FCC FORM 442 - FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR NEW OR MODIFIED RADIO STATION UNDER PART 5 OF FCC RULES - EXPERIMENTAL RADIO SERVICE (OTHER THAN BROADCAST)

ADIO 3060 - 0065 Expires 09/30/98

1. Applicant's Name (company) American Radio Relay League, Inc.

2. Mailing Address: Attention: Christopher D. Imlay Street Address: 225 Main Street P.O. Box: City: Newington State: CT Zip Code: 06111 Country: E-Mail Address: W3KD@ARRL.ORG

3(a). Application is for: NEW LICENSE

3(b). For Modification indicate below: File No: Callsign:

4. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government? If "YES", include as an exhibit a narrative statement describing the government project, agency and contract number.

5. Is this authorization to be used for the exclusive purpose of developing radio equipment for export to be employed by stations under the jurisdiction of a foreign government? If "YES", include the contract number and the name of the foreign government concerned as an exhibit.

6. Is this authorization to be used for providing communications essential to a research project? (The radio communication is not the objective of the research project)? If "YES", include as an exhibit the following information:

- a. A description of the nature of the research project being conducted.
- b. A showing that the communications facilities requested are necessary for the research project involved.
- c. A showing that existing communications facilities are inadequete.

7. If all the answers to I tems 4, 5, 6 are "NO", include as an exhibit a narrative statement describing in detail the following items:

- a. The complete program of research and experimentation proposed including description of equipment and theory of operation.
- b. The specific objectives sought to be accomplished.
- c. How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion or utilization of the radio art, or is along line not already investigated.

8. Give an estimate of the length of time that will be required to 24 Months complete the program of experimentation proposed in this application:

9. Would a commission grant of this application come within Section No 1.1307 of the FCC Rules, such that it may have a significant

File No. 0105-EX-PL-2005

Approved by OMB

No

No

environmental impact? If "YES", include as an exhibit an Environmental Assessment as required by Section 1.1311.

10. List below transmitting equipment to be installed (if experimental, so state) if additional rows are required, please submit equipment list as an exhibit :

Association

No

No

Manufacturer	Model Number	No. Of Units	Experimental
Various		23	No

11. Is the equipment listed in Item 10 capable of station identification Yes pursuant to Section 5.115?

12.	ada	licant	is:

13. Is applicant a foreign government or a representative of a foreign government? No

14. Has applicant or any party to this application had any FCC station license or permit revoked or any application for permit, license or renewal denied by this Commission?

If "YES", include as an exhibit a statement giving call sign of license or permit revoked and relate circumstances.

15. Will applicant be owner and operator of the station?

16. Give the following information of person who can best handle inquiries pertaining to this application:

First Name: Frederick

Last Name: Raab

Title: Experimental Project Manager

Phone Number: 802-655-9670

E-Mail Address: f.raab@ieee.org

17. APPLICANT ANTI-DRUG ABUSE CERTIFICATION:

By checking "YES", the individual applicant certifies that he or she is eligible for this license. This requires that he or she is not subject to a denial of federal benefits, including FCC benefits, as a result of a drug offense conviction pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862. A non-individual applicant, e.g., corporation. partnership or other unincorporated association, certifies that no party to the application is subject to a denial of federal benefits, pursuant to that section. For definition of a "party" for these purposes, see 47CFR 1.2002(b).

18. CERTIFICATION: THE APPLICANT CERTIFIES THAT:

- a. Copies of the FCC Rule Parts 2 and 5 are on hand; and
- b. Adequete financial appropriations have been made to carry on the program of experimentation which will be conducted by qualified personnel; and
- c. All operations will be on an experimental basis in accordance with Part 5 and other applicable rules, and will be conducted in such a manner and at such a time as to preclude harmful interference to any authorized station; and
- d. Grant of the authorization requested herein will not be construed as a finding on the part of the Commission:
 - that the frequencies and other technical parameters specified in the authorization are the best suited for the proposed program of experimentation, and
 - 2. that the applicant will be authorized to operate on any basis other than experimental, and
 - 3. that the Comission is obligated by the results of the experimental

program to make provision in its rules including its table of frequency allocations for applicant's type of operation on a regularly licensed basis.

