC	Y
SNACC HQ	DC	MX104-PREM-DC	Y
Arden Peak	DC	MX104-PREM-DC	Y
Red Mountain	DC	MX104-PREM-DC	Y
BC Water Tank	DC	MX104-MX5 (DC)	N

In addition to the above equipment, Motorola has also included one SRX320 Juniper firewall to go at the master site for management. A set of spares for all above MX104 routers is included in the proposal.

Please note that at sites with no MW connectivity (Henderson P.D. and Geneva), Motorola will need a L2 Ethernet connection going to any other MW site in the network.

1.3 THEORY OF OPERATION

The MPLS routers will use MPLS in order to route traffic and maintain redundant links to all available sites in the network. MPLS (Multiprotocol Label Switching) is a method for engineering traffic patterns by assigning short labels to network packets that describe how to forward them through the network. MPLS is independent of routing tables or any routing protocol and can be used for unicast packets. Traffic is engineered (controlled) primarily by the use of signaling protocols to establish label-switched paths (LSPs). The backhaul

network will use MPLS to maintain and route traffic over the network architecture. In the event of a site link failure, the routers will reroute the traffic over the redundant links if available to maintain connectivity to all Customer's network application including the P25 Radio System. The traffic rerouting occurs in a small amount of time, so very minimum interruption of those network applications will be experienced.

1.4 MPLS CAPABILITIES AND BENEFITS

FAST CONVERGENCE

The integrated network offers the necessary reliability to maintain uninterrupted operation for both voice and data traffic. A single failure on the network ring in any part of the network will not impact the network capabilities. By finding alternative routes quickly around the failure, the end users will not be affected or aware a ring switch has occurred. A key capability of MPLS is that it provides a mechanism in which the connections are rerouted around the failure in sub 50 milliseconds using a feature called FAST reroute (FRR). Fast reroute (FRR) is available to route around a detected failure within 50 ms, similar to the protection provided from many current SONET platforms. Further, due to the support of back-up paths, the ultimate back-up path is predetermined and pre-sigaled to insure proper Quality of Service not only during normal operating conditions, but also in the event of a network disruption.

While strong platform resiliency attributes are needed, the use of IP/MPLS as a packet transport infrastructure provides rapid, deterministic failure accommodation in the network. Traffic engineering tools can be used offline to model single failures and ensure they can be accommodated. When one of the links fails, an MPLS protection mechanism such as fast re-route or secondary LSP protection can switch the traffic to the other working link at speeds comparable to SONET architectures after detecting the link failure.

If the traffic load exceeds the capacity of the remaining link, advanced traffic management mechanisms will ensure the protection of the higher priority traffic, with best-effort data being transmitted according to available excess bandwidth.



TRAFFIC PRIORITIZATION

Another key benefit of MPLS is Traffic Prioritization. As discussed above, in a reroute scenario, the high priority MPLS connections will take precedence over lower priority traffic insuring mission critical traffic reaches its destination. However, traffic prioritization also provides benefits during normal operations. The network operator will be able to define which traffic type or agency's traffic has priority. During periods of high traffic demand, important traffic will be guaranteed to reach its destination according to defined required requirements. A range of prioritization classifications is available. MPLS allows convergence over a common transport layer and dynamic bandwidth allocation, enabling low cost backhaul. Critical, time sensitive traffic (such as Land Mobile Radio) can be prioritized in an IP/MPLS tunnel in order to ensure it will reach its destination just like it was "wired" to the base station directly. Each service can have a specific bandwidth assignment for necessary or committed rate and/or a peak information rate to burst up to as additional bandwidth comes available when other applications are through communicating.

1.5 JUNIPER MPLS ROUTER – MX104

The SDN-ready MX104 Universal Routing Platform is a modular, highly redundant, and full-featured platform built for space- and power-constrained service provider and enterprise facilities.

The MX104 offers 80 Gbps of capacity, a redundant control plane for high availability, as well as four fixed 10GbE ports and four Modular Interface Card (MIC) slots for flexible network connectivity and virtualized network services. Optimized for mobile applications and central office deployments, the MX104 is also ETSI 300 compliant, environmentally hardened for deployment in outside cabinets and remote terminals, and supports advanced timing features.

Powered by Junos OS and the programmable Trio chipset, the MX104 shares the same advanced routing, switching, security, and service features that are available in large MX Series platforms, including support for a wide range of L2/L3 VPN services and advanced broadband network gateway functions.

Deployed in mission-critical service providers and enterprise networks worldwide, the MX104 helps network operators transform their networks—and their businesses—to thrive in our hyper-connected world.

The SDN-ready MX104 3D Universal Edge Router is a modular, highly redundant, and full-featured MX Series platform built for space- and power-constrained service provider and enterprise facilities.



Figure 1-1: MX104 Universal Edge Router

Each MX104 chassis provides:

- 160 Gbps capacity
- Two (2) DC Power Supplies
- Two (2) Routing Engines (Control Plane)
- Two (2) MIC Interface cards. Up to four (4) cards can be supported in a single chassis



SECTION 2

EQUIPMENT LIST

Table 2-1: Project Equipment List

QTY	NOMENCLATURE	DESCRIPTION
6	DSIGMX104PREMDC	MX104-PREM-DC-BNDL
12	DSIGMIC3D20GESFPE	MIC-3D-20GE-SFP-E
2	DSIGMX104MX5DC	MX104-MX5-DC
1	DSSRX320	JUNIPER NETWORKS SRX320 SERVICES GATEWAY HW ONLY
1	DSSRX320JSB	JUNOS SRX320 SECURE BRANCH SOFTWARE
1	DSIGSVCCPSRX320HW	JUNIPER CARE CORE PLUS SUPPORT FOR SRX320 HW ONLY - 12 MONTHS
1	DSIGSRX320RMK0	SRX320 RACK MOUNT KIT WITH ADAPTOR TRAY
1	DSIGMX104MX5AC	MX104 - MX5, 20X1GE, 1 S-MIC SLOTS AC
1	DSIGMX104MX5DC	MX104 - MX5, 20X1GE, 1 S-MIC SLOTS DC
1	DSSRX320	JUNIPER NETWORKS SRX320 SERVICES GATEWAY HW ONLY
1	DSSRX320JSB	JUNOS SRX320 SECURE BRANCH SOFTWARE
1	DSIGSVCCPSRX320HW	JUNIPER CARE CORE PLUS SUPPORT FOR SRX320 HW ONLY - 12 MONTHS
1	DSIGSRX320RMK0	SRX320 RACK MOUNT KIT WITH ADAPTOR TRAY
6	DSIGSVCNDMX104	ND SUPPORT FOR MX104
2	DSIGSVCNDMX104MX5	NDS FOR MX104-MX5-AC AND MX104-MX5-DC

SECTION 3

STATEMENT OF WORK

3.1 INTRODUCTION

Motorola will install and configure the proposed equipment summarized in the attached System Description and Equipment List. The following table describes the project tasks and responsibilities involved throughout the lifecycle of the project.

Prior to starting any equipment installations, Motorola and SNACC shall conduct a site readiness review examine existing work, or work performed by others, that is required to support the proposed design.

Implementation services included as part of this proposal are based on a single mobilization and will occur between normal business hours, Monday – Friday, 8:30am-5pm. Should SNACC require services to occur during non-business hours, additional costs may apply and will be handled via the change order process.

Table 3-1: Project SOW

Tasks	Motorola	SNACC
PROJECT INITIATION		
Contract Finalization and Team Creation		
Execute contract and distribute contract documents.	X	X
Assign a Project Manager as a single point of contact.	X	X
Assign resources.	X	X
Schedule project kickoff meeting.	X	X
Project Administration		
Ensure that project team members attend all meetings relevant to their role on the project.	X	X
Set up the project in the Motorola Solutions information system.	X	
Record and distribute project status meeting minutes.	X	
Maintain responsibility for third-party services contracted by Motorola Solutions.	X	
Complete assigned project tasks according to the project schedule.	X	X
Submit project milestone completion documents.	X	
Upon completion of tasks, approve project milestone completion documents.		X
Deliverable: Completed and approved project milestones throughout the project.		

