FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

APPROVED BY OMB
3060-0065
Expires 12/31/95

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

1. Applicant's Name and Post Office address (Street address, city, state, and ZIP Code. See Instruction No. 4)

Final Analysis Inc.
7500 Greenway Center
Suite 1240
Greenbelt, MD 20770

DO NOT WRITE IN THIS BLOCK
File No.

4684-EX-PL-95

2(a). Application for (check only one box)

☐ New station ☒ Modification of existing authorization

2(b). For Modification indicate below:

File No: 4097-EX-PL-94 Call Sign: KE2XGU

Application for modification indicate whether change is an addition or replacement of (check all that apply)

☒ FREQUENCY ☒ EMISSION ☒ POWER ☐ LOCATION

☐ OTHER PARTICULARS (describe below or in attached EXHIBIT No. _____)

4. Particulars of Operation (see Instruction below)

Frequency (state whether kHz or MHz)	POWER			EMISSION	MODULATING SIGNAL	NECESSARY BANDWIDTH (kHz)
(A)	(B)	(C)	(D)	(E)	(F)	(G)
(1) MHz	20 W	22 dBW	PEAK	50K0F1D	9600 bps	50 KHz

(A) List each frequency or frequency band separately. (If more space is required, attach as EXHIBIT No. _____)
(B) Insert maximum R.F. output power at the transmitter terminals. Specify units.
(C) Insert maximum effective radiated power from the antenna (If pulsed emission, specify peak power).
(D) Insert "MEAN" or "PEAK" (See definitions in Part 5).
(E) List each type of emission separately for each frequency. (See Section 2.201 of FCC Rules.)
(F) Insert as appropriate for the type of modulation:
(1) the maximum speed of keying in bauds;
(2) maximum audio modulating frequency;
(3) frequency deviation of carrier;
(4) pulse duration and repetition rate.
For complex emissions, describe in detail in the space provided below.

(1) $153.0250 + Mx.0100$
$0 \leq M \leq 444$

(G) Describe how the necessary bandwidth was determined in space provided below.

Code 47 Part 2.202 Table III-A1. Frequency Modulation, Signal with Quantized or Digital Information.

5(a). Proposed location of transmitter and transmitting antenna (check only one box)

☒ FIXED/BASE ☐ MOBILE ☐ BASE AND MOBILE

5(b). If permanently located at a fixed location, give below:

State	County	City or Town
UT	Cache	Logan

Number and street (or other indication of location)

Utah State University
1795 N. Research Parkway

5(d). If mobile, describe the exact area of operation

5(c). Enter geographical coordiantes exact to the nearest second

North Latitude	West Longitude
41° 38' 15"	111° 48' 49"

5(e). Enter geographical coordinates of the approximate center of proposed area of operation (mobile applications)

North Latitude	West Longitude
° ' "	° ' "

6. Is a directional antenna (other than radar) used?

If "YES", give the following information: ☒ YES ☐ NO

(a) Width of beam in degrees at the half-power point 52°

(b) Orientation in horizontal plane uniform (c) Orientation in vertical plane _____

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. 1, 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 employed 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. 1, 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 proposed in this application. 2 years

(b) If less than 2 years, give the length of time in months that the authorization requested in this application will be required.

12. Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ YES ☒ NO

If you answer "YES", submit an Environmental Assessment required by Section 1.1311.

13. List below transmitting equipment to be installed (if experimental, so state):

MANUFACTURER	TYPE	NO. OF UNITS
Aerocon	Experimental Ground Station Transmitter	1

14. Is the equipment listed in Item 13 capable of station identification pursuant to Section 5.152? ☒ YES ☐ NO

15. 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 ☒ NO

If "YES", give the following (see instruction 9):

(a) Overall height above ground to tip of antenna is _____ meters.

(b) Elevation of ground at antenna site above mean sea level is _____ meters.

(c) Distance to nearest aircraft landing area is _____ kilometers.

(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.

(e) Submit as EXHIBIT No. _____, a vertical profile sketch of total structure including supporting building, if any, giving heights in meters above ground for all significant features. Clearly indicate existing portion, noting particulars of aviation obstruction lighting already available.

16. Applicant is: *(Check only one box)*

☐ INDIVIDUAL ☐ ASSOCIATION ☐ PARTNERSHIP ☒ CORPORATION

☐ OTHER (describe below)

17. Is applicant a foreign government or a representative of a foreign government? ☐ YES ☒ NO

18. Has applicant or any party to this application had any FCC station license or permit revoked or had any application for permit, license or renewal denied by this Commission? ☐ YES ☒ NO

If "YES", attach as EXHIBIT No. _____, a statement giving call sign of license or permit revoked and relate circumstances.

Will applicant be owner and operator of the station? ☒ YES ☐ NO

20. Give name, title, and telephone number (include area code) of person who can best handle inquiries pertaining to this application.

Albert Catalano, Legal Counsel, (202) 338-3500

21. APPLICANT ANTI-DRUG ABUSE CERTIFICATION:

By checking "YES", the applicant certifies that, in the case of an individual applicant, he or she is not subject to denial of federal benefits, that includes FCC benefits, pursuant to Section 5301 of the Anti- Drug Abuse Act of 1988, 21 U.S.C. 862, or, in the case of a non- individual applicant (e.g., corporation, partnership, or other unincorporated association), no party to the applicant is subject to a denial of federal benefits, that includes FCC benefits, pursuant to that section. For the definition of "party" for these purposes, see 47 CFR 1.2002(b). ☒ YES ☐ NO

22. List below all exhibits in numerical sequence and the item number of form requiring the exhibit identified.

EXHIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER	ITEM NO. OF FORM
1	7,9				

28. **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 3 day of March , 19 95

Name of Applicant Final Analysis Inc.
(must correspond with name given on page 1)

By Nader Modanlo
(print) *(signature)*

Title President

Check appropriate classification:

☐ Individual applicant ☐ 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 specifically 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 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.

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.

Approved by OMB
3060-0065
Expires 12/31/95

FEDERAL COMMUNICATIONS COMMISSION

FCC FORM 442

FOR FCC USE ONLY

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

SECTION I

APPLICANT NAME (Last, first, middle initial)

Final Analysis Inc.

MAILING ADDRESS (Line 1) (Maximum 35 characters - refer to Instruction (2) on reverse of form)

7500 Greenway Center

MAILING ADDRESS (Line 2) (If required) (Maximum 35 characters)

Suite 1240

CITY

Greenbelt

TATE OR COUNTRY (If foreign address)	ZIP CODE	CALL SIGN OR OTHER FCC IDENTIFIER (If applicable)
Maryland	20770	

ter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in FCC Fee Filing Guides. Enter in Column (B) the Fee Multiple, if applicable. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number entered in Column (B), if any.

	(A) FEE TYPE CODE	(B) FEE MULTIPLE (If required)	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(1)	E A E		$45.00	

SECTION II — To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

	(A) FEE TYPE CODE	(B) FEE MULTIPLE (If required)	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(2)			$	
(3)			$	
(4)			$	
(5)			$	

ADD ALL AMOUNTS SHOWN IN COLUMN C, LINES (1) THROUGH (5), AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE. →

TOTAL AMOUNT REMITTED WITH THIS APPLICATION OR FILING	FOR FCC USE ONLY
$45.00	