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

<ol> <li>Applicant's Name and Post Office address         (Street address, city, state, and ZIP Code. See instruction No. 4)     </li> </ol>							DO NOT WRITE IN THIS BLOCK File No.						
CALIFORNIA, STATE OF DGS-TELECOMMUNICATIONS DIVISION 601 SEQUOIA PACIFIC BLVD SACRAMENTO, CA 95814-0282							0014-EX-PL-1999						
2(a). Appl	ication	for	check	only one	box)	·	2(b). For Modific	ation indic	ate bel	ow:			
X New	station		□ м	odification	of existin	g authorization							
3. Applica placeme	tion fon	or Mo	dification	on: Checl	k the bo	ox beside all pa is an addition	File No.: rticulars to be mod or a replacement o	lifled. Chec	ik altha	ill Sign: er addition he curre	on or re- nt authorizatior		
FREQUEN					ssion -		POWER - LOCATION -						
							attached EXHIBIT No.		)				
4. Particula		Opera	tion (se	e instruc	ction be	low)							
frequency whether kHz			<b></b>		VER	<u> </u>	EMISSION	Sil	SIGNAL		ECESSARY BANDWIDTH (kHz)		
(A) 01.7895	мна	10	(B)	100		(D) PEAK	(E)	±60°,	(F)	BITS	<u>; (G)</u>		
01.8855		10		100		PEAK	1K50G1D 1K50G1D	±60°.			0.1		
* <u>.</u>													
(B) Insert units. (C) Insert units. (D) Insert (E) List e (F) Insert (I) the (2) ms (3) fre (4) pui For co	maxi: maxi: maxi:  "MEA ach ty as ap maxi: ximun equence se dur mplex	mum mum No or pe of propri mum n audi y dev ation emis	R.F. outpeffective "PEAK" emission ate for speed of moduration and resions, desired and resio	cut power radiate (See defin separate the type of keying lating from the carried petition is essentible in the carried petition is essentible in the carried petition is essentible in the carried petition in the carried petition is essentible in the carried petition in the carried petition is essentible in the carried petition in the carried	initions tely for of mod in bau equency r rate. n detail	transmitter teer from the and in Part 5). each frequence in the space property in the sp	nore space is requirementals. Specify u enna (if pulsed en	nits. nission, spe	cify pe				
(G) Descri	pe yo.	w the	necess	ary band	width v	was determined	in space provided	below.	F	CC Form	442 - Page 2		

