WILLIAM E. BLUM

bill@ndtleveliii.com

Summary of Qualifications

49 years total NDT experience...NDT Level III – seven methods...42 years instructional experience for US and foreign citizens...5.5 years in Saudi Arabia, 1 year in Indonesia...experience in petrochemical, pressure vessel, structural, nuclear and fossil power plants, shipping and aerospace NDT and QA/QC.

Education

USAF - Over 800 hours of NDT training; over 500 hours of Technical Instructor training

Fundamentals of Weld Inspection, 16 hrs, AWS, Oct 81

Specialized NDT training from McDonnell Douglas and General Dynamics

Radiation Safety, Gulf X-Ray, 20 hrs, Gretna, LA, Sep 89

Ultrasonic Detection of Intergranular Stress Corrosion Cracking, Electrical Power Research Institute, Charlotte, NC, Aug 93

Ultrasonic Sizing of IGSCC, EPRI, Charlotte, NC, Sep 93

ASME Section XI, App. VIII, Performance Demonstration Initiative Qualification, Detection and Through Wall Sizing, EPRI, Charlotte NC, Apr 94

Visual Testing 1, 2, and 3, VCR, Aug 94

Correspondence Course in Electronics, ICS, Jul 95

Radiographic Film Interpretation, Saudi ARAMCO, Jan 96

Radiation Safety, Saudi ARAMCO, Aug 97

Level I - Thermographic Applications, April 2014, 32 hours

Level II - Thermography Training, January 2015, 32 hours

Training certificates available upon request

University Level courses in Economics, Business, Mathematics, Physics and English

Accreditations

ASNT Certified NDT Level III, ET, MFL, MT, PT, RT, UT, and VT Certificate Number 1225.

Certified NDT Level 3 in accordance with NAS410 in ET, MT, PT, RT and UT.

PDI Detection and Sizing, EPRI, April 1994.

Level II Thermographer, Infrared Training Center, January 2015

ASNT IRRSP Radiation Safety Card, RAM, Certification Number 1225, (Expired).

Louisiana Vocational, Technical, and Industrial Education Certificate, Number T-3536. (Expired)

Texas Industrial Radiography Card, Number 05768, April 1993. (Expired)

British Aerospace Nominated NDT Level III, May 2001 (Expired)

IGSCC Detection and Sizing, EPRI, August 1993 (Expired)

VT 1, 2, and 3, EPRI, August 1994 (Expired)

Saudi ARAMCO Radiographic Film Interpretation (RTFI) Certification (Expired)

Saudi ARAMCO Appointed Level III (Expired)

Résumé: William E. Blum, Page 1 of 3

Swedish Radiation Protection Authority (Strålsäkerhetsmyndigheten) Radiation Protection Expert.

Work Experience

Owner (Sep 97 - Present)

NDT Consulting Group Inc, Hurst, Texas and Destin, Florida. Provide NDT consulting, administration, auditing, training service and act as Responsible Level III to users of NDT (www.ndtleveliii.com).

Previously performed as ASME Section XI, Appendix 7, UT Level III and PDI UT Level II at various nuclear power plants for contract companies. Perform review of in-service inspection data. Perform ultrasonic examination of piping and pressure vessels (no longer doing Level II work).

NDT LEVEL III (Sep 95 - Sep 97)

Tuboscope Vetco Saudi Arabia, LTD/Saudi Arabian Oil Company (Saudi ARAMCO). Seconded to Saudi ARAMCO to provide NDT Level III services: Reviewed NDT procedures submitted by outside vendors (conducted over 880 reviews on more than 465 individual procedures submitted by 103 different organizations throughout the world); wrote NDT procedures for internal use at Saudi Aramco; audited vendors and NDT vendor organizations; reviewed and analyzed NDT reports; provided specialized technical support to autonomous units; consulted with field supervisors and advised on implementation and use of various NDT methods; wrote, administered and oversaw certification examinations; developed, conducted and critiqued training courses; provided input on and justifications for equipment purchases; interpreted codes and specifications; coordinated work assignments between the NDT Labs and customers; interpreted radiographic film; performed specialized UT, e.g. depth sizing; interfaced with contract companies and autonomous units as one of Saudi ARAMCO's NDT Level III Specialists. Member of Saudi ARAMCO NDT Advisory Committee. Reason for Leaving: End of Contract.

NDT INSTRUCTOR, NDT LEVEL III/TECHNICIAN (Jul 93 - Sept 95)

VIRGINIA CORPORATION OF RICHMOND, Richmond, VA. Researched, organized, developed, and wrote UT training materials and conducted UT training in accordance with ASME Section XI, Appendix VII; performed NDT of nuclear and fossil power plant components. Company certified to Level III in PT and MT. Certified to Level II UT in accordance with ASME Section XI, Appendix VII. EPRI qualified for manual detection and sizing of IGSCC. EPRI qualified Level I and II, Visual Examination. Qualified ASME Section VIII, PDI Detection and Sizing, EPRI, April 1994. Reason for leaving: Contracting Position Overseas.

