Alaska Communications Internet LLC

Earth Station License Modification Application

Technical Appendix

I. Site-specific Coordination Reports

II. 3.8m Radiation Hazard Report

III. 2.4m Radiation Hazard Report

IV. 7.0m Radiation Hazard Report

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: N2112346 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Kotlik School, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

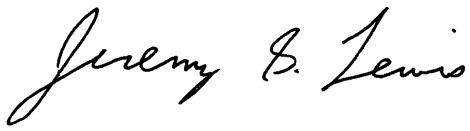
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

05/17/2021 Original PCN (Expedited response requested by 05/31/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED2, LLC
WIRELESS APPLICATIONS CORP

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: N2112346

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Kotlik School, AK	
Call Sign:			
Latitude	(NAD83)	63 1 53.0 N	
Longitude	(NAD83)	163 33 17.0 W	
Elevation AMSL	(ft/m)	3.00	0.91
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	109.29	210.23
Antenna Centerline	(ft/m)	9.84	3.00
Antenna Elevation Angles	(deg)	0.86	15.36

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	4.90	2.00

Antennas Receive: GENERAL DYNAMICS 1241 (2.4 M)
Transmit: GENERAL DYNAMICS 1241 (2.4 M)

Max Transmitter Power	(dbW/4KHz)		-16.41
Max EIRP Main Beam	(dbW/4KHz)		25.19
Modulation / Emission Designator	DIGITAL	5M6G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	715.77	262.19
Max Rain Scatter Distances	(km)	712.58	100.00
Max Interference Power Long Term	(dbW)	-158.60	-154.80
Max Interference Power Short Term	(dbW)	-153.90	-126.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: M2112346 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Trident False Pass, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

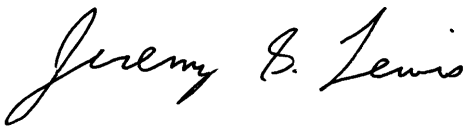
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

05/17/2021 Original PCN (Expedited response requested by 05/31/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: M2112346

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Trident False Pass, AK	
Call Sign:			
Latitude	(NAD83)	54 51 54.0 N	
Longitude	(NAD83)	163 24 41.0 W	
Elevation AMSL	(ft/m)	5.00	1.52
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	107.93	212.58
Antenna Centerline	(ft/m)	9.84	3.00
Antenna Elevation Angles	(deg)	3.56	22.66

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	4.90	2.00

Antennas Receive: GENERAL DYNAMICS 1241 (2.4 M)
Transmit: GENERAL DYNAMICS 1241 (2.4 M)

Max Transmitter Power	(dbW/4KHz)		-15.44
Max EIRP Main Beam	(dbW/4KHz)		26.16
Modulation / Emission Designator	DIGITAL	5M6G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	545.43	199.66
Max Rain Scatter Distances	(km)	458.10	100.00
Max Interference Power Long Term	(dbW)	-158.60	-154.80
Max Interference Power Short Term	(dbW)	-153.90	-126.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: N2035303 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Anchorage, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/29/2021 Original PCN (Expedited response requested by 02/12/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

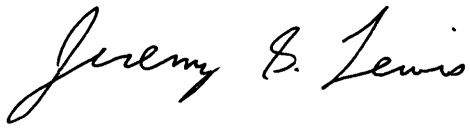
ACS OF ANCHORAGE LICENSE SUB, INC.
ACS OF ANCHORAGE LICENSE SUB, LLC
ALASCOM, INC.
ALASKA PIPELINE COMPANY
ALASKA PUBLIC TELECOMMUNICATIONS, INC
ALASKA RAILROAD CORPORATION
ANCHORAGE, MUNICIPALITY OF
AT&T MOBILITY SPECTRUM LLC
CELLCO PARTNERSHIP
CHUGACH ELECTRIC ASSOCIATION, INC.
COLORADO 7-SAGUACHE LIMITED PARTNERSHIP
COMSEARCH INC
ENSTAR NATURAL GAS CO., A DIVISION OF SEMCO ENERGY, INC.
GCI COMMUNICATION CORP
HOMER ELECTRIC ASSOCIATION
MATANUSKA-SUSITNA, BOROUGH OF
MICRONET COMMUNICATIONS INC
NORSTAR PIPELINE COMPANY, INC. AN ALASKA CORPORATION WHOLLY OWNE
RADIO DYNAMICS
STATE OF ALASKA
THE ALASKA WIRELESS NETWORK, LLC

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: N2035303 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: N2035303