SCAL Forward Provided the exact area of Operation  SCAL SOLANO  COURT LAND  LIBERTY ISLAND PUMP STATION 11 KM W  SCHOOL SOLANO  LIBERTY ISLAND PUMP STATION 11 KM W  SCHOOL SOLANO  LIBERTY ISLAND PUMP STATION 11 KM W  SCHOOL SOLANO  West Longton SCHOOL SC	5(a). Proposed location of transm    Y   FIXED/BASE	nitter and transmitting antenna  MOBILE	(check	only one box to indica BASE AND MOBILE	ate type of operation):
EXENTLY ISLAND PUMP STATION 11 KM W  EXENT). Erric geographical coordinates exact to the nearest second (see instruction 10)  North Lettude CD-MM-SS)  West Longitude CD-MM-SS)  North Lettude CD-MM-SS)  North Lettude CD-MM-SS)  8 ° 19 ° 46 ° 121 ° 41 ° 34 ° ° NAD 27  NAD 88  6 Is a directional antenna (other than radar) used? The second of the second	State County	City or Town			be the exact area of
E(DXI). Enter geographical coordinates exact to the nearest second (see instruction 10)  North Lataude CD-MM-S3  38 ° 19 ' 46 " 121 ° 41 ' 34 " NAD 27 NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? NaD 88  6. Is a directional antenna (other than radar) used? NaD 88  6. Is a directional antenna (other than radar) used? NaD 88  6. Is this authorization in horizontal plane 201 ° (0) Orientation in vertical plane 43 °  7. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government?  7. 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?  8. 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?  9. Is this authorization to be used for providing communications resolute the contract number and the name of the foreign government concerned.  9. 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).  9. If "YES, attach as EXHIBIT No.	Number and street (or other ind	ication of location)		1	
E(DXI). Enter geographical coordinates exact to the nearest second (see instruction 10)  North Lataude CD-MM-S3  38 ° 19 ' 46 " 121 ° 41 ' 34 " NAD 27 NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? Types NAD 88  6. Is a directional antenna (other than radar) used? NaD 88  6. Is a directional antenna (other than radar) used? NaD 88  6. Is a directional antenna (other than radar) used? NaD 88  6. Is this authorization in horizontal plane 201 ° (0) Orientation in vertical plane 43 °  7. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government?  7. 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?  8. 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?  9. Is this authorization to be used for providing communications resolute the contract number and the name of the foreign government concerned.  9. 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).  9. If "YES, attach as EXHIBIT No.	LIBERTY ISLAND PUM	IP STATION 11 KM W			
North Lakaude CD-Med-SS    West Lengtude CD-Med-SS    North Lakaude   West Lengtude   State	· · ·		tion 10)		
8(d). Datum (see instruction 10): SNAD 27 NAD 88  8(d). Datum (see instruction 10): NAD 27 NAD 88  8 is a directional antenna (other than radar) used? YES NO If "YES," give the following information: (a) Width of beam in degrees at the hair-power point 45° (b) Crientation in horizontal plane 201° (c) Orientation in vertical plane 43°  7. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government? YES NO If "YES," attach as EXHIBIT No. a narrative statement describing the government project, agency and contact number.  8. Is this authorization to be used for the exclusive purpose of developing radio equipment for export to be employe by stations under the jurisdiction of a foreign government?  9. Is this authorization to be used for the exclusive purpose of developing radio equipment for export to be employe by stations under the jurisdiction of a foreign government?  9. Is this authorization to be used for providing communications: Provide the contract number and the name of the foreign government concerned.  9. 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). YES NO  10. If "YES, attach as EXHIBIT No. a narrative statement provding the following information:  11. (a) A description of the nature of the research project being conducted.  12. (b) A showing that the communications facilities are inadequate.  13. (c) A showing that existing communications facilities are inadequate.  14. (c) A showing that existing communications facilities are inadequate.  15. (a) The complete program of research and experimentation proposed including description of equipment and theory of operation.  15. (d) The complete program of research and experimentation proposed including description of equipment and theory of operation.  16. (e) The specific objectives sought to be accomplished.  16. (e) He answers to Items 7, 8, and 9, are "NO", a	North Latitude (DD-MM-SS)	West Longitude (DD-MM-SS)			<del></del>
is a directional antenna (other than radar) used? YES  NO  NO  Note that following information:  (a) Width of beam in degrees at the half-power point		A ! P			
(a) Width of beam in degrees at the half-power point 45° (b) Orientation in horizontal plane 201° (c) Orientation in vertical plane 43°  7. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government? YES No  If YES, attach as EXHIBIT No. an anarative statement describing the government project, agency and contact number.  8. Is this authorization to be used for the exclusive purpose of developing radio equipment for export to be employe by stations under the jurisdiction of a foreign government?  YES NO  If YES, attach as EXHIBIT No. the following information: Provide the contract number and the name of the foreign government concerned.  9. 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) YES NO  If YES, attach as EXHIBIT No. an anarative statement providing 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 landequate.  10. If all the answers to items 7, 8, and 9, are "NO", attach as EXHIBIT No. na narrative statement describin in detail the following:  (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, expension, or utilization of the radio art, or is along line not already investigated.  11(a) He analysis and the program of experimentation has a reasonable promise of contribution to the development, extension, expension, or utilization of the radio art, or is along line not already investigated.  11(b) If east than 2 years, give the length of time his will be requir	5(d). Datum (see instruction 10): .	NAD 2	7 🗆	NAD 83	
7. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government?	If "YES", give the following i  (a) Width of beam in degrees	nformation: at the half-power point 45			43°
8. 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?    YES	7. Is this authorization to be use United States Government?  If "YES", attach as EXHIBIT No.	ed for fulfilling the requirement	nt of a g	government contract v	with an agency of the
cation is not the objective of the research project).  If "YES", attach as EXHIBIT No a narrative statement provding 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 inadequate.  10. If all the answers to Items 7, 8, and 9, are "NO", attach as EXHIBIT No a narrative statement describing in detail the following:  (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.  11(a) Give an estimate of the length of time that will be required to complete the program of experimentation propose in this application:	by stations under the jurisdic If "YES", attach as EXHIBIT No	etion of a foreign government?  YES  the following		NO	
in detail the following:  (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.  (d) Give an estimate of the length of time that will be required to complete the program of experimentation propose in this application:  (b) If less than 2 years, give the length of time in months that the authorization requested in this application will be required:  (c) How the program of experimentation, extension, or utilization of the required to complete the program of experimentation propose in this application:  (b) If less than 2 years, give the length of time in months that the authorization requested in this application will be required:  (c) How the program of experimentation to complete the program of experimentation propose in this application propose in this application.  (d) If less than 2 years, give the length of time in months that the authorization requested in this application will be required:  (e) How the program of experimentation to the development, extension, expension, or utilized.  (f) If less than 2 years, give the length of time in months that the authorization requested in this application will be required.  (g) If less than 2 years, give the length of time in months that the authorization requested in this application will be required.  (h) If less than 2 years, give the length of time in months that the authorization requested in this application will be required.  (h) If less than 2 years, give the length of time in months that the authorization requested in this application.  (h) If less than 2 years, give the length of time in months that the authorization requested in this application.  (h) If less than 2 years, give the length of time in months that the authorization reque	cation is not the objective of  If "YES", attach as EXHIBIT No.  (a) A description of the natur  (b) A showing that the comm	the research project).  YES  a narrative state of the research project being unications facilities requested	XX atement conduct are nece	NO provding the following ted. essary for the research	ng information:
in this application: Life of the GOES/DCS Program  (b) If less than 2 years, give the length of time in months that the authorization requested in this application will be required:  Would a Commission grant of this application come within Section 11307 of the FCC Rules, such that it may have significant environmental impact (see instruction 11)?  If "YES", attach as EXHIBIT No.  an Environmental Assessment as required by Section 1.1311.  IS. List below transmitting equipment to be installed (if experimental, so state):  MANUFACTURER  NO. OF UNITS	in detail the following:  (a) The complete program of and theory of operation.  (b) The specific objectives so (c) How the program of expe	research and experimentation ught to be accomplished. rimentation has a reasonable p	proposed	i including description of contribution to the	of equipment
significant environmental impact (see instruction 11)?  If "YES", attach as EXHIBIT No an Environmental Assessment as required by Section 1.1311.  IS. List below transmitting equipment to be installed (if experimental, so state):  MANUFACTURER  MODEL NUMBER  NO. OF UNITS	in this application: Life (b) If less than 2 years, give th	of the GOES/DCS Pro	gram		
MANUFACTURER MODEL NUMBER NO. OF UNITS	12. Would a Commission grant significant environmental i	impact (see instruction 11)?		YES X NO	
	MANUFACTURER	MÖD	EL NUM		NO. OF UNITS

