

THOMAS J. BERTONE

1 8 1 2 C R O S S D R A W L A N E · L E A N D E R , T X 7 8 6 4 1
W W W . M E T A L L U R G Y . C O M · (5 1 2) 3 3 7 - 7 0 7 0

PROFESSIONAL EXPERIENCE:

Internationally recognized consultant metallurgist, author, lecturer and expert in microstructure analysis as related to material processing, Credentialed Expert in Metallurgy, a World Expert in Heat Treatment of Ferrous and Nonferrous Metals, Soldering, Adhesives, Fastener Manufacturing; expert witness deposition and court testimony (Federal and Superior) in aircraft and fatal automotive accident and product liability investigations. Most commonly provides services in the following areas:

- CHEMICAL ANALYSIS
- CORROSION CONTROL
- FAILURE ANALYSIS
- FRACTOGRAPHY
- EXPERT WITNESS TESTIMONIES
- MICROHARDNESS TESTING
- MICROSTRUCTURE ANALYSIS
- METALOGRAPHY

Consultant Metallurgist:

1973 to Date - Tom Bertone Consulting, Inc.

Owner, Tom Bertone Consulting (TBC), has served the Heat Treating and Manufacturing Industries for more than thirty years; offering Metallurgical Consulting Services to the High Performance Racing Component Manufacturing and Aerospace Fastener Industries; Ferrous and Nonferrous Heat Treatment Industries; he is a specialist in Process Technology Effects & Analysis, Product Development, Specification Requirements including ISO and ANSI, Component Failure Analysis, Fractography; Microstructure Analysis; and Mechanical Properties Testing. TBC provides "Expert Witness Legal "and is qualified in Municipal, Superior and Federal Courts.

Metallurgy Professor:

1990 to 1999 - Fullerton Community College, Fullerton, CA

1973 to 1982- El Camino College, Torrance, CA Acting Dept. Head of Metallurgy Curriculum

Engineering Specialist MTS-5:

1986 to 1992 - Rockwell International, Anaheim, CA

Internal Measurement Unit Guidance system Peacekeeper Missile engineer with twentythree (23) Pride Award Suggestions and a Value Engineering \$2.6 million cost savings. Responsible for Guidance System IMU mechanical hardware drawing package, PEC's, ECA's, ECN's, Engineering Failure Analysis; hardware MRB support and specialized training of Operations Department personnel.

Project Manager:

1980 to 1986 - Northrop Corporation, Hawthorne, CA

IMU Program Hardware Manager responsible for customer interface for the IMU program mechanical hardware readiness review with TRW, Draper Laboratory CSDL and U.S. Air Force technical representatives. Directed product improvement program, vendor selection and source evaluations, failure analysis, plating wear studies, mechanical hardware redesign, including product studies for Manufacturing and Engineering Departments at Northrop Electronics Division

Research Associate:

1970 to 1979 - The Aerospace Corporation, El Segundo, CA

Responsibilities included Program Office technical support for Air Force sponsored programs, analysis of aerospace, missile, aircraft, propulsion materials, nuclear effects testing, Skylab metallurgical research, composite materials characterization (metal and nonmetal matrix composites). Numerous classified technical document publishing.

Metallurgical Technician:

1963 to 1970 - Various Manufacturing & Metallurgical Companies

1960 to 1966 - Military Service: United States Navy Reserve - Honorable Discharge

E D U C A T I O N :

1986 - Graduate Courses - UCLA, USC

1985 - B.S. Business Administration - University of Phoenix

1960 - Metallurgy Graduate - Don Bosco Technical Institute - Rosemead, CA

C R E D E N T I A L S :

1994 - Certified Professional Consultant, CPC

1973 - Mining, Metallurgy and Relative Technologies (Lifetime Teaching Credential) Community College Limited Services, California

1973 - Standard Designated Subjects, SDS (Lifetime Teaching Credential) Vocational Trade/Technical Teaching, California

A U T H O R E D B O O K S :

Practical Metallurgy and Materials of Industry, 6th Edition - Prentice Hall, October 2002

Practical Metallurgy and Materials of Industry, 5th Edition - Prentice Hall, August 1999

T E C H N I C A L P U B L I C A T I O N S :

1992 to Date - Hundreds of TBC Written Technical Reports and Metallurgical Analysis

1989 - "IMU R-12 Orifice Matching and Heat Exchanger Study" Rockwell International - RI#C89 1088/201 - September 1989

1988 - "Assembly Specification A170776" Inertial Measurement Unit, Rockwell International Drawing Number ND103000; IMU Program, - July 1988

1987 - "Inertial Measurement Unit Disassembly Procedure" Rockwell International - RI#S87-1558/201 - June 1987

1984 - "Wear of IMU Power Shell Contact Materials" Northrop Corporation Electronics Division - NORT:84-001633 April 1984

1983 - "The Characterization and Evaluation of Advanced Carbon-Carbon Nozzle Materials" The Aerospace Corporation January 83, Vol 1 and Vol 2

1978 – “NATO-II Failure Analysis of Mechanical Despin Assembly Screws” The Aerospace Corporation - April 1978

1978 – “Analysis of Failure Mechanisms in High Reliability Unbiased Subminiature Incandescent Lamps” The Aerospace Corporation - January 1978

1978 – “A Failure Analysis of Miniature Rolling Contact Bearings” The Aerospace Corporation - April 1978

1977 – “Preliminary Materials Investigation: DSCS-II SMA Bearing Anomaly” The Aerospace Corporation - November 1977

1977 – “Railroad Spring Failure Analysis” The Aerospace Corporation - August 1977

1975 – “Evaluation of Thin Film Adhesion to Flexible Substrates” Journal of Vacuum Science and Technology - December 1975

1974 – Metallographic Sample Preparation of Fiber Reinforced Composites” Plenum Press

I N V E N T I O N S :

Two (2) Pending at US Patent Office: Patent information upon request; dealing with Titanium Forging Processing.

S O C I E T I E S :

American Society for Metals International (ASM)

Founding Member of ASM Heat Treating Society

A W A R D S :

International Metallographic Society Honorable Mention Award 1975

Sixteen Rockwell Corporation Pride Suggestion Achievement Awards

L E G A L L I S T I N G

Legal/Referral/Client Listing (Court Cases) per Fed Reg. 26 available upon request.