NDT CONSULTANT (Dec 92 - Jul 93)

Provided consulting and training services to various companies involved in the manufacture of pressure vessels, aircraft components, etc.

NDT TECHNICAL ADVISOR (Nov 91 - Dec 92)

GENERAL DYNAMICS/FT. WORTH DIVISION, Madiun, Indonesia. Advised and trained Indonesian Air Force personnel in the theory and application of NDT methods and procedures. Responsible for operation of NDT Lab. Reason for leaving: End of Contract.

NDT CONSULTANT (May 91 -Nov 91)

Provided consulting and training services to various companies involved in the manufacture of pressure vessels, aircraft components, structures etc.

Resided in Sweden and studied Swedish language. (Aug 90 -May 91)

NDT INSTRUCTOR (Sep 89 -Aug 90)

NEW ORLEANS REGIONAL TECHNICAL INSTITUTE, New Orleans, Louisiana. Trained students in the theory and application of NDT methods and procedures in accordance with ASME, API, ASTM, ANSI, AWS and ABS codes. Training included courses such as Level I and II for RT, UT, MT, PT, VT and ET; Welding Processes; Radiation Safety; Radiographic Film Interpretation; Ultrasonic Testing of Weldments; and Introduction to Certified Welding Inspector. State certified to conduct Radiation

Résumé: William E. Blum, Page 2 of 3

Safety Training and to possess and use radioactive isotopes. Radiation Safety Officer. Reason for leaving: Move to Sweden.

NDT TECHNICAL ADVISOR (Dec 86 -Jun 89)

McDonnell Douglas Services, King Fahd Air Base, Khamis Mushayt, Saudi Arabia. Advised and trained Royal Saudi Air Force personnel in the theory and application of NDT methods. Responsible for operation of NDT Lab. Reason for leaving: End of Contract.

NDT TECHNICIAN, CIVIL SERVICE (Sep 85 -Dec 86)

LUKE AIR FORCE BASE, Arizona. Performed NDT on various military aircraft, engines, and components. Conducted training. Reason for leaving: Contract Job in Saudi Arabia.

NDT TECHNICIAN/SHOP CHIEF (Aug 79 -Sep 85)

ILLINOIS AIR NATIONAL GUARD, Peoria, Illinois. Established the NDT lab as the ILANG converted to jet aircraft. Responsible for all aspects of the NDT shop operation. Performed NDT. Supervised and trained six part-time personnel. Reason for leaving: Civil Service job in Arizona.

NDT INSTRUCTOR (Oct 77 -Aug 79)

UNITED STATES AIR FORCE, Chanute AFB, Illinois. Conducted NDT training for USAF personnel. Wrote training material. Reason for leaving: Elapsed Time of Service, (ETS).

NDT TECHNICIAN (Aug 73 - Oct 77)

UNITED STATES AIR FORCE, Mountain Home AFB, Idaho. Trained in and performed NDT of military aircraft, engines and parts.

Professional Memberships

American Society for Nondestructive Testing, Lifetime Member

Publications/Presentations

Blum, William E. Gryback, Thomas. Cowen-Lyman, Cheryl. "NDT Resources on the World Wide Web". Presented by William Blum at the *ASNT Fall Conference and Quality Testing Show*, held October 15-19, 2001 in Columbus, Ohio.

Blum, William E., McDevitt, Michelle. "Technical Report Writing". *Inspection Trends.* American Welding Society. Spring 2001

Blum, William E. "Radiographic Film Interpretation Inspectors: Why Are So Many Uncertified". *Inspection Trends*. American Welding Society. Fall 1999.

Blum, William E. "Learning to Write NDE Procedures" *Inspection Trends*. American Welding Society. Fall 1998.

Blum, William E., and Svahn, Per-Håkan. "Detection and Sizing of Intergranular Stress Corrosion Cracks; A Comparison Between Procedures used in USA and Sweden. *NDT Forum*. Föreningen för Oförstörande Provning FOP. 1 – 99.

O'Brien, John, and Blum, William E., "Successful NDT Procedure Development", Materials Evaluation, Vol.55, No.10, Oct. 1997, pp 1064-1068

Blum, William E., and Prince, Robert L.. "Radiographic Film Interpretation at Saudi Aramco", Presented by R.L. Prince at the *May 1997 Inspection Interface Meeting* at Saudi Aramco.

Additional Information

US Citizen, Valid Passport, Computer Literate, willing to travel.

Résumé: William E. Blum, Page 3 of 3