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Anchorage, AK	
Call Sign:		E170205	
Latitude	(NAD83)	61 8 28.4 N	
Longitude	(NAD83)	149 52 30.7 W	
Elevation AMSL	(ft/m)	134.51	41.00
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5959.85/5989.85-6078.45/6108.45-6137.75/6167.75-6330.49/6360.49-6425	
Range of Satellite Orbital Long.	(deg W)	114.00	116.00
Range of Azimuths from North	(deg)	140.45	142.53
Antenna Centerline	(ft/m)	34.12	10.40
Antenna Elevation Angles	(deg)	14.62	15.25

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	47.60	51.00
15 DB Half Beamwidth	(deg)	1.40	0.95
Antennas	Receive: RSI SATCOM 700CS (7M)		
	Transmit: RSI SATCOM 700CS (7M)		
Max Transmitter Power	(dbW/4KHz)		-17.50
Max EIRP Main Beam	(dbW/4KHz)		33.50
Modulation / Emission Designator	DIGITAL	72M0G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	468.16	164.30
Max Rain Scatter Distances	(km)	372.23	100.00
Max Interference Power Long Term	(dbW)	-158.60	-154.80
Max Interference Power Short Term	(dbW)	-153.90	-126.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: P2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Anchorage, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

02/10/2021 Original PCN (Expedited response requested by 02/24/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

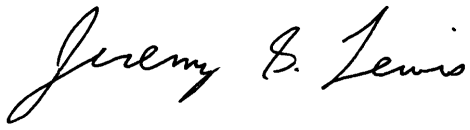
ACS OF ANCHORAGE LICENSE SUB, INC.
ACS OF ANCHORAGE LICENSE SUB, LLC
ALASCOM, INC.
ALASKA PIPELINE COMPANY
ALASKA PUBLIC TELECOMMUNICATIONS, INC
ALASKA RAILROAD CORPORATION
ALASKA, STATE OF
ANCHORAGE, MUNICIPALITY OF
AT&T MOBILITY SPECTRUM LLC
CELLCO PARTNERSHIP
CHUGACH ELECTRIC ASSOCIATION, INC.
COLORADO 7-SAGUACHE LIMITED PARTNERSHIP
COMSEARCH INC
ENSTAR NATURAL GAS CO., A DIVISION OF SEMCO ENERGY, INC.
GCI COMMUNICATION CORP
HOMER ELECTRIC ASSOCIATION
MATANUSKA-SUSITNA, BOROUGH OF
MICRONET COMMUNICATIONS INC
NORSTAR PIPELINE COMPANY, INC. AN ALASKA CORPORATION WHOLLY OWNE
RADIO DYNAMICS
THE ALASKA WIRELESS NETWORK, LLC

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: P2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: P2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Anchorage, AK	
Call Sign:		E170205	
Latitude	(NAD83)	61 8 28.4 N	
Longitude	(NAD83)	149 52 30.7 W	
Elevation AMSL	(ft/m)	134.51	41.00
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5959.85/6108.45-6137.75/6167.75-6330.49/6390.14-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	121.64	224.91
Antenna Centerline	(ft/m)	34.12	10.40
Antenna Elevation Angles	(deg)	7.52	12.86

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	42.00
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-18.89
Max EIRP Main Beam	(dbW/4KHz)		23.11
Modulation / Emission Designator		DIGITAL 12M4G7W	5M6G07W

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	569.31	194.25
Max Rain Scatter Distances	(km)	398.51	100.00
Max Interference Power Long Term	(dbW)	-158.60	-154.80
Max Interference Power Short Term	(dbW)	-153.90	-126.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: R2023911 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Anchorage, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

12/16/2020 Original PCN (Expedited response requested by 12/30/220)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

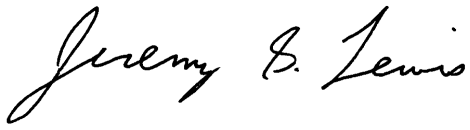
ACS LONG DISTANCE LICENSE SUB, LLC
ACS OF ANCHORAGE LICENSE SUB, INC.
ACS OF ANCHORAGE LICENSE SUB, LLC
ALASCOM, INC.
ALASKA PIPELINE COMPANY
ALASKA PUBLIC TELECOMMUNICATIONS, INC
ALASKA RAILROAD CORPORATION
ALASKA, STATE OF
AT&T MOBILITY SPECTRUM LLC
CELLCO PARTNERSHIP
CHUGACH ELECTRIC ASSOCIATION, INC.
COLORADO 7-SAGUACHE LIMITED PARTNERSHIP
COMSEARCH INC
ENSTAR NATURAL GAS CO., A DIVISION OF SEMCO ENERGY, INC.
GCI COMMUNICATION CORP
HOMER ELECTRIC ASSOCIATION
MATANUSKA-SUSITNA, BOROUGH OF
MICRONET COMMUNICATIONS INC
NORSTAR PIPELINE COMPANY, INC. AN ALASKA CORPORATION WHOLLY OWNE
RADIO DYNAMICS
THE ALASKA WIRELESS NETWORK, LLC