THE APPLICANT FURTHER CERTIFIES THAT:

- e. All the statements in the application and attached exhibits are true, complete and correct to the best of the applicant's knowledge; and
- f. The applicant is willing to finance and conduct the experimental program with full knowledge and understanding of the above limitations; and
- g. The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the USA.

Name of Applicant: American Radio Relay League, Inc. Signature (Authorized person filing form): David Sumner Signature Date (Authorized person filing form): 04/04/2005 Title of Person Signing Application: Executive Vice President Classification: Office of applicant corporation or association

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(A)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

NOTIFICATION TO INDIVIDUALS UNDER PRIVACY ACT OF 1974 AND THE PAPERWORK REDUCTION ACT OF 1980

Information requested through this form is authorized by the Communications Act of 1934, as amended, and specified by Section 308 therein. The information will be used by Federal Communications Commission staff to determine eligibility for issuing authorizations in the use of the frequency spectrum and to effect the provisions of regulatory responsibilities rendered by the Commission by the Act.
 Information requested by this form will be available to the public unless otherwise requested pursuant to 47 CFR 0.459 of the FCC Rules and Regulations. Your response is required to obtain this authorization.

Public reporting burden for this collection of information is estimated to average four (4) hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0065), Washington DC 20554. DO NOT send completed applications to this address. Individuals are not required to respond to this collection unless it displays a currently valid OMD control number.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

	City	State	La	atitu	de		L	Longitude			
(1)	Jamestown	RI	North	41	17	53	West	71	13	39	ĺ
	Street	County									

Station Location

761 Beavertail	
Road	
Road	1

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 18.00

(b) Elevation of ground at antenna site above mean sea level in meters: 23.00

(c) Distance to nearest aircraft landing area in kilometers: 13.00

Action	Frequency	Station Class	Output Power/ERP	wean/	Frequency Tolerance (+/-)	Fmission	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		150HA1A	50 baud

Action	Frequency	Station Class	Output Power/ERP	wean/	Frequency Tolerance (+/-)	- mission	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H012B	31.25 baud

(2)	Hammond	LA	North	30	27	0	West	90	31	0	Mobile:
	Street	County									
	40406 Edgar Traylor Road										
Datu	im: NAD 27										
ls a	directional antenna (other than	n radar)	use	d? N	0					
Exhi	bit submitted: No										
(a) \	Nidth of beam in degr	ees at the	e half-po	ower	poi	nt:					
(b) (Drientation in horizon	tal plane:									
(c) (Drientation in vertical	plane:									

(a) Overall height above ground to tip of antenna in meters: 15.00

(b) Elevation of ground at antenna site above mean sea level in meters: 8.00

(c) Distance to nearest aircraft landing area in kilometers: 18.00

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft: existing antenna

Actior	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud
Actior	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(3)	Rhome	TX		33 9	32 West	97 28 48	B Mobile:
	Street	Cou	nty				
	Meadow Court						