Tasks	Motorola	SNACC
Project Kickoff / Design Review		
Introduce team, review roles, and decision authority.	X	X
Present project scope and objectives.	X	
Review SOW responsibilities and project schedule.	X	X
Schedule Design Review.	X	X
Review the Customer's operational requirements.	X	X
Present the system design and operational requirements for the solution.	X	
Present equipment layout plans and system design drawings.	X	
Present installation plan.	X	
Validate that Customer sites can accommodate proposed equipment.	X	X
Provide approvals required to add equipment to proposed existing sites.		X
Review safety, security, and site access procedures.	X	
Provide minimum acceptable performance specifications for customer provided hardware, software, LAN, WAN and internet connectivity.	X	
Provide heat load and power requirements for new equipment.	X	
Provide information on existing system interfaces.		X
Assume responsibility for issues outside of Motorola Solutions' control.		X
Review and update design documents, including System Description, Statement of Work, Project Schedule, and Acceptance Test Plan, based on Design Review agreements.	X	
Execute Change Order in accordance with all material changes to the Contract resulting from the Design Review.	X	
Deliverable: Finalized design documentation based upon "frozen" design, along with any relevant Change Order documentation.		
SITE PREPARATION		
Site Access		
Provide site owners/managers with written notice to provide entry to sites identified in the project design documentation.		X
General Facility Improvements		
Provide adequate HVAC, grounding, lighting, cable routing, and surge protection based upon Motorola		X

Tasks	Motorola	SNACC
Solutions' Standards and Guidelines for Communication Sites (R56)		
Ensure that electrical service will accommodate installation of system equipment, including isolation transformers, circuit breakers, surge protectors, and cabling.		X
Provide obstruction-free area for the cable run between the demarcation point and system equipment.		X
Supply interior building cable trays, raceways, conduits, and wire supports.		X
Deliverable: Sites meet physical requirements for equipment installation.		
SYSTEM INSTALLATION		
Equipment Order and Manufacturing		
Create equipment order and reconcile to contract.	X	
Manufacture Motorola Solutions-provided equipment necessary for system based on equipment order.	X	
Procure non-Motorola Solutions equipment necessary for the system.	X	
Deliverable: Equipment procured and ready for shipment.		
Equipment Shipment and Storage		
Provide secure location for solution equipment.		X
Pack and ship solution equipment to the identified, or site locations.	X	
Receive solution equipment.		X
Inventory solution equipment.	X	X
Deliverable: Solution equipment received and ready for installation		
General Installation		
Deliver solution equipment to installation location.	X	
Coordinate receipt of and inventory solution equipment with designated contact.	X	
Install all proposed fixed equipment as outlined in the System Description based upon the agreed-upon floor plans, connecting equipment to the power panels or receptacles. Installation performed in accordance with R56 standards and state/local codes.	X	
Provide system interconnections that are not specifically outlined in the system design, including dedicated phone circuits, microwave links, or other types of connectivity.		X

Tasks	Motorola	SNACC
Install and terminate all network cables between site routers and network demarcation points, including microwave, leased lines, and Ethernet.	X	
Ensure that Type 1 and Type 2 AC suppression is installed to protect installed equipment.		X
Connect installed equipment to the provided ground system.	X	
Perform preliminary audit of installed equipment to ensure compliance with requirements and R56 standards.	X	
Note any required changes to the installation for inclusion in the "as-built" system documentation.	X	
Deliverable: Equipment installed.		
MPLS Installation and Configuration		
Install, commission, and test microwave network prior to Motorola MPLS installation meeting latency, jitter and capacity requirements.		X
Provide rack space and AC or DC power to meeting Motorola equipment requirements in accordance with design documents.		X
Configure microwave network to support interface to MPLS routers as required.		X
Install equipment contained in the equipment list and system description.	X	
Configure ASTRO 25 system to support the new configurations.	X	
Deliverable: ASTRO 25 core and remote site equipment installation completed.		
SYSTEM OPTIMIZATION AND TESTING		
R56 Site Audit		
Perform R56 site-installation quality-audits, verifying proper physical installation and operational configurations.	X	
Deliverable: R56 Standards and Guidelines for Communication Sites audits completed successfully.		
Solution Optimization		
Verify that all equipment is operating properly and that all electrical and signal levels are set accurately.	X	
Verify communication interfaces between devices for proper operation.	X	
Resolve any interference caused by equipment not supplied by Motorola Solutions.		X
Ensure that functionality meets manufacturers' specifications and complies with the final configuration established during design review or system staging.	X	
Deliverable: Completion of System Optimization.		
Functional Acceptance Testing		

Tasks	Motorola	SNACC
Verify the operational functionality and features of the solution supplied by Motorola Solutions, as contracted.	X	
Perform link and failure mode testing.	X	
Document the results of the acceptance tests and present to the Customer for review.	X	
If any major task as contractually described fails, repeat that particular task after Motorola Solutions determines that corrective action has been taken.	X	
Review and approve final acceptance test results.		X
Resolve any minor task failures before Final System Acceptance.	X	
Deliverable: Completion of functional testing and approval by Customer.		
PROJECT TRANSITION		
Cutover		
Finalize Cutover Plan.	X	X
Migrate ASTRO network	X	
Resolve punchlist items, documented during the Acceptance Testing phase, in order to meet all the criteria for final system acceptance.	X	
Assist Motorola Solutions with resolution of identified punchlist items by providing support, such as access to the sites, equipment and system, and approval of the resolved punchlist items.		X
Deliverable: Migration to new system completed, and punchlist items resolved.		
Transition to Warranty		
Review the items necessary for transitioning the project to warranty support and service.	X	
Provide a Customer Support Plan detailing the warranty support associated with the contract equipment.	X	
Participate in the Transition Service/Project Transition Certificate (PTC) process.		X
Deliverable: Service information delivered and approved by Customer		
Finalize Documentation and System Acceptance		
Provide manufacturer's installation material, part list and other related material to Customer upon project completion.	X	

Tasks	Motorola	SNACC
Provide an electronic as-built system manual on CD or other Customer preferred electronic media. The documentation will include the following: <ul style="list-style-type: none"> ▪ Site Block Diagrams. ▪ Site Equipment Rack Configurations. ▪ Functional Acceptance Test Plan Test Sheets and Results. ▪ Equipment Inventory List. ▪ Maintenance Manuals (where applicable). ▪ Technical Service Manuals (where applicable). Drawings will be delivered in Adobe PDF format.	X	
Receive and approve documentation.		X
Execute Final Project Acceptance.	X	X
Deliverable: All required documents are provided and approved. Final Project Acceptance.		

Either Party may request changes to the general scope of this Agreement. If a requested change causes an increase or decrease in the cost or a change in system configuration the Parties will agree to an equitable adjustment of the Contract Price and will reflect the adjustment in a Change Order. Neither Party is obligated to perform requested changes unless both Parties execute a written Change Order.

SECTION 4

PROJECT SCHEDULE

The estimated time for completion of the project is 18 months from Project Kickoff through Final Project Acceptance. A mutually agreed upon detailed project schedule will be developed by the Motorola Solutions' Project Manager upon contract award during the Contract Design Review (CDR) phase of the project.

SECTION 5

ACCEPTANCE TESTING

System Acceptance of the proposed solution will occur upon successful completion of a Functional Acceptance Test Plan (FATP), which will test the features, functions, and failure modes for the installed equipment in order to verify that the solution operates according to its design. This plan will validate that the proposed solution will operate according to its design. A detailed FATP will be developed and finalized during the Design Review.



SECTION 6

WARRANTY AND MAINTENANCE

Motorola Solutions will provide warranty services per our standard warranty terms and conditions as outlined within the existing Agreement, B&Q #31428, Lease Purchase #23636. In addition to the warranty services, Motorola Solutions has included support services as included below.

6.1 ONSITE INFRASTRUCTURE RESPONSE

On Site Infrastructure Response provides local, trained and qualified technicians who arrive on location to diagnose and restore the communications network. Motorola Dispatch contacts the local authorized service center in your area and dispatches a qualified technician to the site. An automated escalation and case management process ensures that the technician arrives and system restoration begins within the contracted response times.

The field technician performs first level trouble-shooting, provides information regarding the system condition, removes any failed components for repair, and reinstalls new or reconditioned components. If the technician is unable to resolve the issue, the case is escalated to the System Support Center or product engineering teams as needed.

6.2 JUNIPER CARE NEXT-DAY DELIVERY

Juniper Care combines traditional 24x7 remote technical support, hardware replacement services, online support and service automation. More than a simple break-fix service, Juniper Care helps you meet network demands with technical and operational support designed to keep your network running reliably, while at the same time protecting your high-performance networking investment.

6.2.1 JTAC Access

With Juniper Networks Technical Assistance Center (JTAC) support, you have unlimited 24x7 access to JTAC engineers by phone and online. As a single point of contact for all of your support needs, JTAC engineers have extensive experience supporting large-scale networks. JTAC engineers can help you diagnose system problems, configure, troubleshoot, and provide work-around solutions. To ensure that JTAC responds as quickly as possible, automatic escalation alerts to senior management are triggered on all priority issues.

6.2.2 Software Releases

Juniper Networks provides you with access to all new software releases as soon as they are made available for general release.



6.2.3 CSC Online E-Support

The Customer Support Center (CSC) provides you with self-service access to Juniper's award winning online portal for the information, answers, tools, and service options required to ensure the support of your network investment. Features within the CSC include, but are not limited to, software downloads, technical alerts and bulletins, RMA requests, and the Juniper Networks Knowledge Base.

6.2.4 Next-Day Delivery

Juniper Networks will deliver FRU replacements to the ship-to address in advance of receiving returned defective hardware within the next business day if Juniper issues an RMA by 3pm (local JTAC time). "Next-Day Delivery" is subject to availability.



SECTION 7

PRICING SUMMARY

Table 7-1: Project Pricing

Description	Price
Equipment	\$240,442
Services	\$275,783
System Discount	(\$64,149)
PROJECT TOTAL	\$452,076

7.1 PAYMENT TERMS

Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Customer will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution. Payment for the System purchase will be in accordance with the following milestones.

System Purchase:

1. 50% of the system price is due upon Contract Execution
2. 50% of the system price is due upon Final Acceptance

SECTION 8

CONTRACTUAL DOCUMENTATION

This proposal is subject to the terms and conditions of the Contract previously entered into by the SNACC and Motorola effective December 1, 2014 (the "Contract"). Motorola's proposal is subject to the terms and conditions of the Contract and the enclosed payment milestones. To accept Motorola's proposal, the SNACC may either issue a purchase order that incorporates by reference the Contract and Motorola's proposal dated April 1, 2022, or, alternatively, SNACC and Motorola may execute a written change order to the Contract.



