APPLICATION FOR NEW OR MODIFIED RADIO STATION AUTHORIZATION UNDER PART 5 OF FCC RULES - EXPERIMENTAL RADIO SERVICE (OTHER THAN BROADCAST)

 Applicant's Name and Post Office address (Street address, city, state, and ZIP Code. See instruction No. 4) The Board of Trustees of the Leland Stanford Junior University 				File	No.	O NOT WRITE IN T		
				0241-EX-PL-2000				
P.O. Box N Stanford,	•	g 170						
Z(a). Application	for (check o	nly one box)		2(b). F	or Modifica	tion indicate belov	w:	
X New station	☐ Mo	dification of existin	g authorization	File N	·n·	Call	Sign:	
E. Application for placement to in	Modification	n: Check the bo	ox beside all pa is an addition	rticulars	to be modi	fied. Check either		
FREQUENCY -		EMISSION -	-	POW	IER -	Loc	ATION -	
OTHER PARTICULA	RS - addition o	r replacement? (De	scriba below or in	attached	EXHIBIT No)		
4. Particulars of	Operation (se	e instruction be	elow)					
frequency (state	Frequency Istate POWFR			EMISSION		MODULATING SIGNAL	NECESSARY BANDWIDTH (KHz) *	
(A)	(B) 401W	(C) 30 dBm	(D) Mean	G7D	(E) (OPSK)	(F) OFDM 64QAM	(G) 4 MOD (4 MHz)	
Base Stations	401W	30 abii	Mean	1 372	/ QI DI()	OI DIT O I QUAL		
2478-2482								
MHz								
				 				
-								
		<u> </u>						
(E) Insert maxiunits. (D) Insert "MEA (E) List each ty (F) Insert as ap (1) the maxiun (2) maximum (3) frequence	mum R.F. out; mum effectiv N" or "PEAK" pe of emissic propriate for mum speed in audio modu by deviation	out power at the re radiated power at the readiated power at the (See definition on separately for the type of most keying in ballating frequent of carrier;	te transmitter to the and the	erminals ntenna (: Specify u If pulsed er : Section 22 Bandwidt	red, attach as EXH nits. nission, specify per Ol of FCC Rules.) th indicated incrimentation.	ak power). Specify	
For complex	emissions, d	epetition rate. describe in detai ary bandwidth				l below. FO	CC Form 442 - Page March 199	

	Proposed location of trai	nsmitter and transmitting MOBILE	ng antenna (checl	conly one bo	ox to indicate MOBILE	e type of operation):
5 lɔ).	If permanently located a		e below:	5(c). If mo		the exact area of
State	· · · · · · · · · · · · · · · · · · ·	City or Town Stanford/Pa	lo Alto	1		
CA	Santa Clara ber and street (or other		10 11100			
		Indication of tocations				
Se	e Exhibit A				,	
5];5)(1). Enter geographical coordiante	s exact to the nearest secon	d (see instruction 10)		•	ordinates of the approximate (see instruction 10.)
\orth	Latitude (DD-MM-SS)	West Longitude (DD-MM		North Latitud	1 0 , ,,	West Longitude
	Exhibit A	See Exhibit A	, ,,	0		0 , "
5(d).	Datum (see instruction 1	0):	X NAD 27	NAD 83		
	a directional antenna (care "YES", give the following] NO		
(2) Width of beam in degr	rees at the half-power	point 120			00
(1	o) Orientation in horizon	tal plane <u>0-360</u>	(c) Orie	ntation in ve	rtical plane	90
	this authorization to be	used for fulfilling the	requirement of s	government	contract w	ith an agency of the
7. 15 T	nited States Governmen	it?		No		•
	"YES", attach as EXHIBI				the govern	nent project,
11	gency and contact numb	er.		•	•	•
5 To	this authorization to be	used for the exclusive	purpose of devel	oping radio	equipment fo	or export to be employed
þ	y stations under the jur	isdiction of a foreign g		∏ NO		
T.f	"YES", attach as EXHIBIT	f No the			de the contr	act number and the
r	name of the foreign gove	ernment concerned.				
	this outhorization to be	used for providing co	mmunications esse	ential to a re	search projec	ct? (The radio communi-
£. 1	ation is not the objective	e of the research proje	c <u>t).</u>	=	_	
	f "YES", attach as EXHIBI	T No. o		NO	the following	g information:
	a) a demonstration of the r	eture of the research t	orollegt being cond	lucted.		
- (b) A showing that the co c) A showing that exist!	ommunications facilities	: requested are ne	ecessary for	the research	project involved.
13. I	f all the answers to Item	ıs 7, 8, and 9, are "NO", a	ttach as EXHIBIT I	No. B	a narra	ative statement describing
	n detail the following: a) The complete program				description	of equipment
	and theory of operation	on.		-	-	
(b) The specific objective	s sought to be accompli	shed.	o of contribu	tion to the c	levelonment extension.
	c) How the program of expansion, or utilization	on of the radio art, or i	s along line not a	ready invest	igeted.	
ll(a)	. Give an estimate of the	e length of time that w	ill be required to	complete the	program of	experimentation proposed
	in this application: If less than 2 years, giv			out horization	requested i	n this application
(b)) If less than 2 years, give will be required:	24 months	————	autiloi izawoi.	roquosion .	чим фримин
12.	Would a Commission graignificant environmen	rant of this application	come within Sect	_	(47)	s, such that it may have a
	If "YES", attach as EXHI			YES ntal Assessme	NO X nt as requir	ed by Section 1.1311.
18.	List below transmitting MANUFACTURER	equipment to be instal	lled (if experimen MODEL NU	ital, so state): JMBER		NO. OF UNITS
	Experimental					
						ECC Form 442 - Page 3