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 12.00

(b) Elevation of ground at antenna site above mean sea level in meters: 250.00

(c) Distance to nearest aircraft landing area in kilometers: 13.00

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(4) E	Burbank	СА	North	34 11	19 West	118 17 40	6 Mobile:
	Street	Cou	nty				
1	054 East Olive						
P	Avenue						
Datum	: NAD 27						
Is a di	rectional antenn	a (other	than radar) (used? N	0		
Exhibit	t submitted: No						
(a) Wi	dth of beam in d	egrees a	t the half-pov	wer poi	nt:		
(b) Ori	ientation in horiz	zontal pl	ane:				
(c) Ori	entation in verti	cal plane	e:				
existin	e antenna exten g building, will i sed antenna be n	t extend	more than 6	meters	above the	building, or	will the
(a) Ov	erall height abov	/e groun	d to tip of an	tenna ir	n meters: 24	4.00	
(b) Ele	evation of ground	d at ante	nna site abov	/e mear	n sea level ii	n meters: 21	3.00
(c) Dis	tance to nearest	aircraft	landing area	in kilor	meters: 6.00	C	
(0) = .0		mations					
(d) Lis tanks,	t any natural for towers, etc.) wh na from aircraft:	nich, in tl				la tena to si	hield the
(d) Lis tanks,	towers, etc.) wh a from aircraft:	nich, in tl		Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequer Tolerar (+/-)		missior signato	
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		60	HOJ2B	31.25 baud
(5) B	Bow	NH	North	43 7	30 We	st 71	30	59 Mobile:
9	Street Dean Avenue	Cou	nty					
Datum	: NAD 27							
Is a dir	rectional antenna	a (other	than radar)	used? N	lo			
Exhibit	submitted: No							
(a) Wi	dth of beam in de	egrees a	t the half-po	wer poi	nt:			
(b) Ori	entation in horiz	ontal pla	ane:					
(c) Ori	entation in vertic	al plane	:					
existin	e antenna exteno g building, will it ed antenna be m	extend	more than 6	meters	above t	he bui	lding, o	r will the
(a) Ove	erall height abov	e groun	d to tip of an	tenna iı	n meters	20.0	2	
(b) Ele	vation of ground				inclus	. 20.0	5	
	varion of ground	at ante	nna site abov	/e mear				145.00
	tance to nearest				n sea lev	el in m		145.00
(c) Dis (d) Lis tanks,	_	aircraft mations ich, in tł	landing area of existing n ne opinion of	ı in kiloı nan-ma	n sea lev meters: de struc	el in m 11.00 tures (heters: T	ees, water
(c) Dis (d) Lis tanks,	tance to nearest t any natural for towers, etc.) wh a from aircraft: (aircraft mations ich, in th existing Station	landing area of existing n ne opinion of	n in kilon nan-mae the app Mean/	n sea lev meters: de struc blicant, v Frequel Tolerar	el in m 11.00 tures (would	heters: T	ees, water shield the Modulating
(c) Dis (d) Lis tanks, antenn	tance to nearest t any natural for towers, etc.) wh a from aircraft: (aircraft mations ich, in th existing Station	landing area of existing n ne opinion of antenna Output	n in kilon nan-ma the app Mean/ Peak	n sea lev meters: de struc blicant, v Freque	el in m 11.00 tures (vould ncy E be	heters: hills, tr tend to missior	ees, water shield the Modulating Signal
(c) Dis (d) Lis tanks, antenn Action	tance to nearest t any natural for towers, etc.) wh a from aircraft: of Frequency 495.00000000 510.00000000 kHz	aircraft mations ich, in th existing Station Class	landing area of existing n ne opinion of antenna Output Power/ERP 100.000000 W / 20.000000	n in kilon nan-ma the app Mean/ Peak	n sea lev meters: de struc blicant, v Frequel Tolerar	el in m 11.00 tures (vould ncy E De 15	heters: Thills, tritend to	ees, water shield the Modulating Signal 50 baud