**Southern Nevada Area Communications Council
Agenda Item**

Issue: For the Board to set a deadline to get as many radios on the SNACC system to be TDMA (Time Division Multiple Access) ready by 2024 and for those agencies which are not ready, SNACC will make a reasonable effort to help facilitate their transition to TDMA (Such as, by temporarily enabling Dynamic Dual Mode).	Date: June 15, 2022
Petitioner: Jason Manzo, SNACC Administrator	Agenda Item: 5
Recommendation - FOR POSSIBLE ACTION: For the Board to set a deadline to get as many radios on the SNACC system to be TDMA (Time Division Multiple Access) ready by 2024 and for those agencies which are not ready, SNACC will make a reasonable effort to help facilitate their transition to TDMA (Such as, by temporarily enabling Dynamic Dual Mode and/or take action as necessary.	

Fiscal Impact:
None

Background:
Currently, more than half of the radios on the SNACC system are TDMA ready.

Respectfully Submitted:



Jason Manzo
SNACC Administrator

Agency/Dept:	TDMA	FDMA	ANALOG	Unkown "-"	APX-FDMA	XT	VARIANCE	Ttl. Count
RTC	557	925	1	2	53	872	MATCH	1485
Henderson Police	190	739	58	26	1	738	MATCH	1013
Clark County Aviation	282	628	57	31	321	306	1	998
CCSD Police	194	178	9	0	18	159	1	381
Nye County VHF	68	173	117	37	4	169	MATCH	395
Clark County Fire	428	123	0	1	66	57	MATCH	552
Henderson Fire	145	125	0	0	0	125	MATCH	270
Las Vegas Fire	546	79	0	2	3	76	MATCH	627
CCWRD	52	94	2	0	94	0	MATCH	148
North Las Vegas Fire	110	72	5	18	5	67	MATCH	205
AMR	69	71	1	0	10	61	MATCH	141
Henderson Jail	0	68	1	6	0	68	MATCH	75
Community Ambulance	118	57	0	0	0	57	MATCH	175
Henderson Utilities	54	17	0	0	0	17	MATCH	71
Medic West	57	35	0	1	9	26	MATCH	93
North Las Vegas Police	875	25	9	0	0	25	MATCH	909
UNIVERSITY POLICE SERVICES	164	44	0	0	0	44	MATCH	208
L V V W D	546	30	0	0	0	30	MATCH	576
UNIVERSITY HOUSING AND RESIDENTIAL LIFE UNLV	0	24	0	0	0	24	MATCH	24
Boulder City Fire	18	23	0	0	4	19	MATCH	41
L V V W D SNWA	328	11	0	0	0	11	MATCH	339
Las Vegas Parking Enforcement	0	22	16	0	0	22	MATCH	38
Henderson Marshals	0	19	6	1	0	19	MATCH	26
MERCY AIR NEVADA	8	16	0	1	1	15	MATCH	25
Nye County 800	107	15	0	48	5	10	MATCH	170
Clark County OEM	1	15	0	0	0	15	MATCH	16
Clark County Henderson Justice Court Marshals	0	12	0	0	0	12	MATCH	12
Las Vegas Animal Control	20	10	0	2	0	10	MATCH	32
HENDERSON CODE ENFORCEMENT	0	10	0	0	0	10	MATCH	10
Henderson Alternative Sentencing	0	9	0	0	0	9	MATCH	9
Clark County IT	0	9	0	0	0	9	MATCH	9
Las Vegas Marshals	177	5	0	0	0	5	MATCH	182
Las Vegas Detention & Enforcement	150	6	5	47	0	6	MATCH	208
HENDERSON OFFICE OF EMERGENCY MANAGEMENT AND SAFETY	5	5	0	0	0	5	MATCH	10
Clark County Boulder City Constable	0	5	0	0	0	5	MATCH	5
CLARK COUNTY HENDERSON CONSTABLE OFFICE	0	5	0	0	0	5	MATCH	5
Southern Nevada Health District	60	4	0	11	0	4	MATCH	75
MERCY AIR ARIZONA	0	4	0	0	0	4	MATCH	4
Henderson Attorney	2	3	0	0	0	3	MATCH	5
Paiute Tribal Police	32	2	0	0	0	2	MATCH	34
Clark County Juvenile Justice Services	0	2	0	0	0	2	MATCH	2
Boulder City Police	104	1	0	0	0	1	MATCH	105
Pahrump Valley Fire VHF	23	1	0	0	0	1	MATCH	24
HEALTHCARE AMERICA SHS_SUNRISE	1	1	0	0	0	1	MATCH	2
MGM RESORTS SECURITY	0	1	0	0	1	0	MATCH	1
HEALTHCARE AMERICA SHS_LAKES ER	0	1	0	0	0	1	MATCH	1
Clark County Coroner	0	1	0	0	0	1	MATCH	1
Special Event Temp	0	1	0	0	0	1	MATCH	1
STATE OF NEVADA GAMING CONTROL BOARD	81	0	0	1	0	0	MATCH	82
Clark County Building & Fire Prevention	50	0	0	0	0	0	MATCH	50
Las Vegas Court Marshals	38	0	0	0	0	0	MATCH	38
CCSD Attendance Officers	37	0	0	0	0	0	MATCH	37
UNIVERSITY PARKING AND TRANSPORTATION SERVICES	26	0	0	0	0	0	MATCH	26
Guardian Elite Medical Services	26	0	0	0	0	0	MATCH	26
Pahrump Valley Fire 800	17	0	0	18	0	0	MATCH	35
Clark County Family Services	13	0	0	0	0	0	MATCH	13
HENDERSON BUSINESS OPERATIONS DIVISION	7	0	0	0	0	0	MATCH	7
Boulder City Marshals	6	0	0	0	0	0	MATCH	6
OPTIMUMMEDICINE	6	0	0	0	0	0	MATCH	6
EMERUS-DIGNITY HEALTH ST ROSE MICRO	5	0	0	0	0	0	MATCH	5
UNITED STATES AIR FORCE-NELLIS	3	0	0	0	0	0	MATCH	3
LAS VEGAS CONVENTION and VISITORS AUTHORITY	2	0	0	0	0	0	MATCH	2
LAS VEGAS WATER POLLUTION CONTROL FACILITY	2	0	0	0	0	0	MATCH	2
MOAPA VALLEY FIRE DISTRICT	1	0	0	0	0	0	MATCH	1
UNIVERSAL HEALTH SERVICES BLUE DIAMOND	1	0	0	0	0	0	MATCH	1
UNIVERSAL HEALTH SERVICES GREEN VALLEY	1	0	0	0	0	0	MATCH	1
HEALTHCARE AMERICA SHS_ALIANTE ER	1	0	0	0	0	0	MATCH	1

CrossRoads of Southern Nevada	1	0	0	0	0	0	MATCH	1
HEALTHCARE AMERICA SHS_S. LAS VEGAS BLVD	1	0	0	0	0	0	MATCH	1
ELITE MEDICAL CENTER	1	0	0	0	0	0	MATCH	1
HEALTHCARE AMERICA SHS_SKYE CANYON ER	1	0	0	0	0	0	MATCH	1
UNIVERSAL HEALTH SERVICES VALLEY VISTA FED	1	0	0	0	0	0	MATCH	1
	5819	3726	287	253				10,085

Grnd Ttl. 10,085

**Southern Nevada Area Communications Council
Agenda Item**

Issue: Approve the Nevada Pool insurance for fiscal year 2023.	Date: June 15, 2022
Petitioner: Jason Manzo, SNACC Administrator	Agenda Item: 6
Recommendation - FOR POSSIBLE ACTION: Approve the Nevada Pool insurance for fiscal year 2023 and/or take action as necessary.	

Fiscal Impact:
\$34,179.60

Background:
This is a yearly reoccurring item. Last year SNACC paid \$26,858.41, this is insurance to cover all of the SNACC sites and equipment.

Respectfully Submitted:



Jason Manzo
SNACC Administrator

**Proposal Prepared
for**

**Southern Nevada Area
Communications Council**

Presented By

Lloyd Cutler



**5740 S. Arville Ste 204
Las Vegas, NV 89118**

702-798-3700

Date: 05/25/2022

The outlines of coverage used throughout this document, are not intended to express any legal opinion as to the nature of coverage. They are only visuals to a basic understanding of coverage and limits. For a complete understanding of the coverage's provided, please refer to the actual policy wording.

Price Summary

Named Insured: Southern Nevada Area Communications Council

Policy Term: 07/01/2022 – 07/01/2023

The total estimated price for the insurance coverage in this proposal is:

\$34,179.60

(21-22 \$26,858.41)

Insured Locations

Named Insured: Southern Nevada Area Communications Council

Policy Term: 07/01/2022 – 07/01/2023

See attached location list

Mailing Address:
6000 E Rochelle Ave, Las Vegas, NV 89122

Payment Options

Named Insured: Southern Nevada Area Communications Council

Policy Term: 07/01/2022 – 07/01/2023

Payment Option	Total	Due Now
Package	\$34,719.60	

Check payable to Assurance, Ltd.