14.	Is the equi	ipment listed in It	em 13 capable of stat	ion identification pursu	ant to Section 5.152:	, 🗆	YES	M	NO
15.	Will the a more than than a bui	6 meters above t	he building, or will t	ove the ground, or if me he proposed antenna be	ounted on an existing mounted on an ex	ng bui isting	lding, v	will it re oth	extend ner
			(see instruction 9):	a is mete	ers.				
	(b) Elevation	on of ground at a	ntenna site above me	ean sea level is	meters.				
	(c) Distanc	e to nearest aircr	aft landing area is _			k	ilomet∈	ers.	
	the opi		ant, would tend to sl	made structures (hills, tr hield the antenna from					in
	if any,	giving heights in	meters above ground	al profile sketch of tota d for all significant fea nting already available.					
16.	Applicant	1s: (Check enly ene	benl						
	☐ INDIV	TIDUAL AS	SOCIATION [	PARTNERSHIP	☐ CORPORATION		÷		
	X OTHER	R (describe in spac	e provided below)						
		ERNMENTAL E	<del>-</del>						
	901	EKNMENIAL E	MITII						
17.	Is applican	t a foreign gover	nment or a represent	tative of a foreign gove	ernment?		YES		NO
18.				d any FCC station licens by this Commission?	se or permit revoke	d or h	ad any		
		-		tatement giving call sig	n of Hoones on non-		YES	$\square X$	NO
		nd relate circumsta		tatement giving can sig	n or needse or per	mir			
19.	Will applic	ant be owner and	i operator of the stat	lon?		X	YES		NO
20.	Give name who can b	, title, and telepho est handle inquiri	one number (include es pertaining to this	area code), and Internet application.	e-mail address (if	applice	ible) of	pers	on
		Sawyer, Sen 657-6167	ior Telecommu	nications Engin	eer				
21.		ANTI-DRUG ABUS	E CERTIFICATION:	· · · · · · · · · · · · · · · · · · ·		•	-		
	he or she i conviction eg. corpore subject to	s not subject to a pursuant to Section partnership a denial of federa	denial of federal bear on 5301 of the Anti- or other unincorpora	Ties that he or she is eli nefits, including FCC be Drug Abuse Act of 1988, ated association, certifie to that section. For defin	nefits, as a result of 21 U.S.C. 862. A non- is that no party to	f a dri - indiv the ap	ug offe vidual a plication	n <b>se</b> applica n is	
	see 47 CFR	1.2002(b).				X	YES		NO
22.	List below	all exhibits in nu	merical sequence and	d the item number of fo	orm requiring the e	xhibit	identii	ried.	
	IIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER		ITEM N	0. OF F	DRM
	1	10							
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## 23. 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: (i) 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 walves 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 Twenty-sixth , 19 98 day of December Name of Applicant State of California (must correspond with name given on page 1) Glen S. Nash

Title CSA VII-Senior Telecommunications Engineer

Check appropriate classification:

ш	Individual applicant	L	Member of applicant partnership
	Authorized employee		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 OMB 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.