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: R2023911 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: R2023911

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Anchorage, AK	
Call Sign:		E170205	
Latitude	(NAD83)	61 8 28.4 N	
Longitude	(NAD83)	149 52 30.7 W	
Elevation AMSL	(ft/m)	134.51	41.00
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5959.85/6108.45-6137.75/6167.75-6330.49/6390.14-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	121.64	224.91
Antenna Centerline	(ft/m)	34.12	10.40
Antenna Elevation Angles	(deg)	7.52	12.86

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	41.60	45.60
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1383 (3.8 M)		
	Transmit: PRODELIN 1383 (3.8M)		
Max Transmitter Power	(dbW/4KHz)		-17.80
Max EIRP Main Beam	(dbW/4KHz)		27.80
Modulation / Emission Designator	DIGITAL	72M0G7W 7M00G7W 1M20G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	569.31	198.38
Max Rain Scatter Distances	(km)	398.51	100.00
Max Interference Power Long Term	(dbW)	-158.60	-154.80
Max Interference Power Short Term	(dbW)	-153.90	-126.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: M2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Alitek, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/27/2021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
KODIAK MICROWAVE SYSTEM, LLC

Respectfully Submitted,

Jeremy B. Lewis

Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: M2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Alitek, AK	
Call Sign:			
Latitude	(NAD83)	56 53 53.7 N	
Longitude	(NAD83)	154 14 47.4 W	
Elevation AMSL	(ft/m)	50.00	15.24
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5989.5/6019.5-6048.8/6078.8-6271.19/6301.19-6330.49/6360.49-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	116.49	221.72
Antenna Centerline	(ft/m)	34.12	10.40
Antenna Elevation Angles	(deg)	7.61	17.68

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	42.00
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-18.50
Max EIRP Main Beam	(dbW/4KHz)		23.50
Modulation / Emission Designator	DIGITAL	5M60G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	369.72	172.38
Max Rain Scatter Distances	(km)	296.52	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: N2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Naknek, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

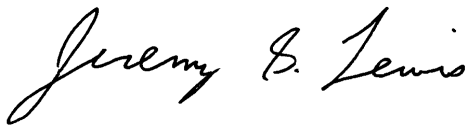
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

02/10/2021 Original PCN (Expedited response requested by 02/24/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
NUSHAGAK ELECTRIC & TELEPHONE COOP
RADIO DYNAMICS
UNITED UTILITIES, INC.
WIRELESS APPLICATIONS CORP

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: N2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Naknek, AK	
Call Sign:			
Latitude	(NAD83)	58 43 43.7 N	
Longitude	(NAD83)	157 0 0.9 W	
Elevation AMSL	(ft/m)	16.00	4.88
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	114.00	116.00
Range of Azimuths from North	(deg)	132.51	134.52
Antenna Centerline	(ft/m)	34.12	10.40
Antenna Elevation Angles	(deg)	13.89	14.67

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-15.44
Max EIRP Main Beam	(dbW/4KHz)		26.16
Modulation / Emission Designator	DIGITAL	5M60G7W	12M4G7W

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	332.74	166.74
Max Rain Scatter Distances	(km)	282.26	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: L2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

St Paul, AK

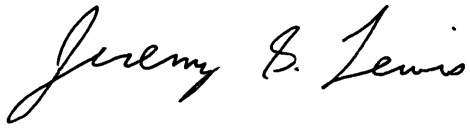
The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

06/07/2021	No-impact change notification pursuant to Section 101.103(d)(2)(ix) - No response required.
01/27/2021	Original PCN (Expedited response requested by 02/10/2021) There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: L2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		St Paul, AK	
Call Sign:			
Latitude	(NAD83)	57 7 23.0 N	
Longitude	(NAD83)	170 16 45.0 W	
Elevation AMSL	(ft/m)	26.25	8.00
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	102.44	204.25
Antenna Centerline	(ft/m)	6.56	2.00
Antenna Elevation Angles	(deg)	-0.75	22.50

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	41.60	45.60
15 DB Half Beamwidth	(deg)	1.00	1.00

Antennas Receive: PRODELIN 1383 (3.8 M)
Transmit: PRODELIN 1383 (3.8M)

Max Transmitter Power	(dbW/4KHz)		-8.80
Max EIRP Main Beam	(dbW/4KHz)		36.80
Modulation / Emission Designator	DIGITAL	3M20G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	591.87	343.49
Max Rain Scatter Distances	(km)	265.49	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: A2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Excursion Inlet, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

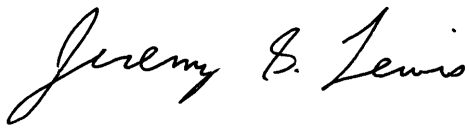
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/27/2021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

