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#### CURRICULUM VITAE

## William E. Thornton

Birth:

April 14, 1929

Degrees:

B. S., Physics, University of North Carolina, 1953

M. D., University of North Carolina School of Medicine, 1963

Positions:

lst Lieutenant, United States Air Force, O.I.C., flight test instrumentation laboratory, Eglin Air Force Base, Florida, 1953-55

Consultant, Air Proving Ground, on flight test instrumentation, Eglin Air Porce Base, Florida, 1955-56

Chief Engineer, electronics division, Del Mar Engineering Laboratories, Los Angeles, California, 1956-59

Currently: Instructor, Department of Surgery, University of North Carolina School of Medicine

Patents:

U. S. #2,938,201 Radar-Optical Scoring System

U. S. #2,971,274 Missile Simulator

U. S. #2,869,120 I. R. Target System

Twelve additional domestic and foreign patents are issued or pending on a variety of instrumentation systems including: Doppler Radar Missile Scoring Systems, Pulsed Light Radar System, Electromagnetic Blood Flow Meters, and Electrocardiographic Computer.

# Publications and Papers:

"An Application of Analog Computational Methods to Physiological Measurements." William Thornton, David A. Davis, Kenneth Sugioka, and Charles Fowler. Anesthesiology, 20, No. 1, January-February 1959, p. 137.

"Performance and Application of a Commercial Blood Flow Meter." William Thornton and Benton Bejack. Transactions of the Professional Group on Medical Electronics, December, 1959.

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William Thornton and Benton Bejack. Transactions of the
Professional Group on Medical Electronics, December, 1959.

"Radio Telemetry in Patient Monitoring." David A. Davis, William Thornton, Doris C. Grosskreutz, Kenneth Sugioka, and Rodney McKnight. Anesthesiology, 22, No. 6, November-December 1961, pp. 1010-13.

"The Clinical Applications of Telecardiography." David A. Davis, Thomas C. Gibson, and William Thornton. Digest of the 1962 Fifteenth Annual Conference on Engineering in Medicine and Biology, November, 1962.

"Computer Analysis of the Electrocardiogram." William Thornton, Thomas C. Gibson, and David A. Davis. Digest of the 1962 Fifteenth Annual Conference on Engineering in Medicine and Biology, November, 1962.

"Telecardiography and the Use of Simple Computers." Thomas C. Gibson, William Thornton, William P. Algary, and Ernest Craige. The New England Journal of Medicine, 267, December, 1962, pp. 1218-24.

"Use of Radio Telemetry for Electromyography." Margaret Moore, William Thornton, et al. Journal of the American Physical Therapy Association, November, 1963. In Press.

Awards: Legion of Merit, United States Air Force.

Currently in press:

Preumorardiography' - Tranton - Davis, Proceedings

of ! EEE

Simple computers in Greethesiology' Tranton + Davis

Badio-telemetry in Clinical Greethesiology' Davis + Thomton

Practical applications of telemetry in clinical medicine'

to be presented at National Telemetry Con. Thomton + Davis

Experience in medicine - medically related news prior to entry USAF, Jan 64 1956-59 I mormally associated = 4 with Thursty of n. C. med. School in development of medical electronic instrumentation which included design + fabrication of EKG, EMG + EEG amplifiers and associated equipment, dual beam monitor oscilloscopes (EKG+ EEG) and analog computational elements. (Latter items reported in gnestresiology 59), In 1959 organized + directed a medical electronics subsidiary ( quionics Research Products) of the company in which I was employed. I using this time designed several blood flow systems (3 patents issued or pending) that are in extensive production + use. 1959-63 During solidays + part time in medical school continued design and development of medical instrumentation in association with U. n.C., Duke, Cornell + Univ. of Indiana - This work included: EKG, EEG, GSR, EMG, Evoked Nerre Potential, + Blood Pressure telemetry systems, tape storage systems, EKG computer, IN a recording + analysis system audiometric equipment and a vascety of simple computers. This work is reported in part in the accompanying list of papers. June 63 - Nec 63 Instructor, Dest. Surgery - 21. M.C .full time research in nuclear magnetic resonance