(6)	Long Beach	MS	Nor	th 30	12 59	9 West	89	4	49	Mobile:
	Street	Cou	inty							
	1157 East Old Pa Road	SS								
Datur	m: NAD 27									
lsad	lirectional antenn	a (other	than rad	ar) usec	l? No					
Exhib	oit submitted: No									
	/idth of beam in d	0		f-power	point:					
	rientation in horiz									
(c) Oı	rientation in verti	cal plan	e:							
existi	he antenna exten ing building, will i osed antenna be n	t extend	l more tha	an 6 met	ers ab	ove the	build	ing,	or v	will the
(a) O	verall height abov	ve grour	d to tip o	f antenr	ia in m	neters: 2	0.00			
(b) El	levation of ground	l at ante	enna site a	above m	ean se	ea level	in me	ters:	7.0	00
(c) Di	istance to nearest	aircraft	landing	area in k	ilome	ters: 10	.00			
tanks	ist any natural for , towers, etc.) wh nna from aircraft:	lich, in t	he opinio							
		Station	Outro		, Fr	equency	/			
Action	n Frequency	Class	Outpu Power/I			olerance (+/-)		issio gnat		Modulating Signal
Action New	n Frequency 495.00000000- 510.00000000 kHz			ERP Pe		olerance	Desi		or	
	495.00000000 510.00000000 kHz	Class	Power/1 100.000 W / 20.0000 W	ERP Pe 0000 000 P	ak To	olerance	150 Em	gnat	or A	Signal
New	495.00000000 510.00000000 kHz	Class FX Station	Power/1 100.000 W / 20.0000 W	ERP Pe 0000 000 P tt Pe Pe 0000	ak To	olerance (+/-) requency olerance	Lin Desi 1501	gnat HA1/	n or	Signal 50 baud Modulating
New Action	495.0000000-510.0000000 kHz n Frequency 495.00000000-510.00000000	Class FX Station Class	Power/I 100.000 W / 20.0000 W Power/I 100.000 W / 20.0000	ERP Pe 0000 000 P tt Pe Pe 0000	ak To	olerance (+/-) requency olerance	Lin Desi 1501	gnat HA14 issio gnat	n or	Signal 50 baud Modulating Signal 31.25
New Action	495.0000000-510.0000000 kHz n Frequency 495.00000000-510.00000000	Class FX Station Class	Power/I 100.000 W / 20.0000 W Power/I 100.000 W / 20.0000	ERP Pe 0000 000 P It RP 0000 P 0000 P	an/ To an/ Fr To	olerance (+/-) requency olerance	Em 1501 60H	gnat HA14 issio gnat	n cor	Signal 50 baud Modulating Signal 31.25
New Action	495.00000000 510.00000000 KHz n Frequency 495.00000000 510.00000000 kHz	Class FX Station Class FX	Power/I 100.000 W / 20.0000 W Power/I 100.000 W / 20.0000 W	ERP Pe 0000 000 P It RP 0000 P 0000 P	an/ To an/ Fr To	equency olerance (+/-)	Em 1501 60H	gnat HA1/ gnat 0J2E	n cor	Signal 50 baud Modulating Signal 31.25 baud
New Action New (7)	495.00000000 510.00000000 KHz n Frequency 495.00000000 495.00000000 510.00000000 510.00000000 KHz	Class FX Station Class FX	Power/I 100.000 W / 20.0000 W Power/I 100.000 W / 20.0000 W	ERP Pe 0000 000 P It RP 0000 P 0000 P	an/ To an/ Fr To	equency olerance (+/-)	Em 1501 60H	gnat HA1/ gnat 0J2E	n cor	Signal 50 baud Modulating Signal 31.25 baud

- (a) Width of beam in degrees at the half-power point:
- (b) Orientation in horizontal plane:
- (c) Orientation in vertical plane:

- (a) Overall height above ground to tip of antenna in meters: 26.00
- (b) Elevation of ground at antenna site above mean sea level in meters: 2.00
- (c) Distance to nearest aircraft landing area in kilometers: 8.00

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft: existing antenna

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	P		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(8) 🛚	lcLean	VA		38 55	58 West	77 10 17	7 Mobile:
	Street	Cou	nty				
	915 Chelsea Roa	ad					
Datum	: NAD 27						
(c) Ori	entation in verti	cal plane	2:				