ALASCOM, INC.
ALASKA POWER & TELEPHONE
COMSEARCH INC
FIBER ALASKA

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: A2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Excursion Inlet, AK	
Call Sign:			
Latitude	(NAD83)	58 24 55.3 N	
Longitude	(NAD83)	135 26 36.4 W	
Elevation AMSL	(ft/m)	34.00	10.36
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5930.025/6019.5-6182.065/6242.065-6300.84/6419.79-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	134.98	239.71
Antenna Centerline	(ft/m)	34.12	10.40
Antenna Elevation Angles	(deg)	15.11	8.65

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	42.00
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-18.50
Max EIRP Main Beam	(dbW/4KHz)		23.50
Modulation / Emission Designator	DIGITAL	5M60G7W	12M4G7W

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	369.72	172.38
Max Rain Scatter Distances	(km)	292.74	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: M2111918 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Silver Bay False Pas, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

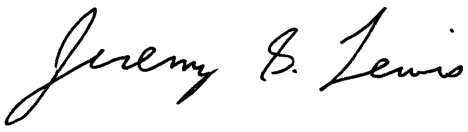
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

05/06/2021 Original PCN (Expedited response requested by 05/20/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: M2111918

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Silver Bay False Pas, AK	
Call Sign:			
Latitude	(NAD83)	54 52 4.5 N	
Longitude	(NAD83)	163 24 35.1 W	
Elevation AMSL	(ft/m)	11.00	3.35
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	107.93	212.58
Antenna Centerline	(ft/m)	9.84	3.00
Antenna Elevation Angles	(deg)	3.56	22.66

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	42.00	46.20
15 DB Half Beamwidth	(deg)	1.40	1.30

Antennas Receive: PRODELIN 3.8 METER
Transmit: PRODELIN 3.8M

Max Transmitter Power	(dbW/4KHz)		-17.08
Max EIRP Main Beam	(dbW/4KHz)		29.12
Modulation / Emission Designator	DIGITAL	2M80G7W 72M0G7W 5M60G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	545.46	193.45
Max Rain Scatter Distances	(km)	458.10	100.00
Max Interference Power Long Term	(dbW)	-158.60	-154.80
Max Interference Power Short Term	(dbW)	-149.90	-130.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: C2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Aniak AJSHS, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/272021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.
04/27/2021 No-impact change notification pursuant to Section 101.103(d)(2)(ix) - No response required.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED UTILITIES, INC.
UNITED2, LLC
WIRELESS APPLICATIONS CORP

Respectfully Submitted,

Jeremy B. Lewis

Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: C2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Aniak AJSHS, AK	
Call Sign:			
Latitude	(NAD83)	61 34 48.3 N	
Longitude	(NAD83)	159 33 6.7 W	
Elevation AMSL	(ft/m)	37.20	11.34
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5930.2/5960.2-6182.24/6212.24-6425	
Range of Satellite Orbital Long.	(deg W)	91.00	191.00
Range of Azimuths from North	(deg)	109.06	214.81
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	1.34	15.60

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-18.80
Max EIRP Main Beam	(dbW/4KHz)		22.80
Modulation / Emission Designator	DIGITAL	5M80G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	507.68	234.03
Max Rain Scatter Distances	(km)	441.49	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: D2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Aniak AMNES, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/272021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.
04/27/2021 No-impact change notification pursuant to Section 101.103(d)(2)(ix) - No response required.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED UTILITIES, INC.
UNITED2, LLC
WIRELESS APPLICATIONS CORP

Respectfully Submitted,

Jeremy B. Lewis

Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: D2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Aniak AMNES, AK	
Call Sign:			
Latitude	(NAD83)	61 34 49.0 N	
Longitude	(NAD83)	159 31 51.1 W	
Elevation AMSL	(ft/m)	37.20	11.34
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5930.2/5960.2-6182.24/6212.24-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	112.73	214.84
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	3.14	15.59

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00

Antennas Receive: PRODELIN 1244 (2.4M)
Transmit: PRODELIN 1244 (2.4M)

Max Transmitter Power	(dbW/4KHz)		-18.80
Max EIRP Main Beam	(dbW/4KHz)		22.80
Modulation / Emission Designator	DIGITAL	5M60G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	423.23	194.65
Max Rain Scatter Distances	(km)	341.04	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: B2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Aniak DO, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

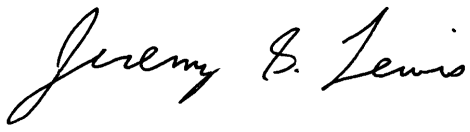
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/27/2021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED UTILITIES, INC.
UNITED2, LLC
WIRELESS APPLICATIONS CORP