Financing available upon request



poolpact.com
The Power of the POOL

NEVADA PUBLIC AGENCY INSURANCE POOL MEMBER COVERAGE SUMMARY

Prepared For:

Southern Nevada Area Communications Council

Prepared By:

Assurance Ltd

**THANK YOU FOR
YOUR
MEMBERSHIP!**



Dear POOL Member:

Thank you for your continuing leadership commitment to serving your communities by fulfilling your public service mission. The POOL continues to offer programs, services and support for Members' financial security and collaborating with you in support of your mission.

This Member Coverage Summary reflects the successful negotiations with multiple markets to obtain cost-effective terms, conditions and pricing for approval by the POOL Board on behalf of all Members.

As owners of the POOL, you approved the extensive risk management services, such as POOL/PACT HR services including its training courses and ELearning modules on important HR topics. Enrollment in POOL's ELearning programs including Target Solutions Fire/EMS training, KnowBe4 email security training continues to reach an increasing number of employees for convenient and cost-effective learning. Our ongoing focus on law enforcement policies and practices targeted jail and road operations with onsite and virtual assessments and sample policies.

We encourage you to discuss the POOL's services with staff and your agent. We regularly update our website and encourage you to visit www.poolpact.com to utilize a growing base of HR and risk management information in the resource libraries. While there, look for the POOL Coverage documents, board and committee agendas and minutes.

Thanks to all Member volunteers who serve on our boards and committees. These volunteers do a superb job of representing the interests of the Members of your POOL.

Sincerely,

Wayne Carlson
Executive Director
Nevada Public Agency Insurance Pool



NEVADA PUBLIC AGENCY INSURANCE POOL COVERAGE SUMMARY

RENEWAL PROPOSAL	COVERAGE PERIOD	NAMED ASSURED	MAINTENANCE DEDUCTIBLE
	07/01/2022 – 07/01/2023 Standard Time	Southern Nevada Area Communications Council	\$1,000

Property Coverage

Coverage	Limit per Loss	
Property	\$300,000,000	Per Schedule of Locations

The following sub-limits apply to Section V. C. Extensions of Property Coverage:

Accounts Receivable	\$5,000,000 per loss
Arson Reward	10% up to \$25,000 per loss
Debris Removal - Mold/ Asbestos	\$100,000
Earthquake	\$150,000,000 aggregate
Flood	\$150,000,000 aggregate \$25,000,000 aggregate - Flood Zone A
Equipment Breakdown	\$100,000,000 per loss
<ul style="list-style-type: none"> • Loss of Income & Extra Expense 	included
<ul style="list-style-type: none"> • Hazardous Substance Coverage 	\$250,000 per loss
<ul style="list-style-type: none"> • Spoilage Coverage 	\$250,000 per loss
<ul style="list-style-type: none"> • Data Restoration 	\$100,000 per loss
<ul style="list-style-type: none"> • Electrical Risk Improvements 	\$10,000
Expediting Expenses	\$25,000 per loss
Unintentional Errors and Omissions	\$5,000,000 per loss
Money and Securities	\$500,000 per loss
Ordinance or Law – LEED Building	\$500,000
Agreed Value Vehicles	Per Attachment D, if applicable



NEVADA PUBLIC AGENCY INSURANCE POOL COVERAGE SUMMARY

Liability Coverage

The Limits of Liability are as follows:

Coverage	Limit per Named Assured	Annual Aggregate Limit per Named Assured
Per Event	\$10,000,000	\$10,000,000
<i>All Sublimits are a part of and not in addition to the Limits of Liability.</i>		
<i>Liability Sublimits:</i>		
<ul style="list-style-type: none"> • Additional Assured (Lessors) (Section I, item 2) 	\$2,000,000	
<ul style="list-style-type: none"> • Weed Spray Property Damage (Section IV, item 3 (B) (2) (ix)) 	\$250,000	\$250,000
<ul style="list-style-type: none"> • Emergency Response to Pollution (Section IV, item 3 (B) (2) (v)) 	\$1,000,000	\$1,000,000
<ul style="list-style-type: none"> • Criminal Defense Fees and Costs (Section VI, part C, item 4) 	\$50,000	\$50,000
<ul style="list-style-type: none"> • Defense for Regulatory Agency Actions (Section VI, part C, item 16) 	\$50,000	
Sexual Abuse Sublimit (Section VI, part C, item 21)	\$2,500,000	\$2,500,000
<i>Retroactive Date</i>		<i>May 1, 1987 except as shown in Attachment C</i>



NEVADA PUBLIC AGENCY INSURANCE POOL COVERAGE SUMMARY

Cyber Risk Coverage Form

CYBER SECURITY RISK COVERAGE			
PART ONE: Terms and Conditions			
SECURITY RISK COVERAGE LIMITS	Limit per Named Assured Per PRIVACY OR SECURITY EVENT	Annual Aggregate Limit Per All Named Assureds	
PART TWO: Privacy or Security Liability Limits	3,000,000	3,000,000 up to \$15,000,000 aggregate all POOL Members combined	
<i>The following sublimits are a part of and not in addition to the Limits of Liability:</i>			
PART THREE: Security Failure/Privacy Event Management Coverage	\$100,000		
PART FOUR: Network Interruption Coverage	\$250,000	Waiting Hours Period: 12 hours	
Proof of Loss Preparation Costs (as defined), (Separate Limit)	\$50,000		
Retroactive Date		July 1, 2013	



NEVADA PUBLIC AGENCY INSURANCE POOL COVERAGE SUMMARY

Environmental Liability Coverage

The Limits of Liability are as follows:

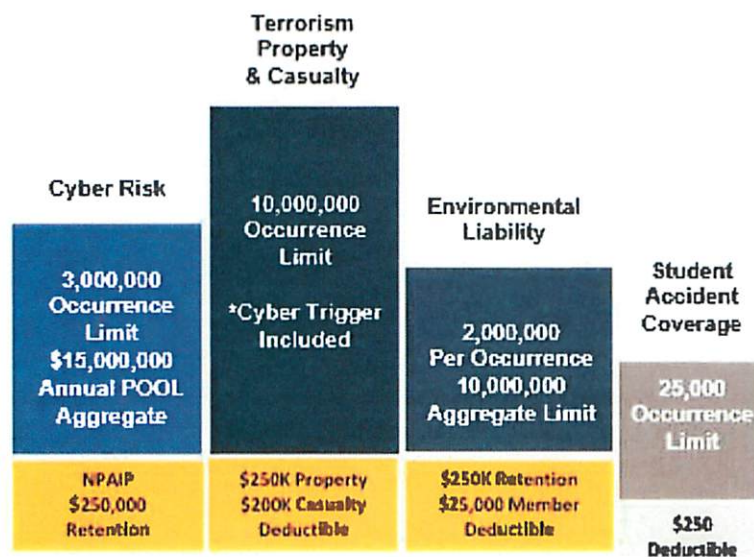
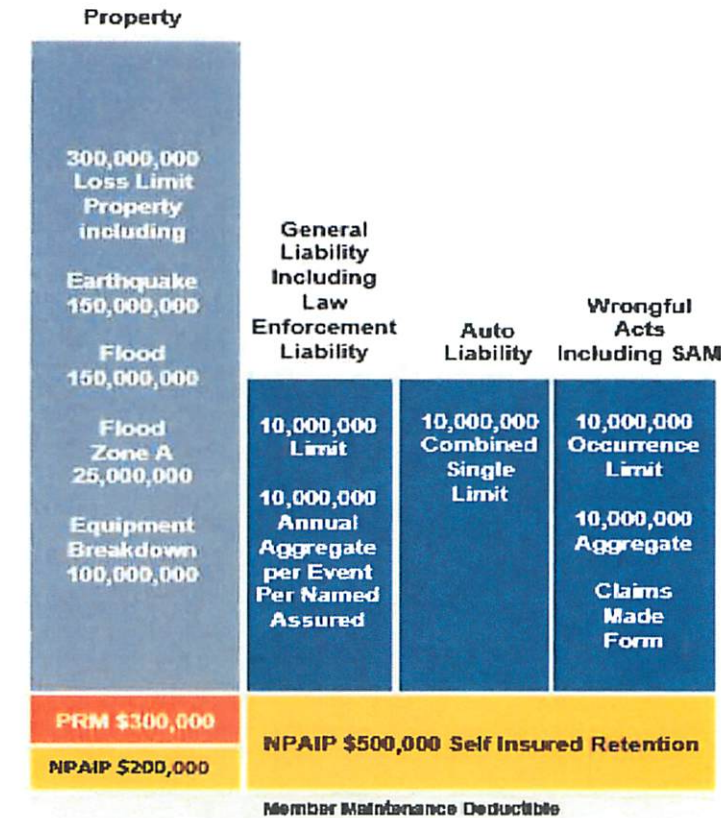
Coverage A	Third Party Claims for Bodily Injury, Property Damage or Remediation Expense
Coverage B	First Party Remediation Expense
Coverage C	Emergency Response Expense
Coverage D	Business Interruption

COVERAGE	DEDUCTIBLE	EACH INCIDENT LIMIT	AGGREGATE LIMIT
A,B,C	\$25,000	\$2,000,000	\$10,000,000

COVERAGE	DEDUCTIBLE	BUSINESS INTERRUPTION LIMIT (Days)	BUSINESS INTERRUPTION LIMIT (\$)
D	3 Days	365	\$2,000,000



NPAIP 2022-2023 Program Structure



This summary is intended for reference only. For specific terms, conditions, limitations and exclusions, please refer to the POOL Coverage Form and Cyber Risk Coverage Form edition July 1, 2022.