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(9)	lamestown	NJ	North	41 17	54 West	71 13 39	9 Mobile:
	Street	Cou	nty				
	14 Washington Street						
Datum	: NAD 27						
Is a di	rectional antenna	a (other	than radar) (used? N	0		
Exhibi	t submitted: No						
(a) Wi	dth of beam in de	egrees a	t the half-pov	wer poi	nt:		
	ientation in horiz	-					
	ientation in vertion	•					_
existir	e antenna extend ng building, will it sed antenna be m	t extend	more than 6	meters	above the	building, or	will the
(a) Ov	erall height abov	e groun	d to tip of an	tenna ir	n meters: 17	7.00	
(b) Ele	evation of ground	l at ante	nna site abov	ve mear	n sea level i	n meters: 11	00.1
(c) Dis	stance to nearest	aircraft	landing area	in kilor	meters: 24.0	00	
tanks,	t any natural for towers, etc.) wh a from aircraft: (ich, in tl	he opinion of				
Action	Frequency	Station	Output	Mean/	Frequency	Emission	Modulating
					1		

New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud				
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)		Modulating Signal				
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud				
(10) 5	Stanfield	NC	North	35 9	8 West	80 13 2	9 Mobile:				
	Street 6164 Pless Mill Road	Cou	nty								
Datum	: NAD 27										
Is a di	rectional antenna	a (other	than radar)	used? N	0						
Exhibit	t submitted: No										
	dth of beam in de	•	· · ·	wer poi	nt:						
	ientation in horiz										
• •	entation in vertic	•									
existin	e antenna extend g building, will it sed antenna be m	t extend	more than 6	meters	above the	building, or	will the				
	erall height abov	0	•								
	evation of ground						7.00				
• •	tance to nearest		5								
tanks,	t any natural for towers, etc.) wh ha from aircraft: (ich, in tl	he opinion of								
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)		Modulating Signal				
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud				
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak		Emission Designator	Modulating Signal				

	kHz	20.0 W	000000						
(11)	Cookeville	TN	North	36 13	37	West	85	33 0	Mobile:
	Street	County							
	3927 Huntington Drive								
Datu	m: NAD 27								
Isa	directional antenna	(other thai	n radar)	used?	lo				
Fyhil	bit submitted: No								

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 12.00

(b) Elevation of ground at antenna site above mean sea level in meters: 301.00

(c) Distance to nearest aircraft landing area in kilometers: 24.00

Actior	n Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud
Actior	n Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	I Emission	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(12)	Nederland	со	North	39 56	37 West	105 34 20	Mobile:
	Street	Cou	nty				

536 Hurricane Hill Drive

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 18.00

(b) Elevation of ground at antenna site above mean sea level in meters: 2591.00

(c) Distance to nearest aircraft landing area in kilometers: 32.00

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft: existing antenna

Action	Frequency	Station Class	Output Power/ERP	wean/	Frequency Tolerance (+/-)	- mission	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		150HA1A	50 baud

Action	Frequency	Station Class	Output Power/ERP	iviean/	Frequency Tolerance (+/-)	- mission	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		60H0J2B	31.25 baud

(13)	Verndale	MN	North	43	36	58	West	94	48	8	Mobile:
	Street	County									
	26699-271st Street										

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

(a) Overall height above ground to tip of antenna in meters: 17.00

(b) Elevation of ground at antenna site above mean sea level in meters: 467.00

(c) Distance to nearest aircraft landing area in kilometers: 30.00

Action	Frequency	Station Class	Output Power/ERP	Mean∕ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		60H0J2B	31.25 baud
(14) 0	Colchester	VT	North	44 30	20 West	73 8 40	Mobile:
	Street	Cou	nty				
7	7 Vermont Aven	ue					
Datum	: NAD 27						
Is a di	rectional antenna	a (other	than radar) u	used? N	0		
Exhibit	submitted: No						
(a) Wi	dth of beam in de	egrees a	t the half-pov	wer poi	nt:		
(b) Ori	entation in horiz	ontal pla	ane:				
(c) Ori	entation in verti	cal plane	e:				
existin	e antenna exten g building, will i sed antenna be m	t extend	more than 6	meters	above the	building, or	will the
(a) Ov	erall height abov	e groun	d to tip of an	tenna ir	n meters: 13	3.00	
(b) Ele	vation of ground	l at ante	nna site abov	/e mean	i sea level ii	n meters: 37	7.00
(c) Dis	tance to nearest	aircraft	landing area	in kilor	meters: 5.00	C	
tanks,	t any natural for towers, etc.) wh na from aircraft: (ich, in tl	ne opinion of				