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: B2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Aniak DO, AK	
Call Sign:			
Latitude	(NAD83)	61 34 55.1 N	
Longitude	(NAD83)	159 32 18.0 W	
Elevation AMSL	(ft/m)	37.20	11.34
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5930.2/5960.2-6182.24/6212.24-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	112.72	214.83
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	3.14	15.59

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-20.50
Max EIRP Main Beam	(dbW/4KHz)		21.10
Modulation / Emission Designator	DIGITAL	5M60G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	423.26	188.23
Max Rain Scatter Distances	(km)	341.13	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: E2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Chuathbaluk CVSS, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/272021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.
04/27/2021 No-impact change notification pursuant to Section 101.103(d)(2)(ix) - No response required.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED UTILITIES, INC.
UNITED2, LLC
WIRELESS APPLICATIONS CORP

Respectfully Submitted,

Jeremy B. Lewis

Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: E2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Chuathbaluk CVSS, AK	
Call Sign:			
Latitude	(NAD83)	61 34 23.1 N	
Longitude	(NAD83)	159 14 57.1 W	
Elevation AMSL	(ft/m)	37.57	11.45
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-5930.2/5960.2-6182.24/6212.24-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	112.99	215.13
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	3.27	15.52

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00
Antennas	Receive: PRODELIN 1244 (2.4M)		
	Transmit: PRODELIN 1244 (2.4M)		
Max Transmitter Power	(dbW/4KHz)		-18.80
Max EIRP Main Beam	(dbW/4KHz)		22.80
Modulation / Emission Designator	DIGITAL	5M80G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	422.98	194.54
Max Rain Scatter Distances	(km)	338.09	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: F2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Sleetmute JESS, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/27/2021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED UTILITIES, INC.

Respectfully Submitted,

Jeremy B. Lewis

Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: F2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Sleetmute JESS, AK	
Call Sign:			
Latitude	(NAD83)	61 42 9.1 N	
Longitude	(NAD83)	157 10 14.1 W	
Elevation AMSL	(ft/m)	39.70	12.10
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	114.93	217.28
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	4.13	14.80

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00

Antennas Receive: PRODELIN 1244 (2.4M)
Transmit: PRODELIN 1244 (2.4M)

Max Transmitter Power	(dbW/4KHz)		-18.80
Max EIRP Main Beam	(dbW/4KHz)		22.80
Modulation / Emission Designator	DIGITAL	5M60G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	416.45	191.56
Max Rain Scatter Distances	(km)	322.96	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: G2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Stony River GMSHS, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

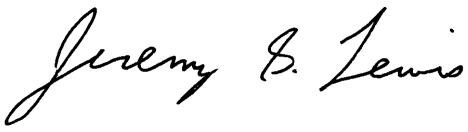
Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/27/2021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC

Respectfully Submitted,



Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: G2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Stony River GMSHS, AK	
Call Sign:			
Latitude	(NAD83)	61 47 13.6 N	
Longitude	(NAD83)	156 35 17.7 W	
Elevation AMSL	(ft/m)	40.16	12.24
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	95.00	191.00
Range of Azimuths from North	(deg)	115.49	217.86
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	4.34	14.55

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00

Antennas Receive: PRODELIN 1244 (2.4M)
Transmit: PRODELIN 1244 (2.4M)

Max Transmitter Power	(dbW/4KHz)		-20.50
Max EIRP Main Beam	(dbW/4KHz)		21.10
Modulation / Emission Designator	DIGITAL	5M60G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	411.29	182.77
Max Rain Scatter Distances	(km)	320.09	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: H2034509 5.93 GHz
Licensee: Alaska Communications Internet, LLC

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

Crooked Creek JJSS, AK

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

01/272021 Original PCN (Expedited response requested by 02/10/2021)
There were no unresolved interference objections.
04/27/2021 No-impact change notification pursuant to Section 101.103(d)(2)(ix) - No response required.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

COMSEARCH INC
UNITED UTILITIES, INC.
UNITED2, LLC
WIRELESS APPLICATIONS CORP

Respectfully Submitted,

Jeremy B. Lewis

Jeremy Lewis
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.
812 Lexington Dr
Plano, Texas 75075
972-422-7200

File: H2034509

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

Company:		Alaska Communications Internet, LLC	
Site Name, State:		Crooked Creek JJSS, AK	
Call Sign:			
Latitude	(NAD83)	61 51 48.6 N	
Longitude	(NAD83)	158 8 18.2 W	
Elevation AMSL	(ft/m)	38.19	11.64
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6425	
Range of Satellite Orbital Long.	(deg W)	96.00	191.00
Range of Azimuths from North	(deg)	114.99	216.22
Antenna Centerline	(ft/m)	12.00	3.66
Antenna Elevation Angles	(deg)	4.07	14.95