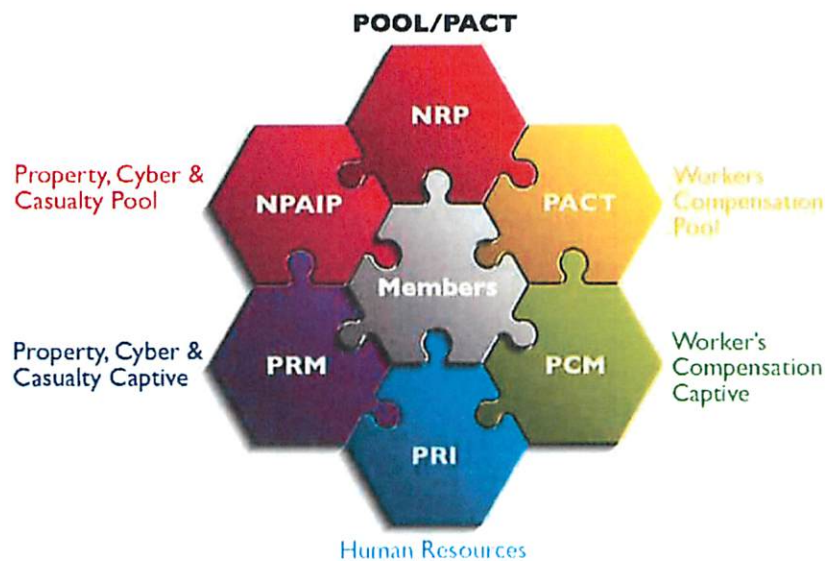
POOL/FACT – HERE FOR YOU

Members Helping Members

In 1987, four Nevada counties formed their own risk sharing pool. Now over thirty years later, the majority of Nevada's public entities remain committed to each other and the mission of their risk pool organization. POOL/FACT continues to excel in providing an unparalleled level of service to our members. Our mission seeks to help members manage their risks so they can serve the public effectively.

The POOL Board is comprised of dedicated, hardworking, and ethical Member leaders focused on public risk management. They continue to do an excellent job of representing the interests of the Member-owners of POOL/FACT.

Our members continue to see great value in being part of POOL/FACT because of extensive services, which keeps membership retention strong. POOL/FACT encourages you to discuss the services we offer with your insurance agent – its valued partner in the POOL program.



POOL Executive Committee

Josh Foli - Chair (Lyon County)
Geof Stark – Vice Chair (Churchill County)
Amanda Osborne - Director (Elko County)
Dan Murphy - Director (Pershing Co.SD)
Gina Rackley – Fiscal Officer (Humboldt Co)
Ann Cyr - Director (Carson City SD)
Scott Lindgren - Director (TDFPD)

PACT Executive Committee

Paul Johnson - Chair (White Pine CSD)
Mike Giles – Vice Chair (City of Lovelock)
Amana Osborne - Trustee (Elko County)
Josh Foli – Fiscal Officer (Lyon County)
Robyn Dunckhorst - Trustee (Humboldt GH)
Craig Roissum - Trustee (City of Caliente)
Joe Westerlund – Trustee (Town of Tonopah)



PROGRAMS AND SERVICES AVAILABLE TO POOL/PACT MEMBERS

RISK MANAGEMENT

Training

POOL/PACT provides extensive training. Examples include: Portable Fire Extinguisher Training • Safe Driving Techniques • Blood Borne Pathogens • Ethics • Nevada Open Meeting Law • POOL/PACT 101 • Positive Governance. Visit www.poolpact.com for more information.

eLearning

POOL/PACT provides a dynamic eLearning platform, ongoing and timely learning courses, and support for: Human Resources • Employee Safety • Cyber Security • Risk Management • Health and Wellness • Emergency Medical Services • Fire Safety • and many more!

Risk Management Programs

Member Value and Performance (MVP) Review • Infrared Thermography (IRT) • Safety Policies and Procedures Review • Site Surveys • OSHA Compliance Assistance • Safety and Loss Control Committee Review and Development • Improved Security Systems • Swimming Pool Safety Training and Inspections • School District Hazard Vulnerability Assessments and Emergency Operations Plan Reviews • Claims Analysis • Written Workplace Safety Plan Review and Development

Law Enforcement and Fire Protection

On-line Law Enforcement training, policies, and best practices from the Legal Liability Risk Management Institute • Jail assessment and policy review for members operating correctional facilities. • Fire and EMS training, policies, and best practices from TargetSolutions. • Fit For Retirement, a Complete Wellness program, that includes mental health, advanced testing, dietician, and fitness guidance for full-time first responders.

Risk Management Grant Program and Loss Control Excellence Program

- Loss Control grants to help mitigate or eliminate risk to employees and liability exposure.
- Five, \$2,000 risk management educational grants available to each member each year.
- Loss Control Excellence Program with financial incentive.

24-7-365 Workers Compensation Nurse Triage Program

PACT members are eligible to use our innovative and streamed lined WC information and reporting system for non-life-threatening on-the-job injuries

Cybersecurity

All POOL members are provided a KnowBe4 online account subscription • Ongoing and updated Cybersecurity training • Best Practices • Cyber Incident Response templates and guidance • Network assessments • Virtual Risk Officer

MSDSOnline

OSHA and state compliance with safety data sheet management and updates are available online to ensure compliance and updated information.

For additional information contact Marshall Smith or Jarrod Hickman, POOL/PACT Risk Managers, (775) 885-7475 website: www.poolpact.com



PROGRAMS AND SERVICES AVAILABLE TO POOL/PACT MEMBERS

HUMAN RESOURCES

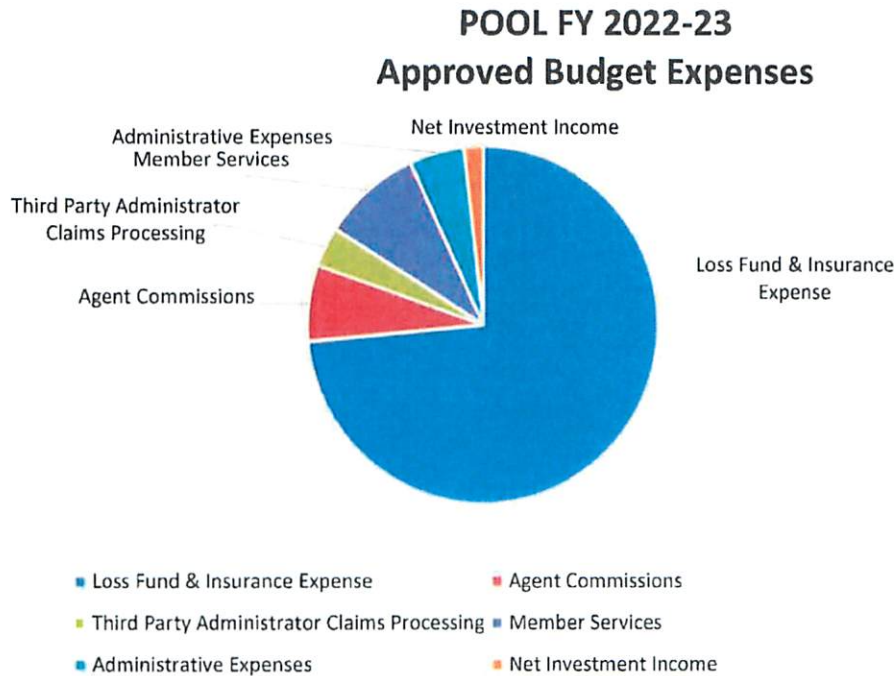
A variety of services are offered through POOL/PACT HR. We work with each member individually to address their specific HR-related needs and reduce liability. The basic services include:

- Consultation with members to manage and resolve critical employment-related issues to include identifying options, providing step-by-step guidance, monitoring progress, and answering questions.
- In-person and virtual instructor-led training courses, workshops, and certificate programs.
- eLearning and live online training courses available 24/7 and tracked for completions.
- Webinars on HR-related topics.
- On-site assessments of members' HR practices with recommendations.
- Communication issued as "Alerts" and "Notices" to inform members when a significant HR-related law or practice has changed.
- On-site HR Briefings tailored to specific needs/requests of members.
- Sample personnel policies which may be adopted for use by members.
- Sample job description templates and numerous HR forms that can be tailored for use by members.
- Salary schedule database available on our website for member reference.
- Summary of HR-related legislation produced each legislative session.
- HR Scholarships to assist member HR representatives in attaining nationally recognized HR certifications.
- Annual HR Conference providing HR representatives and CEOs valuable information on communication, leadership, and legal compliance.