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(15) <mark>R</mark>	Roland	AR	North	34 29	40 West	92 18 5	O Mobile:
	Street	Cou	nty				
8	101 Barrett Roa	d					
Is a dii Exhibit (a) Wie (b) Ori	: NAD 27 rectional antenna : submitted: No dth of beam in de entation in horiz entation in vertio	egrees a contal pla	t the half-por ane:				
Will the existin propos (a) Ove	e antenna exten g building, will i ed antenna be m erall height abov vation of ground	d more t t extend nounted re groun	han 6 meters more than 6 on an existin d to tip of an	meters g struct tenna ir	above the ture other t n meters:	building, or han a buildi	will the
(c) Dis	tance to nearest	aircraft	landing area	in kilor	meters:		
tanks,	t any natural for towers, etc.) wh a from aircraft:						
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.00000000- 510.000000000	FX	100.000000 W / 20.000000	Р		150HA1A	50 baud

	kHz		20.000000 W				
Action	Frequency	Station Class	Output Power/ERP	wean/	Frequency Tolerance	Emission Designator	Modulating Signal

	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(16)	St. Francis	MN	North	45 23	20 West	93 22 1	1 Mobile:
	Street	Cou	nty				
	3740 227th Ave., NW						
Datun	n: NAD 27						
lsad	irectional antenna	a (other	than radar)	used? N	lo		
Exhibi	it submitted: No						
	idth of beam in de	•	-	wer poi	nt:		
. ,	rientation in horiz	•					
	ientation in verti	•					
existi	ne antenna extene ng building, will i sed antenna be m	t extend	more than 6	meters	above the	building, or	will the
(a) Ov	verall height abov	e groun	d to tip of an	tenna i	n meters: 1	5.00	
	evation of ground						80.00
	stance to nearest						
tanks	st any natural for , towers, etc.) wh na from aircraft:	ich, in tl	he opinion of				
					0		
Actior	n Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)		Modulating Signal
Action New	Frequency 495.00000000- 510.00000000 kHz			Peak	Tolerance	Emission	
	495.00000000- 510.00000000 kHz	Class	Power/ERP 100.000000 W / 20.000000 W	Peak	Tolerance	Emission Designator 150HA1A	Signal 50 baud Modulating
New	495.00000000- 510.00000000 kHz	Class FX Station	Power/ERP 100.000000 W / 20.000000 W	Peak P Mean/ Peak	Tolerance (+/-) Frequency Tolerance	Emission Designator 150HA1A Emission	Signal 50 baud Modulating

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 21.00

(b) Elevation of ground at antenna site above mean sea level in meters: 21.00

(c) Distance to nearest aircraft landing area in kilometers: 3.00

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft: existing antenna

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal			
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		150HA1A	50 baud			
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal			
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud			
(18)	Green Harbor	MA	North	42 4	18 West	70 39 1	6 Mobile:			
(18)	Green Harbor Street	MA Cou		42 4	18 West	70 39 1	6 Mobile:			
				42 4	18 West	70 39 1	6 Mobile:			
	Street			42 4	18 West	70 39 1	6 Mobile:			

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

(a) Overall height above ground to tip of antenna in meters: 18.00

(b) Elevation of ground at antenna site above mean sea level in meters: 6.00

(c) Distance to nearest aircraft landing area in kilometers: 0.32

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft: existing antenna

Actio	n Frequency	Station Class	Output Power/ERP	Mean/ Peak	Tol	quency erance +/-)		ssior Inato		/lodulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ			150H	A1A	5	50 baud
Actio	n Frequency	Station Class	Output Power/ERP	Mean/ Peak	Tol	quency erance +/-)	Emi: Desig	ssior Inato		/lodulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р			60H0	J2B		31.25 baud
(19)	Batavia	IL	North	41 30	36	West	88	11	28	Mobile:
	Street	Cou	nty							

