



M. Steven Counts **Senior Technologist**

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Mr. Counts has over 5 years of experience in failure analysis investigations, laboratory evaluations and testing methods. He specializes in metallurgical evaluation including, inverted light microscopy, stereomicroscopy, and scanning electron microscopy (SEM).

Prior to joining ESi, in 2017, he worked in a forensic and security laboratory and served in the United States Army where he was able to build upon his complex problem-solving, compliance management and security skills. Mr. Counts is active in many technical and professional societies and is currently working with the newly formed Security and Defense Services Practice Group, primarily with material characterization and analysis with numerous component manufacturing startups.

Areas of Specialization

Failure Analysis

Inspection and Investigative Services

Material Testing and Characterization

Laboratory Practices and Procedures

Advanced Metallurgical Preparation

Ceramic and Glass Fractography

Photo Documentation

Component Testing and Teardown

Physical Security and Safety Assessments

Firearm and Ammunition Analysis

Consumer Product Testing

Petrography Preparation and Analysis

Professional Affiliations

ASM International

ASM Member, 2017 – Present

ASM Atlanta Chapter Chairman, 2020 – Current

ASM Atlanta Chapter Vice-Chairman, 2019 – 2020

ASM Atlanta Chapter Secretary, 2018 – 2019

Failure Analysis Society, 2017 – Present

International Metallographic Society, 2017 – Present

ASTM International

Metallography E04

Specimen Preparation E04.01

Terminology E04.02

Light Microscopy E04.03

Criteria for Metallographic Laboratory Evaluation and Safety E04.17

Fatigue and Fracture E08

Standards and Terminology E08.02

Mineralogical Society of America

Member, 2022 – Present

The Minerals, Metals, and Materials Society

Member, 2021- Present

Positions Held**Engineering Systems Inc., Atlanta, Georgia**

Senior Technologist, 2022 – Present

Laboratory Technologist, 2019 – 2022

Technologist, 2017 – 2019

Technician, 2017 – 2017

Education

Biochemistry – Kennesaw State, 2011

Continued Education

Principles of Failure Analysis – ASM International, 2018

Metallurgical Lab Practices – ASM International, 2019

Metallurgy for the Non-Metallurgist – ASM International, 2020

Forensic Geology/Petrography – American Engineering Testing, Inc., 2022

Publications/Presentations*Case Study Involving Failure Sequence Determination of Machinery*, MS&T 2019 AbstractR. Parrington, **S. Counts***Aluminum Insert Failure*, IMAT 2021 Conference and Exhibition, St. Louis, MOR. Parrington, J. McDougall, **S. Counts***Testing and Analysis to Understand and Prevent Jet Fighter Mid-Flight Acrylic Canopy Failures*,
International Conference on Fracture, Atlanta, GAR. Parrington, **S. Counts**