For additional information contact Stacy Norbeck, POOL/PACT Human Resources Manager,
(775) 887-2240 email: stacynorbeck@poolpact.com website: www.poolpact.com



POOL 2022-2023 APPROVED BUDGET AND EXPENSES



Pool Budget	Approved Budget	% Allocation
Loss Fund & Insurance Expense	\$ 17,163,656	74.2%
Agent Commissions	\$ 1,567,177	6.8%
Third Party Administrator Claims Processing	\$ 800,575	3.5%
Member Services	\$ 2,052,526	8.9%
Administrative Expenses	\$ 1,139,947	4.9%
Net Investment Income	\$ 413,421	1.8%
Total Budget	\$ 23,137,301	100.0%



POOL/PACT CONTACTS

Nevada Risk Pooling (NRP) (775) 885 7475

Wayne Carlson, Executive Director, ext 132
waynecarlson@poolpact.com

Alan Kalt, Chief Financial Officer, ext 128
akalt@poolpact.com

Marshall Smith, Risk Manager, ext 104
marshallsmith@poolpact.com

Jarrold Hickman, Risk Manager, ext 133
jarroldhickman@poolpact.com

Mike Van Houten, eLearning Administrator, ext 101
eLearning@poolpact.com

Stephen Romero, Member Relations Manager, ext 110
stephenromero@poolpact.com

Pooling Resources, Inc. (POOL/PACT HR) (775) 887 2240

Stacy Norbeck, General Manager, ext 107
stacynorbeck@poolpact.com

Neal Freitas, Sr. HR Business Partner, ext 113
nealfreitas@poolpact.com

Ashley Creel, Sr. HR Business Partner, ext 105
ashleycreel@poolpact.com

Jeff Coulam, Sr. HR Business Partner, ext 106
jeffcoulam@poolpact.com

Lessly Monroy, HR Business Partner, ext 108
Lesslymonroy@poolpact.com

Davies Claims Solutions

Donna Squires, Claims Manager
(775) 329 1181
Donna.squires@Davies-group.com

Margaret Malzahn, WC Claims Supervisor
(775) 329 1181
Margaret.malzahn@Davies-group.com



NPAIP MEMBERSHIP

Counties:

Carson City
Churchill County
Elko County
Esmeralda County
Eureka County
Humboldt County
Lander County
Lincoln County
Lyon County
Mineral County
Nye County
Pershing County
Storey County
White Pine County

Towns:

Town of Gardnerville
Town of Genoa
Town of Minden
Town of Pahrump
Town of Round Mountain
Town of Tonopah

School Districts:

Carson City School District
Churchill County School District
Douglas County School District
Elko County School District
Esmeralda County School District
Eureka County School District
Humboldt County School District
Lander County School District
Lincoln County School District
Lyon County School District
Mineral County School District
Nye County School District
Pershing County School District
Storey County School District
White Pine County School District

Cities:

Boulder City
City of Caliente
City of Carlin
City of Elko
City of Ely
City of Fernley
City of Lovelock
City of Wells
City of West Wendover
City of Winnemucca
City of Yerington

Fire Districts:

Moapa Valley Fire Protection District
Mt. Charleston Fire Protection District
North Lake Tahoe Fire Protection District
North Lyon County Fire Protection District
Pahranagat Valley Fire District
Tahoe Douglas Fire Protection District
Washoe County Fire Suppression
White Pine Fire District

Others:

Central Nevada Historical Society
Central Nevada Regional Water Authority
County Fiscal Officers Association of Nevada
Douglas County Redevelopment Agency
Elko Central Dispatch
Elko Convention & Visitors Authority
Humboldt River Basin Water Authority
Lincoln County Regional Development
Mineral County Housing Authority
Nevada Association of Counties
Nevada Commission for the Reconstruction of the V & T Railway
Nevada League of Cities
Nevada Risk Pooling, Inc.
Nevada Rural Housing Authority
Pooling Resources, Inc.
Regional Transportation Commission of Washoe County
Truckee Meadows Regional Planning Agency
U.S. Board of Water Commissioners
Virginia City Tourism Convention
Western Nevada Regional Youth Center
White Pine County Tourism

Special Districts:

Alamo Water & Sewer District
Amargosa Library District
Beatty Library District
Beatty Water & Sanitation District
Canyon General Improvement District
Carson-Truckee Water Conservancy District
Carson Water Subconservancy District
Churchill County Mosquito, Vector and Weed Control District
Douglas County Mosquito District
Douglas County Sewer
East Fork Swimming Pool District
Elko County Agricultural Association
Elko TV District
Fernley Swimming Pool District
Gardnerville Ranchos General Improvement District
Gerlach General Improvement District
Humboldt General Hospital
Incline Village General Improvement District
Indian Hills General Improvement District
Kingsbury General Improvement District
Lakeridge General Improvement District
Lincoln County Water District
Logan Creek Estates General Improvement District
Lovelock Meadows Water District
Maria Bay General Improvement District
Mason Valley Swimming Pool District
Minden Gardnerville Sanitation District
Moapa Valley Water District
Nevada Association of Conservation Districts
Nevada Association of School Boards
Nevada Association of School Superintendents
Nevada Tahoe Conservation District
Northern Nye County Hospital District
Pahrump Library District
Palomino Valley General Improvement District
Pershing County Water Conservation District
Sierra Estates General Improvement District
Silver Springs General Improvement District
Silver Springs Stagecoach Hospital
Skyland General Improvement District
Smoky Valley Library District
Southern Nevada Area Communication Council
Southern Nevada Health District
Stagecoach General Improvement District
Sun Valley General Improvement District
Tahoe Douglas District
Topaz Ranch General Improvement District
Tahoe Reno Industrial General Improvement District
Tonopah Library District
Walker Basin Conservancy
Walker River Irrigation District
Washoe County Water Conservation District
West Wendover Recreation District
Western Nevada Development District
White Pine Television District #1
Zephyr Cove General Improvement District
Zephyr Heights General Improvement District

**THANK YOU
FOR YOUR
MEMBERSHIP!**



**NEVADA PUBLIC AGENCY INSURANCE POOL
2022/2023 RENEWAL APPLICATION**

ALL QUESTIONS MUST BE ANSWERED

PRODUCER: Lloyd Cutler **EFFECTIVE DATE:** 7/1/2022

OFFICE: Assurance LTD, 5740 South Arville, Suite 204, Las Vegas, NV 89118

1) **NAMED ASSURED (INSURED:)** Southern Area Communications Council
CONTACT PERSON: Jason Manzo
PHONE: 702-455-7390 **EMAIL:** Jmanzo@ClarkCountyNV.gov
ADDRESS: 6000 E Rochelle Ave
CITY: Las Vegas **STATE:** NV **ZIP:** 89122

2) **PROPERTY INFORMATION -**

VALUES - IMPORTANT THAT 100% REPLACEMENT COST VALUES BE LISTED.

TOTAL BUILDING VALUES	\$0	
TOTAL CONTENT VALUES	\$14,759,335	
AUTO PHYSICAL DAMAGE VALUES (ALL LICENSED VEHICLES)	N/A	ACV (CN x .75) AND RC (100%)
EQUIPMENT VALUES	N/A	
E.D.P. EQUIPMENT VALUES	\$25,000	
E.D.P. MEDIA VALUES	\$5,000	
E.D.P. EXTRA EXPENSE VALUES	N/A	
ACCOUNTS RECEIVABLE VALUES	N/A	
RENTAL INCOME VALUES	N/A	
VALUABLE PAPERS VALUES	N/A	
BUSINESS INTERRUPTION VALUES	N/A	
EXTRA EXPENSE VALUES	N/A	
OTHER/MISCELLANEOUS VALUES	N/A	
TOTAL INSURED VALUES:	\$14,789,335	

3) **GENERAL LIABILITY CHECKLIST:**

A. **ENTITY INFORMATION: DOES THE PUBLIC ENTITY OWN OR OPERATE ANY OF THE FOLLOWING:**

Yes/No		Yes/No	
<u>No</u>	Airports	<u>No</u>	Independent Contractors
<u>No</u>	Beaches,Lakes	<u>No</u>	Jail
<u>No</u>	County Homes	<u>No</u>	Landfills
<u>No</u>	Bleachers,Arenas,Stadiums	<u>No</u>	Law Enforcement Activities
<u>No</u>	Cemeteries	<u>No</u>	Marinas
* <u>No</u>	Dams,Reservoirs	* <u>No</u>	Recreational Facilities (Parks,Camps,etc.)
<u>No</u>	Day Care Centers, Day Camps	<u>No</u>	Schools and Colleges
* <u>No</u>	Electric Utility	* <u>No</u>	Sewer Utility
<u>No</u>	EMT's,Paramedics,Nurses	<u>No</u>	Ski Facility
<u>No</u>	Fairs and Festivals	<u>No</u>	Streets,Roads,Highways,Bridges
<u>No</u>	Fire Department	<u>No</u>	Transportation System
<u>No</u>	Garbage Collection	* <u>No</u>	Water Utility
<u>No</u>	Gas Utility	<u>No</u>	Watercraft over 26 ft. (provide descr. and use)
<u>No</u>	Golf Course	<u>No</u>	Wharves,Piers,Docks
<u>No</u>	Hospitals and Nursing Homes	<u>No</u>	Youth Detention Centers
<u>No</u>	Housing Authority,Projects	<u>Yes</u>	Other: Remote Comm facilities

* Supplemental Applications should be completed for those items that are new exposures this year.