St	reet
Datum:	NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

314 S. Harrison

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 9.00

(b) Elevation of ground at antenna site above mean sea level in meters: 229.00

(c) Distance to nearest aircraft landing area in kilometers: 13.00

Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		60H0J2B	31.25 baud
(20)	ottage Grove	OR	North	43 25	23 West	123 14 24	4 Mobile:
	Street	Cou	nty				
3	2857 Fox Lane						
Datum	: NAD 27						
Is a dii	rectional antenn	a (other	than radar) (used? N	0		
	submitted: No						
• •	dth of beam in d entation in horiz	-	-	wer poi	nt:		
	entation in verti	· · ·					
Will the existin	e antenna exten g building, will i ed antenna be n	d more t t extend	han 6 meters more than 6	meters	above the	building, or	will the
(a) Ov	erall height abov	ve groun	d to tip of an	tenna ir	n meters: 43	3.00	
	vation of ground						07.00
• •	tance to nearest		3				
tanks,	t any natural for towers, etc.) wh a from aircraft:	lich, in tl	he opinion of				
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		150HA1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Frequency Tolerance	Emission Designator	Modulating Signal

New	495.00000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Ρ		60H0J2B	31.25 baud
(21)	Colorado Springs	СО	North	38 48	44 West	104 51 5	Mobile:
	Street	Cou	inty				
ģ	905 Zodiac Drive						
Datum	: NAD 27						
Is a di	rectional antenna	a (other	than radar)	used? N	ю		
	t submitted: No						
	dth of beam in de	-	-	wer poi	nt:		
	ientation in horiz ientation in verti						
	e antenna exten	•		s above	the around	l. or if moun	ted on an
existin	ng building, will i	t extend	more than 6	meters	above the	building, or	will the
	sed antenna be m erall height abov			0			ng? Yes
(a) Uv	eran neight abov	e groun	u to tip of all	iterina n	i meters. I	2.00	
• •	vation of ground	l at ante	nna site abo	ve mear	n sea level i	n meters: 1	875.00
(b) Ele	evation of ground stance to nearest						875.00
(b) Ele (c) Dis (d) Lis	stance to nearest	aircraft mations	landing area of existing r	a in kilo nan-ma	meters: 32. de structur	00 es (hills, tre	es, water
(b) Ele (c) Dis (d) Lis tanks,	stance to nearest any natural for towers, etc.) wh	aircraft mations iich, in tl	landing area of existing r he opinion of	a in kilo nan-ma	meters: 32. de structur	00 es (hills, tre	es, water
(b) Ele (c) Dis (d) Lis tanks,	stance to nearest	aircraft mations iich, in tl	landing area of existing r he opinion of	a in kilo nan-ma	meters: 32. de structur blicant, wou	00 es (hills, tre uld tend to s	es, water
(b) Ele (c) Dis (d) Lis tanks,	stance to nearest at any natural for towers, etc.) wh na from aircraft:	aircraft mations iich, in tl	landing area of existing r he opinion of antenna	a in kilo nan-ma the app Mean/	meters: 32. de structur	00 es (hills, tre uld tend to s	es, water hield the Modulating
(b) Ele (c) Dis (d) Lis tanks, antenr	stance to nearest at any natural for towers, etc.) wh na from aircraft:	aircraft mations iich, in tl existing Station	Ianding area of existing r he opinion of antenna	a in kilon nan-ma The app Mean/ Peak	meters: 32. de structure blicant, wou Frequency Tolerance	00 es (hills, tre uld tend to s Emission	es, water hield the Modulating
(b) Ele (c) Dis (d) Lis tanks, antenr	Frequency 495.00000000	aircraft mations nich, in ti existing Station Class	Ianding area of existing r he opinion of antenna Output Power/ERP 100.000000 W / 20.000000	a in kilon nan-ma The app Mean/ Peak	meters: 32. de structure plicant, wou Frequency Tolerance (+/-)	00 es (hills, tre uld tend to s Emission Designator 150HA1A	es, water hield the Modulating Signal