:- <u>-</u>	Is the equip	ment listed in Iter	m 18 capable of statio	n identification pursuar	at to Section 5.152?	X YES	□ NO		
il.	Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it exten more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? X YES NO								
	If "YES", giv (a) Overall 1	e the following (s height above grou	see instruction 9): nd to tip of antenna	is17 meters	(See Exhibit	c.)			
				n sea level is	meters.				
	(c) Distance		_ kilomete	rs,					
	(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 and thereby minimize the aeronautical hazard of the antenna.								
	Build	ings, trees							
	if any, g	iving heights in	meters above ground	l profile sketch of total for all significant feat ling already available.	structure including a	supporting existing p	building, portion,		
13.	Applicant is	. iCheck only one b	hox?						
	☐ IVIDIVI	dual 🗌 ass	OCIATION	PARTNERSHIP [CORPORATION				
	X OTHER	(describe in space	provided below)						
		•	•						
	Univ	rersity							
17.	Is applicant	a foreign govern	ment or a representa	ative of a foreign gover	nment?	YES	X NO		
15.	Has application	nt or any party to for permit, licens	this application had e or renewal denied	any FCC station license by this Commission?	or permit revoked	or had any	7 X NO		
	If "YES", att	ach as EXHIBIT Ne	oa st	atement giving call sign	of license or permit				
	revoked an	d relate circumsta	nces.						
15.	Will applica	ant be owner and	operator of the stati	on?		X YES	□ ио		
210.	who can be	title, and telephonest handle inquirienchibhotla	ne number (include a es pertaining to this a	area code), and Internet application.	e-mail address (if ap)	plicable) o	f person		
	Visitin	ng Associate I	Professor 408	-439-4070 ha	rikvs@stanford.	edu			
sil.	By checkin he or she is conviction	s not subject to a c pursuant to Section tion, partnership a denial of federal	dual applicant certifi denial of federal ben in 5801 of the Anti- I or other unincorpora	ies that he or she is elig lefits, including FCC ber Drug Abuse Act of 1988, 2 ted association, certifies to that section. For defin	nefits, as a result of a 21 U.S.C. 862. A non-in that no party to the ition of a "party" for	a drug offe ndividual : e application	ense applicant, on is		
	Titat balana	all authibite in mu	marical seguence and	the item number of fo	rm requiring the ext	ibit identi	fled.		
:54	rist Delow	an exhibits in hu	merical sequence and	t the field number of 10.	un redutitife mie evr	1.01.100110			
£X	HIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER	ITEM ND. OF FORM	EXHIBIT NUMBER	ITEM	NO. OF FORM		
	A	5(b)(1)							
	<u>B</u>	10							
	C	15(e)	I i						
						1			

	OFDIFICATION.							
233	CERTIFICATION: Attention: Read this certification carefully before signing this application.							
	THE APPLICANT CERTIFIES THAT:							
	 (a) Copies of FCC Rule Parts 2 and 5 are on hand; and (b) Adequate 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: (1) 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 Commission 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. 							
	APPLICANT CERTIFIES FURTHER 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. 							
	Signed and dated this 4th day of OCTOBER 2000							
	Name of Applicant The Board of Trustees of the Leland Stanford Junior University							
	By DEBRA ZUMWALT (Bust correspond with name given on page 1)							
	Title ACTING GENERAL COUNSEL							

IVILLEUL 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).

Member of applicant partnership

X Authorized employee Office of applicant corporation or association

Check appropriate classification:

Individual applicant

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 1984, as amended, and specified by Section 808 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 indiress.** Individuals are not required to respond to this collection unless it displays a currently valid OMB control number.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 98-579, DECEMBER 91, 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.