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	37.60	41.60
15 DB Half Beamwidth	(deg)	1.50	1.00

Antennas Receive: PRODELIN 1244 (2.4M)
Transmit: PRODELIN 1244 (2.4M)

Max Transmitter Power	(dbW/4KHz)		-18.80
Max EIRP Main Beam	(dbW/4KHz)		22.80
Modulation / Emission Designator	DIGITAL	5M60G7W 2M80G7W 1M20G7W12M4G7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	417.67	192.12
Max Rain Scatter Distances	(km)	323.73	100.00
Max Interference Power Long Term	(dbW)	-140.60	-178.00
Max Interference Power Short Term	(dbW)	-118.40	-154.80
Rain Zone / Radio Zone		3	A

II. 3.8m Rad Haz Report

ANALYSIS OF NON-IONIZING RADIATION
for Alaska Communications Internet LLC

The Office of Science and Technology Bulletin, No. 65, October 1985 and revised August 1997, specifies that the maximum level of non-ionizing radiation that a person may be exposed to over a six minute period is an average power density equal to 5 mW/cm**2 (five milliwatts per centimeter squared) for a controlled environment. For an uncontrolled environment, the maximum level of non-ionizing radiation that a person may be exposed to over a thirty minute period is an average power density equal to 1 mW/cm**2 (one milliwatt per centimeter squared). It is the purpose of this report to determine the maximum power flux densities of the earth station in the far zone, near zone, transition zone, at the main reflector surface, and between the antenna edge and the ground.

Parameters which were used in the calculations:
==========

Antenna Diameter, (D) = 3.8000 m

Antenna Surface Area (Sa) = pi(D**2)/4 = 11.3411 m**2

Wavelength at 6.1750 GHz (lambda) = 0.0485 m

Transmit Power at Flange (P) = 40.0000 Watts

Antenna Gain at Earth Site (GES) = 46.2000 dBi = 41686.9383
Power Ratio:
AntiLog(GES/10)

pi = 3.1415927

Antenna Aperture Efficiency (n) = 0.6000

1. FAR ZONE CALCULATIONS

Distance to the Far Zone (Df) = $\frac{(n)(D^{**}2)}{\text{lambda}}$ = 178.6392 m

Far Zone Power Density (Rf) = $\frac{(GES)(P)}{4*pi*(Df^{**}2)}$ = 4.1581 W/m**2

= 0.4158 mW/cm**2

2. NEAR ZONE CALCULATIONS

Power Flux Density is considered to be at a maximum value throughout the entire length of this Zone. The Zone is contained within a cylindrical volume which has the same diameter as the antenna. Beyond the Near Zone, the Power Flux Density will decrease with distance from the Antenna.

Distance to the Near Zone (Dn) = $\frac{D^{**}2}{4*\text{lambda}}$ = 74.4330 m

Near Zone Power Density (Rn) = $\frac{16.0(n)P}{pi(D^{**}2)}$ = 8.4648 W/m**2

= 0.8465 mW/cm**2

3. TRANSITION ZONE CALCULATIONS

The Power Density begins to decrease with distance in the Transition Zone. While the Power Density decreases inversely with distance in the Transition Zone, the Power Density decreases inversely with the square of the distance in the Far Zone. Since the maximum Power Density in the Transition Zone will not exceed the Near Zone values, it is not calculated.

4. MAIN REFLECTOR ZONE

Main Reflector Power Density = $\frac{2(P)}{Sa}$ = 7.0540 W/m**2

= 0.7054 mW/cm**2

5. ZONE BETWEEN THE MAIN REFLECTOR AND THE GROUND

Applying uniform illumination of the Main Reflector Surface:

Main to Ground Power Density = $\frac{P}{Sa}$ = 3.5270 W/m**2

= 0.3527 mW/cm**2

CALCULATED SAFETY MARGINS SUMMARY
AND EVALUATION

Controlled Safety Margin = 5.0 - Calculated Zone Value (mW/cm**2)

Zones	Safety Margins (mW/cm**2)	Conclusions
1. Far Zone	4.5842	Complies with ANSI
2. Near Zone	4.1535	Complies with ANSI
3. Transition Zone	Rf < Rt < Rn	Complies with ANSI
4. Main Reflector Surface	4.2946	Complies with ANSI
5. Main Reflector to Ground	4.6473	Complies with ANSI

Uncontrolled Safety Margin = 1.0 - Calculated Zone Value (mW/cm**2)

Zones	Safety Margins (mW/cm**2)	Conclusions
1. Far Zone	0.5842	Complies with ANSI
2. Near Zone	0.1535	Complies with ANSI
3. Transition Zone	Rf < Rt < Rn	Complies with ANSI
4. Main Reflector Surface	0.2946	Complies with ANSI
5. Main Reflector to Ground	0.6473	Complies with ANSI