B. RATING INFORMATION

	General
2,000,000	Population
	Payroll (excl. clerical & benefits)
N/A	Water Utility Payroll
N/A	Emergency Personnel (Law Enf., Fire, EMT's)
	Total Employees
3	Number Employees (FT Equivalents)
	Road Mileage
	Paved
	Unpaved
	Court
	Number of Judges
	Number of District Attorneys
	EMT's/ Paramedics
N/A	Number of Professionals
N/A	Number of Volunteers
	Firefighters
N/A	Number of Professionals
N/A	Number of Volunteers
	Nurse/ LPN
N/A	Number of Professionals
N/A	Number of Volunteers

	Law Enforcement
N/A	Number Full Time
N/A	Number Part Time
N/A	Number Dispatchers
	Jail/Youth Detention Centers
	Square Feet (cells only)
	# of Cells
	Number of Beds
	Average Number of daily inmates
	Number of Jailers
	Number of Bailiffs
	Number Youth Detention Center Attendants
	Clinics
	Square Feet of Clinics
	Amusement
	Number of Swimming Pools
	Number of Diving Boards
	Number of Water Park
	Number of Skate Parks
	Number of Climbing Walls
	Number of Amusement Parks
	Number of Zoos
	Miscellaneous
	Miles of Waterfront Exposure

4) CYBER LIABILITY INFORMATION

	Yes/ No
Is your data encrypted?	YES _____
Do you have password protection on all data accessible devices?	YES _____
Do you have a credentialed IT professional to install and secure all wifi devices?	YES _____
Do you have frequent and ongoing backups on all critical data?	YES _____
If you outsource PII data retention, are all 3rd parties PCI-DSS and/or HIPAA compliant?	N/A _____
Do you have a Data Security & Privacy Policy that is updated periodically and consistently enforced?	YES _____
Do you provide awareness training for employees on data privacy and security issues?	YES _____

Cyber Comments/

5) AUTOMOBILE LIABILITY INFORMATION

<u>VEHICLE</u>	<u>NUMBER</u>	<u>VEHICLE</u>	<u>NUMBER</u>
Private Passenger Emergency Cars	N/A	Ambulances	N/A
All Other Private Passenger Cars	N/A	Buses	N/A
Vans (other than 15 Passenger), Pickups & Other Light Trucks (Up to 10,000 lbs. GVW)	N/A	15 Passenger Vans	N/A
		Motor Bikes	N/A
Medium Trucks		Fire Trucks	N/A

(10,000 to 20,000 lbs. GVW)	<u>N/A</u>	Trailers	<u>N/A</u>
Heavy Trucks (Over 20,000 lbs. GVW)	<u>N/A</u>	Miscellaneous	<u>N/A</u>

NOTE: Please be sure to indicate seating capacity for all buses and 15 passenger vans on the vehicle schedule.

TOTAL NUMBER OF VEHICLES 0

6) PAYROLL INFORMATION:

	Current Year	Last Year
Total Payroll (excl. benefits)	<u>\$ 325,102.00</u>	<u>\$327,285</u>

COVERAGE NOTICE

If this account meets our underwriting standards, liability coverage will be quoted as follows:

- General Liability and Law Enforcement will be quoted on an **Event** basis.
- Automobile Liability will be quoted on an **Event** basis.
- Public Officials Errors & Omissions will be quoted on a Claims-Made basis only.

The information provided in this application and all schedules are true and correct to the best of my knowledge.

Signed: _____
PRESIDING OFFICIAL

Named Insured: _____ Southern Nevada Area Communications Council

Signed: _____
AGENT OR BROKER

**NPAIP PUBLIC ENTITY PACKAGE APPLICATION
SUPPLEMENTAL QUESTIONNAIRES**

Member Name: _____

Southern Nevada Area Communications (SNACC)

1) RECREATIONAL EXPOSURES

- A. Number of Swimming Pools _____ N/A
- B. Number of Diving Boards _____ N/A
- C. Number of Climbing Walls _____ N/A
- D. Number of Skate Parks _____ N/A

2) UTILITIES

- A. Sewer
 - 1. Is a sewage disposal plan maintained? _____ N/A
 - If yes, please give annual payroll (excl clerical) _____ N/A
- B. Water
 - 1. Annual Payroll (excl clerical)? _____ N/A
 - 2. Identify Water Source:
 - Lake _____ N/A
 - Well _____ N/A
 - River _____ N/A
 - Spring _____ N/A
 - Other (Describe) _____ N/A

3) EMT's, PARAMEDICS, and NURSES

1. Please give the number of each of the following certified personnel:	# of Paid Employees	# of Volunteers
Emergency Medical Technicians	<u>N/A</u>	<u>N/A</u>
Paramedics	<u>N/A</u>	<u>N/A</u>
Nurses	<u>N/A</u>	<u>N/A</u>
LPNs	<u>N/A</u>	<u>N/A</u>

4) DAMS / DIKES / LEVEES / RESERVOIRS / SPILLWAYS *(any barrier built to impound water that, if it broke, would release water in a floodlike manner)*

This supplement must be completed for each Dam/Dike/Levee/Reservoir or Spillway - please copy this section again below this one for each additional structure.

A. Dam / Dike / Levee / Reservoir / Spillway

- 1. General Information
 - a) Structure Name: N/A Structure Location: N/A
 - b) Year built: _____ N/A
 - e) Hazard Code: _____ N/A (I, II, III, IV - see below)
 - f) Construction: _____ N/A (Concrete, Earthen, Steel, or Timber) - if Other, Please Specify: _____ N/A
 - g) Dimensions: Height _____ N/A
 - h) Storage Capacity (Acres/Feet) _____ N/A

HAZARD CODES:

- Class I Dams which, should they fail, would likely cause loss of life.
- Class II Dams which, should they fail, would likely cause substantial downstream property damage, but are not considered to be a threat to life.
- Class III Dams which would cause little or no downstream damage should they fail.
- Class IV Dams which are less than 15 feet in height, impound less than 15 acre feet of water to the top of the dam, and drain less than 150 acres. No dam may be included in the Class IV category if failure of the dam could cause downstream property damage or loss of life.

4) COMMENTS - PLEASE USE THIS AREA TO ELABORATE ON ANY INFORMATION PROVIDED ELSEWHERE IN THIS APPLICATION

N/A

Member Name	Site Number	Building Number	Site Name	Description	Address 1	City	State	Zip	Const Year	ISO Construction Class	Total Sq.Ft.	Flood Zone	Num Of Stories	Num Of Sprinklers	Replacement Cost	
															New	Modeled Contents Value
SNACC	20	01	SITE 20 - APEX	SNACC FACILITY	700 STEWART AVENUE	LAS VEGAS	NV	89001	1992	N - NOT APPLICABLE	150		1		0	600,000
SNACC	21	01	SITE 21- APEX	SNACC FACILITY	11 APEX ROAD UNIT D	NORTH LAS VEGAS	NV	89030	2001	N - NOT APPLICABLE	10		1		0	600,000
SNACC	23	01	SITE 23- ANGLES PEAK	SNACC FACILITY	1 ANGEL PK BUILDING 18	LAS VEGAS	NV	89124	1965	N - NOT APPLICABLE	15		1		0	400,000
SNACC	24	01	SITE 24- BIG HORN	SNACC FACILITY	1275 EAST PRIMM BLVD.	LAS VEGAS	NV	89109	2003	N - NOT APPLICABLE	10		1		0	400,000
SNACC	25	01	SITE 25- LAKE MEAD	SNACC FACILITY	243 LAKESHORE RD.	BOULDER CITY	NV	89005	1971	N - NOT APPLICABLE	10		1		0	400,000
SNACC	26	01	SITE 26- LOW POTOSI	SNACC FACILITY	2 LOW POTOSI	GOODSPRINGS	NV	89019	1985	N - NOT APPLICABLE	10		1		0	450,000
SNACC	27	01	SITE 27- BEACON	SNACC FACILITY	2 GLENDALE	GLENDALE	NV	89015	2003	N - NOT APPLICABLE	195		1		0	400,000
SNACC	28	01	SITE 28- SPIRT MTN	SNACC FACILITY	1B SPRIT MOUNTAIN ROAD	SEARCHLIGHT	NV	89046	2005	N - NOT APPLICABLE	10		1		0	350,000
SNACC	29	01	SITE 29- OATMAN	SNACC FACILITY	3 OATMAN PL	OATMAN	AZ	86433	1984	N - NOT APPLICABLE	10		1		0	350,000
SNACC	30	01	SITE 30- BOULDER CITY	SNACC FACILITY	1310 MOUNTAIN VIEW DRIVE	BOULDER CITY	NV	89005	1964	N - NOT APPLICABLE	90		1		0	450,000
SNACC	31	01	SITE 31 LAKE LAS VEGAS	SNACC FACILITY	LAKE LAS VEGAS	HENDERSON	NV	89011	2000	N - NOT APPLICABLE	100		1		0	350,000
SNACC	32	01	SITE 32- WEST SITE (NYE)	SNACC FACILITY	PAHRUMP WEST SITE	PAHRUMP	NV	89048	2009	N - NOT APPLICABLE	360		1		0	350,000
SNACC	33-1	01	SITE 33-1 BROOKS	SNACC FACILITY	1630 BROOKS AVENUE	NORTH LAS VEGAS	NV	89032	2009	N - NOT APPLICABLE	300		1		0	1,000,000
SNACC	33-2	01	SITE 33-2 SUNCOAST	SNACC FACILITY	9090 ALTA DRIVE	LAS VEGAS	NV	89145	2000	N - NOT APPLICABLE	24		1		0	800,000
SNACC	33-3	01	SITE 33-3 ELKHORN	SNACC FACILITY	7208 SHAUMBER RD	LAS VEGAS	NV	89166	2009	N - NOT APPLICABLE	24		1		0	800,000
SNACC	33-4	01	SITE 33-4 RJC	SNACC FACILITY	200 SOUTH LEWIS AVE	LAS VEGAS	NV	89101	2005	N - NOT APPLICABLE	200		1		0	800,000
SNACC	33-5	01	SITE 33-5 MANDALAY BAY	SNACC FACILITY	3950 S Las Vegas Blvd	LAS VEGAS	NV	89119	1976	N - NOT APPLICABLE	100		1		0	800,000
SNACC	33-6	01	SITE 33-6 RED MTN	SNACC FACILITY	RED MOUNTAIN	BOULDER CITY	NV	89005	2001	N - NOT APPLICABLE	144		1		0	800,000
SNACC	33-7	01	SITE 33-7 ARDEN PEAK	SNACC FACILITY	3 ARDEN PEAK	HENDERSON	NV	89015	2001	N - NOT APPLICABLE	360		1		0	1,100,000
SNACC	36	1	SITE 36- HOOVER DAM	SNACC FACILITY	HOOVER DAM SITE	BOULDER CITY	NV	89005	2020	N - NOT APPLICABLE	10		1		0	559,335
SNACC	02		SNACC OFFICE	SNACC FACILITY	6000 E. ROCHELLE AVENUE	LAS VEGAS	NV	89122	1996	N - NOT APPLICABLE	5000		2		0	2,500,000
SNACC	22		SITE 22 - GENEVA	SNACC FACILITY	1122 Geneva Ave	HENDERSON	NV	89015	1987	N - NOT APPLICABLE	160		1		0	450,000
SNACC	34		SITE 34 - PANORAMA	SNACC FACILITY	771 Panorama Rd	Pahrump	NV	89060		N - NOT APPLICABLE			1		0	450,000
															\$0	\$14,759,335