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OVERSEA AREA PREFERENCE							
I (DO) (DO NOT) VOLUNTEER FOR OVERSEAS. IF SELECTED FOR OVERSEA DUTY I PREFER: PACAF WAS USAFE AC CAIRC							
Have you ever been convicted by a civil court or are you awaiting trial by a civi (Explain fully under remarks)	court for an offense other than a minor traffic violation?						
REMARKS: (See instructions No. 5, 6 and 7)	desponsible for formation, ensurement						
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THEN A PARTY TO SENAL TORS AND PARTY AND							
BARES OF EMPOYMENT TREE							
FLYING STATUS AGREEMENT							
If I am selected for recall in a non-flying capacity, I hereby voluntarily request permanent suspension from flying status.							
ACTIVE DUTY	AGREEMENT						
AFR 45-22, see Para 13, b, c, or d, as appropriate, AFR 45-26	Para 13a, AFR 45-26 for officers of Air Force Medical Service.) er served on EAD as such; or officers applying for EAD under 6.) (Airmen see Para 2h (2), AFR 45-21.)						
FOR ALL OTHER OFFICERS AND WARRANT OFFICERS:	inderstand that this does not preclude my requesting separation						
from active military service under applicable directives and that the requirements of the USAF.	t approval of any request for separation will be dependent upon						
I (Do) (Do not) require at least 30 days notice prior to my entry	on extended active duty.						
I fully understand the following:	EXPERIENCE (Instruction No. 4)						
1. This application is valid for one (1) year from date thereof.	you will be retained for the duration of the active duty tour at the first station or assignment.						
<ol> <li>No action should be taken to close out personal affairs in anticipation of entering on EAD until such time as competent active duty orders are received by the applicant.         (CAUTION: Actions contrary to this condition are the sole responsibility of the applicant.)     </li> <li>No assurance of assignment to an area of choice may be given since selections for EAD are based on requirements Air Force-wide. No assurance can be given that</li> </ol>	4. Dependents of airmen who are selected for overseas assignment are not authorized to accompany or join the individual at the personnel processing activity to which assigned for subsequent movement overseas. Concurrent travel or advance application for movement of dependents is not authorized. Application may be submitted after arrival at the overseas destination in accordance with applicable directives of the overseas command.						
INSTRUCTIONS							
1. All information should be typewritten or clearly printed	7. If additional space is needed for any item on this form,						
in ink.  2. Applications must be forwarded as specified in applicable	continue on separate sheets of paper and fasten to this application. Such continuations become a part of this application.						
directives (AFR 45-21; AFR 45-22 or AFR 45-26).  3. If reservist served on EAD in a grade higher than cur-	8. It is important that the following be attached as in-						
rent permanent reserve grade, such higher temporary	A. One copy of the orders relieving applicant from						
grade will also be recorded in this item.  4. Describe your civilian job experience starting with your most recent employment. If you need additional space continue on another sheet and attach to this applica-	most recent tour of EAD. (This item is applicable to reservists who have previously served on EAD in commissioned grade.)						
tion. Salary is per month including average overtime pay.	B. If rated, certified or photostat copy of last page of AF Form 5 or 5a. Individual Flight Record, with Tables I, II, and III completed. If personal copy						
5. If applicant is serving on active duty in a warrant offi-	not available write: Dir of Flight and Missile Safety, Flt Records Br, Norton AFB, Calif.						
cer or enlisted status, it is necessary that the W/O or enlisted grade, service number, and organization of as-	9. Permanent home address shown on this application						
signment be included under "Remarks."	will be indicated in EAD orders. For purposes of computing mileage allowances upon relief from EAD,						
<ol> <li>In narrative form, include the reasons why you believe you are qualified for and should be ordered to EAD.</li> </ol>	any changes in permanent home address reported after						
Include any information which you think will be help-	entry on EAD will not affect the permanent home ad- dress indicated in the active duty orders. If applicant						
ful in processing the application. Especially important are items of information which may not be contained in your military records.	manent home address, such temporary address will also be indicated in the orders.						
IMPORTANT: Further correspondence regarding this application is unnecessary. You will be notified of action taken as soon as possible.							
I FULLY UNDERSTAND AND AGREE TO THE CONDITIONS OF THIS APPLICATION AS WELL AS THE PROVISIONS OF AFR 45-21, AFR 45-22, OR AFR 45-26, AS APPROPRIATE.							
TYPED OR PRINTED FIRST, MIDDLE AND LAST NAME	SIGNATURE						
William Edgar Thornton, Jr.	It. The inton						

AF form 125 Application for Extended Active Duty with the United States
Air Force

Civilian Occupational Experience (continued)

October, 1954 to July, 1955

Expert

\$1,000.00

Description of work: Consultant on development, testing, and operation of airborne target and scoring systems for evaluation of airborne F. C. S.

HEADQUARTERS AIR PROVING GROUND COMMAND EGLIN AIR FORCE BASE, FLORIDA Office of the Air Provost Marshal

13 October 1952

SUBJECT: Security Clearance

TO

: Commanding Officer 3200th Proof Test Group Eglin AFB, Fla.

1. Request the following entry be made in Form 66, Service Record or 201 File (Civilian) of:

# THORNTON, William E. 2nd Lt. AO 2249073

"NAC dtd 26 Sep 52 by OSI IG USAF, filed DO # 4 ; final clearance granced 6 Oct 52 for access to SECRET security information required in the performance of officially assigned duties."

- 2. Clearance granted herewith constitutes and administrative determination affecting the loyalty and character fitness of the person and does not of itself authorize disclosure of any classified information to such person.
- 3. Your attention is invited to the provisions of paragraph 6(1)(1), AFR 31-9 in that a copy of this correspondence will be retained in subject officer's personnel records.
- 4. Request orginal be indorsed back indicating that service record entry has been made.

CIARENCE G. MANNING 1st Lt., USAF Security Officer