6. EVALUATION

A. Controlled Environment
B. Uncontrolled Environment
All Zones comply with ANSI Standards.

III. 2.4m Rad Haz Report

ANALYSIS OF NON-IONIZING RADIATION
for Alaska Communications Internet LLC

The Office of Science and Technology Bulletin, No. 65, October 1985 and revised August 1997, specifies that the maximum level of non-ionizing radiation that a person may be exposed to over a six minute period is an average power density equal to 5 mW/cm**2 (five milliwatts per centimeter squared) for a controlled environment. For an uncontrolled environment, the maximum level of non-ionizing radiation that a person may be exposed to over a thirty minute period is an average power density equal to 1 mW/cm**2 (one milliwatt per centimeter squared). It is the purpose of this report to determine the maximum power flux densities of the earth station in the far zone, near zone, transition zone, at the main reflector surface, and between the antenna edge and the ground.

Parameters which were used in the calculations:
==========

Antenna Diameter, (D) = 2.4000 m

Antenna Surface Area (Sa) = pi(D**2)/4 = 4.5239 m**2

Wavelength at 6.1750 GHz (lambda) = 0.0485 m

Transmit Power at Flange (P) = 40.0000 Watts

Antenna Gain at Earth Site (GES) = 41.6000 dBi = 14454.3977
Power Ratio:
AntiLog(GES/10)

pi = 3.1415927

Antenna Aperture Efficiency (n) = 0.6000

1. FAR ZONE CALCULATIONS

Distance to the Far Zone (Df) = $\frac{(n)(D^{**}2)}{\text{lambda}}$ = 71.2577 m

Far Zone Power Density (Rf) = $\frac{(GES)(P)}{4*pi*(Df^{**}2)}$ = 9.0612 W/m**2

= 0.9061 mW/cm**2

2. NEAR ZONE CALCULATIONS

Power Flux Density is considered to be at a maximum value throughout the entire length of this Zone. The Zone is contained within a cylindrical volume which has the same diameter as the antenna. Beyond the Near Zone, the Power Flux Density will decrease with distance from the Antenna.

Distance to the Near Zone (Dn) = $\frac{D^{**}2}{4*\text{lambda}}$ = 29.6907 m

Near Zone Power Density (Rn) = $\frac{16.0(n)P}{pi(D^{**}2)}$ = 21.2207 W/m**2

= 2.1221 mW/cm**2

3. TRANSITION ZONE CALCULATIONS

The Power Density begins to decrease with distance in the Transition Zone. While the Power Density decreases inversely with distance in the Transition Zone, the Power Density decreases inversely with the square of the distance in the Far Zone. Since the maximum Power Density in the Transition Zone will not exceed the Near Zone values, it is not calculated.

4. MAIN REFLECTOR ZONE

Main Reflector Power Density = $\frac{2(P)}{Sa}$ = 17.6839 W/m**2

= 1.7684 mW/cm**2

5. ZONE BETWEEN THE MAIN REFLECTOR AND THE GROUND

Applying uniform illumination of the Main Reflector Surface:

Main to Ground Power Density = $\frac{P}{Sa}$ = 8.8419 W/m**2

= 0.8842 mW/cm**2

CALCULATED SAFETY MARGINS SUMMARY
AND EVALUATION

Controlled Safety Margin = 5.0 - Calculated Zone Value (mW/cm**2)

Zones	Safety Margins (mW/cm**2)	Conclusions
1. Far Zone	4.0939	Complies with ANSI
2. Near Zone	2.8779	Complies with ANSI
3. Transition Zone	Rf < Rt < Rn	Complies with ANSI
4. Main Reflector Surface	3.2316	Complies with ANSI
5. Main Reflector to Ground	4.1158	Complies with ANSI

Uncontrolled Safety Margin = 1.0 - Calculated Zone Value (mW/cm**2)

Zones	Safety Margins (mW/cm**2)	Conclusions
1. Far Zone	0.0939	Complies with ANSI
2. Near Zone	-1.1221	POTENTIALLY HAZARDOUS
3. Transition Zone	Rf < Rt < Rn	Complies with ANSI
4. Main Reflector Surface	-0.7684	POTENTIALLY HAZARDOUS
5. Main Reflector to Ground	0.1158	Complies with ANSI

6. EVALUATION

A. Controlled Environment
B. Uncontrolled Environment
The NEAR ZONE does not comply with the ANSI standards!
The system will be FENCED so that no one can enter the affected Zone while the system is in use. Additionally, the system will be shut down for servicing.

The MAIN Reflector Surface ZONE does not comply with the ANSI standards!
The system will be FENCED so that no one can enter the affected Zone while the system is in use. Additionally, the system will be shut down for servicing.