Cyber Liability Coverage : Identity Theft Protection

Any business that relies on electronic data, computers, and networks to manage information, and stores their employees non-public, private information on a network, has Cyber Liability Exposure. Coverage is available on a separate policy, but not automatically included. Please discuss this with your agent.

Some examples of exposure would include but is not limited to : sending infected emails, unauthorized access or disclosure of information residing on your network, privacy injury and identity theft that results from a breach of network security, and failure to comply with applicable privacy laws, e.g. HIPAA, GLBA, COPPA.

Value Added Services

Assurance Ltd. is proud to list the following services we provide for our clients. We are ***“Committed to Insurance Excellence!”***

Certificates of Insurance issued within 24 hours or less.

Vehicle identification cards issued within 24 hours of request.

Phone calls returned the same day.

Free Motor Vehicle driving record checks for prospective employees.

Complete Bond services

Claim Service including computerized loss runs and summaries.

Agent Support System - Agent backed up by a team of service representatives who are licensed insurance agents and available to assist you in the event your agent is out of the office.

Review of all insurance policies.

Full -line of products including Life and Health, Estate Planning, Benefits, Commercial Insurance and Personal Insurance.



Mr. Larsh Kellogg formed the original agency in 1952. In 1974 the agency was purchased by Don Olliver of Olliver-Pilcher Insurance Agency in Arizona. At that time, David H. Lee, our current President, joined the firm to manage it for Mr. Olliver. David Lee purchased the agency with three other partners in December 1983.

Assurance Ltd. currently employs 31 people. The agency has complete underwriting departments for Personal Lines, Commercial Lines, Bonds, Employee Benefits and Estate Planning. The agency is actively involved in marketing all lines of insurance and bonds. All agents and customer service representatives are required to be licensed with the State of Nevada.

The owners and officers of Assurance Ltd. are:

President: David H. Lee
Vice President: Frank R. Nolimal
Secretary: David R. Lee
Treasurer: Lynn E. Campbell
Director: Larry B. Holden
Director: Luis E. Principe

We are proud to support the following organizations:

Independent Insurance Agents of Southern Nevada
Insurance Women of Southern Nevada
Las Vegas Chamber of Commerce
Henderson Chamber of Commerce
North Las Vegas Chamber of Commerce
Latin American Chamber of Commerce
Nevada Development Authority
Association of General Contractors
Southern Nevada Home Builders Association
Better Business Bureau of Las Vegas

COMMERCIAL INSURANCE

Property • Liability Insurance
Excess Liability
Workers' Compensation
Professional Liability
Business Auto

BOND DEPARTMENT

Contract Bonds
Miscellaneous Bonds
ERISA Bonds
Fidelity Bonds

Executive Business Planning

Estate & Financial Planning
Buy • Sell Insurance
Key Man Plans
Private Pension Plans
Disability Income Plans

Employee Group Benefits

Medical • Dental • Vision
125 Cafeteria Plans
Pension Plans • 401k

Personal Insurance

Residences
Automobiles
Personal Excess Liability
Recreational Vehicles
Disability Income
Life Insurance
Health Insurance
Mortgage Life Insurance

CHANGES AND DEVELOPMENTS

It is important that we be advised of any changes in your operations, which may have a bearing on the validity and/or adequacy of your insurance. The types of changes that concern us include, but are not limited to, those listed below:

1. Changes in any operations such as an expansion to another state, new products, or new applications of existing products.
2. Mergers and/or acquisitions of new companies, partnerships, LLCs, etc.
3. Any newly assumed contractual liability, granting of indemnities or hold harmless agreements.
4. Circumstances which may require an increased liability insurance limit.
5. Any changes in fire or theft protection such as the installation of or disconnection of sprinkler systems, burglar alarms, etc. This includes any alterations to it.
6. Immediate advice of any changes to scheduled equipment such as automobiles, contractor's equipment, electronic data processing, etc.
7. Property of yours that is in transit, unless we have arranged for the insurance previously.
8. Any changes in existing premises including vacancy, whether temporary or permanent, alterations, demolition, etc. Also, any new premises, purchased, constructed or occupied.

Your insurance program will only be as good as the communications maintained between you and your insurance agent.

INSURED'S OBLIGATION AT TIME OF LOSS

When filing a claim, your policies require that you follow specific procedures and comply with certain provisions:

PROPERTY LOSSES:

1. Immediate written notice of loss must be given to the insurance company in the event of fire and/or other direct damage to property.
2. Notice of loss should include a description of how, when and where the loss or damage occurred.
3. Notify the police if a law may have been broken, as in the case of burglary, theft or vandalism.
4. You are obligated to take all reasonable steps to protect your property from further damage. Examples are boarding up windows, or making temporary repairs to your roof if damaged. Keep records of your expenses for consideration in the settlement of your loss.
5. Complete inventories of the damaged or destroyed property must be provided, including quantities, costs, values and amount of loss claims.

LLABILITY CLAIMS:

1. You must see that any injury or damage is reported as soon as possible.
2. Full details of the claim should include how, when and where the "occurrence" took place; the names and addresses of any injured persons and/or witnesses; and a description and location of any damaged property.
3. If a claim or suit is filed against you, you are obligated to cooperate with the insurance company. The policy prohibits you from making any voluntary payments or assuming liability in any way.
4. You are required to report any occurrence that may result in a claim; therefore, you should emphasize to your employees the importance of reporting an incident to management, no matter how insignificant they feel it may be.

WORKERS' COMPENSATION CLAIMS:

1. You must see that any injury or damage is reported as soon as possible.
2. Full details of the claim should include how, when and where the "occurrence" took place; the names and addresses of the injured worker and/or witnesses; and a description and location of the accident.
3. Make sure the injured worker receives immediate medical assistance.
4. You are required to report all injuries; therefore, you should emphasize to your employees the importance of reporting all incidents to management, no matter how insignificant they feel it may be.

Regardless of the type, all losses should be reported to us in writing as soon as possible.

AVAILABLE OPTIONAL COVERAGES

Assurance, Ltd. recommends you consider the following coverages for your insurance portfolio:

Employment Practices Liability Insurance
Directors & Officers Liability
Flood Insurance
Earthquake Insurance
Employee Dishonesty Insurance
HIPAA Errors & Omissions Insurance
Higher Limits of Liability, including Excess Liability
Equipment Breakdown Insurance
Law and Ordinance Property Protection
Business Interruption – Extended Period of Restoration
Off-Premises Power Interruption
Spoilage Insurance
Fiduciary Liability
Increased Demolition Limits
Internet Liability
Ocean Cargo Insurance
Motor Cargo Insurance
Cyber Liability

This is a partial list of insurance that is available. If you have concerns regarding risks you may have, please ask us if we can provide coverage for you.

CLIENT AUTHORIZATION TO BIND COVERAGE

After careful consideration of your proposal dated 05/25/2022, we accept your insurance program subject to the following exceptions/changes:

Policy Type	Carrier	Premium	Bind Request
Package	Nevada Public Agency Insurance Pool	\$34,719.60	Y/N

Subjectivities:

- Check in the amount of \$34,719.60 payable to Assurance, Ltd.

Special Notes:

Above insurance programs accepted subject to the following exceptions/changes:

It is understood this proposal is only a summary of the details; the policies will contain the actual coverages.

We confirm the values; schedules and other data contained in the proposal are from our records and acknowledge it is our responsibility to see that they are maintained accurately.

Please provide us with a binder(s) and invoice for the coverage agreed upon at your earliest convenience.

Agent Signature

Client Signature

Dated : _____

Dated: _____