(b) Ele (c) Dis (d) Lis tanks, antenr	stance to nearest at any natural for towers, etc.) wh ha from aircraft: Frequency 495.00000000 510.00000000 kHz	aircraft mations nich, in ti existing Station Class	Ianding area of existing r he opinion of antenna Output Power/ERP 100.000000 W / 20.000000 W	a in kilon nan-ma The app Mean/ Peak	meters: 32. de structure blicant, wou Frequency Tolerance	00 es (hills, tre uld tend to s Emission Designator 150HA1A	es, water hield the Modulating Signal 50 baud
(b) Ele (c) Dis (d) Lis tanks, antenr Action New	stance to nearest at any natural for towers, etc.) wh ha from aircraft: Frequency 495.00000000 510.00000000 kHz	aircraft mations nich, in tl existing Station FX Station	anding area of existing r he opinion of antenna Output Power/ERP 100.000000 W / 20.000000 W	a in kilon nan-ma The app Peak Peak	Frequency (+/-)	00 es (hills, tre uld tend to s Emission Designator 150HA1A Emission	es, water hield the Modulating Signal 50 baud
(b) Ele (c) Dis (d) Lis tanks, antenr Action New	stance to neareststance to nearestst any natural fortowers, etc.) whha from aircraft:Frequency495.00000000510.00000000kHzFrequency495.00000000stance495.00000000stance510.00000000stance510.00000000stance10.00000000	aircraft mations nich, in tl existing Station Class FX Station Class	Ianding area of existing r he opinion of antenna Output Power/ERP 100.000000 W / 20.000000 W Output Power/ERP 100.000000 W / 20.000000	a in kilon nan-ma The app Peak Peak Mean/ Peak	Frequency (+/-)	00 es (hills, tre uld tend to s Emission Designator 150HA1A Emission Designator	es, water hield the Modulating Signal 50 baud Modulating Signal 31.25
(b) Ele (c) Dis (d) Lis tanks, antenr Action New Action	stance to neareststance to nearestst any natural fortowers, etc.) whha from aircraft:Frequency495.00000000510.00000000kHzFrequency495.00000000stance495.00000000stance510.00000000stance510.00000000stance10.00000000	aircraft mations nich, in tl existing Station Class FX Station Class	Ianding area of existing r he opinion of antenna Output Power/ERP 100.000000 W / 20.000000 W 100.000000 W 20.000000 W / 20.000000 W	a in kilon nan-ma the app Peak Peak P	Frequency (+/-)	00 es (hills, tre uld tend to s Emission Designator 150HA1A Emission Designator 60H0J2B	es, water hield the Modulating Signal 50 baud Modulating Signal 31.25

445 Shirley Avenue

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 12.00

(b) Elevation of ground at antenna site above mean sea level in meters: 30.00

(c) Distance to nearest aircraft landing area in kilometers: 16.00

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft: existing antenna

Action	Frequency	Station Class	Output Power/ERP	Mean∕ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	I F X	100.000000 W / 20.000000 W	Р		150HA1A	50 baud
					Frequency		
Action	Frequency	Station Class	Output Power/ERP	Mean/ Peak	Tolerance (+/-)	Emission Designator	Modulating Signal

(23)	Wyland	MA	North	42	21	55	West	71	20	8	Mobile:
	Street	County									
	157 Plain Road										

Datum: NAD 27

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an

existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? Yes

(a) Overall height above ground to tip of antenna in meters: 18.00

(b) Elevation of ground at antenna site above mean sea level in meters: 40.00

(c) Distance to nearest aircraft landing area in kilometers: 12.00

Action	Frequency	Station Class	Output Power/ERP	Mean∕ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal
New	495.0000000- 510.00000000 kHz	FX	100.000000 W / 20.000000 W	Р		OK15A1A	50 baud
Action	Frequency	Station Class	Output Power/ERP	Mean∕ Peak	Frequency Tolerance (+/-)	Emission Designator	Modulating Signal