IV. 7.0m Rad Hazard Report

ANALYSIS OF NON-IONIZING RADIATION
for Alaska Communications Internet LLC
Site: Anchorage State: AK
Latitude: 61 8 28.4 Longitude: 149 52 30.7 (NAD83)
05-12-2021

The Office of Science and Technology Bulletin, No. 65, October 1985 and revised August 1997, specifies that the maximum level of non-ionizing radiation that a person may be exposed to over a six minute period is an average power density equal to 5 mW/cm**2 (five milliwatts per centimeter squared) for a controlled environment. For an uncontrolled environment, the maximum level of non-ionizing radiation that a person may be exposed to over a thirty minute period is an average power density equal to 1 mW/cm**2 (one milliwatt per centimeter squared). It is the purpose of this report to determine the maximum power flux densities of the earth station in the far zone, near zone, transition zone, at the main reflector surface, and between the antenna edge and the ground.

Parameters which were used in the calculations:
==========

Antenna Diameter, (D) = 7.0000 m

Antenna Surface Area (Sa) = pi(D**2)/4 = 38.4845 m**2

Wavelength at 6.1750 GHz (lambda) = 0.0485 m

Transmit Power at Flange (P) = 320.0000 Watts

Antenna Gain at Earth Site (GES) = 51.0000 dBi = 125892.5412
Power Ratio:
AntiLog(GES/10)

pi = 3.1415927

Antenna Aperture Efficiency (n) = 0.6000

1. FAR ZONE CALCULATIONS

Distance to the Far Zone (Df) = $\frac{(n)(D^{**}2)}{\text{lambda}}$ = 606.1856 m

Far Zone Power Density (Rf) = $\frac{(GES)(P)}{4*pi*(Df^{**}2)}$ = 8.7243 W/m**2

= 0.8724 mW/cm**2

2. NEAR ZONE CALCULATIONS

Power Flux Density is considered to be at a maximum value throughout the entire length of this Zone. The Zone is contained within a cylindrical volume which has the same diameter as the antenna. Beyond the Near Zone, the Power Flux Density will decrease with distance from the Antenna.

Distance to the Near Zone (Dn) = $\frac{D^{**}2}{4*\text{lambda}}$ = 252.5773 m

Near Zone Power Density (Rn) = $\frac{16.0(n)P}{pi(D^{**}2)}$ = 19.9561 W/m**2

= 1.9956 mW/cm**2

3. TRANSITION ZONE CALCULATIONS

The Power Density begins to decrease with distance in the Transition Zone. While the Power Density decreases inversely with distance in the Transition Zone, the Power Density decreases inversely with the square of the distance in the Far Zone. Since the maximum Power Density in the Transition Zone will not exceed the Near Zone values, it is not calculated.

4. MAIN REFLECTOR ZONE

Main Reflector Power Density = $\frac{2(P)}{Sa}$ = 16.6301 W/m**2

= 1.6630 mW/cm**2

5. ZONE BETWEEN THE MAIN REFLECTOR AND THE GROUND

Applying uniform illumination of the Main Reflector Surface:

Main to Ground Power Density = $\frac{P}{Sa}$ = 8.3150 W/m**2

= 0.8315 mW/cm**2

CALCULATED SAFETY MARGINS SUMMARY
AND EVALUATION

Controlled Safety Margin = 5.0 - Calculated Zone Value (mW/cm**2)

Zones	Safety Margins (mW/cm**2)	Conclusions
1. Far Zone	4.1276	Complies with ANSI
2. Near Zone	3.0044	Complies with ANSI
3. Transition Zone	Rf < Rt < Rn	Complies with ANSI
4. Main Reflector Surface	3.3370	Complies with ANSI
5. Main Reflector to Ground	4.1685	Complies with ANSI

Uncontrolled Safety Margin = 1.0 - Calculated Zone Value (mW/cm**2)

Zones	Safety Margins (mW/cm**2)	Conclusions
1. Far Zone	0.1276	Complies with ANSI
2. Near Zone	-0.9956	POTENTIALLY HAZARDOUS
3. Transition Zone	Rf < Rt < Rn	Complies with ANSI
4. Main Reflector Surface	-0.6630	POTENTIALLY HAZARDOUS
5. Main Reflector to Ground	0.1685	Complies with ANSI

6. EVALUATION

A. Controlled Environment
B. Uncontrolled Environment
The NEAR ZONE does not comply with the ANSI standards!
WARNING SIGNS will be posted for the affected Zone indicating danger while the system is in use. Additionally, the system will be shut down for servicing.

The MAIN Reflector Surface ZONE does not comply with the ANSI standards!
WARNING SIGNS will be posted for the affected Zone indicating danger while the system is in use. Additionally, the system will be shut down for servicing.