

The American Society for Nondestructive Testing asnt.org

ASNT MISSION STATEMENT

ASNT's mission is to advance the field of nondestructive testing.

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FROM THE WAY-BACK MACHINE

The following excerpt was taken from an article titled "A Look Ahead at Nondestructive Testing," authored by NDT giant Robert C. McMaster and published in *Materials Evaluation* in April 1986:

Past experience has shown that more than one type of nondestructive test may be needed to detect various types and locations of defects and to provide assurance of quality based upon confirming or additive evidence obtained from these different test indications. A major problem arises when the test records produced by different test methods are not compatible. Today, many human inspectors have the training and experience needed to provide such correlations between X-ray, ultrasonic, magnetic particle, liquid penetrant, eddy current, and other commonly used types of tests. Robotic or computer-controlled nondestructive test systems will typically require consistent forms of test records, possibly bitmapped graphic images which can be enlarged, reduced, rotated, and rectified to fit new coordinate systems. Fortunately, these techniques have been well developed for use in aerial mapping of the Earth's surface and in "Landsat" images recorded by satellites in space. Three-dimensional analyses of defect locations, shapes, sizes, and planes of view feasible with computer graphics today offer examples of the programs and techniques required. Contrast enhancement, as well as color identifications of types or severity of defects (similar to those widely broadcast in television weather shows today), can also be used for defect identification, locations, shapes, and analyses of the severity of hazards they could present in service. Coincidence of defect indications obtained from different types of tests, or from tests made on the same test objects at different points during manufacture, or at different times during service, or whenever test evaluations are required for legal or other purposes, could be demonstrated by sequences of such rectified images (just as the movements of air masses, fronts, and jet streams are shown on television nationwide as time-lapse maps of the weather movements over the Earth's surface). Even when the test object moves about on the Earth's surface, at sea, in the air, or in outer space, its defect images could still be correlated after transmission of test data to earth stations at fixed locations. For critical applications, such images could be reproduced at highly qualified analysis facilities, such as national or international standards laboratories. The system reliability attainable by these means could far exceed that obtainable today from repeated inspections by certified human operators.



NEAL J. COUTURE, CAE ASNT CEO NCOUTURE@ASNT.ORG

"We are often reminded that those organizations and individuals who do not know their own history are forced to live it again."

-ROBERT C. MCMASTER

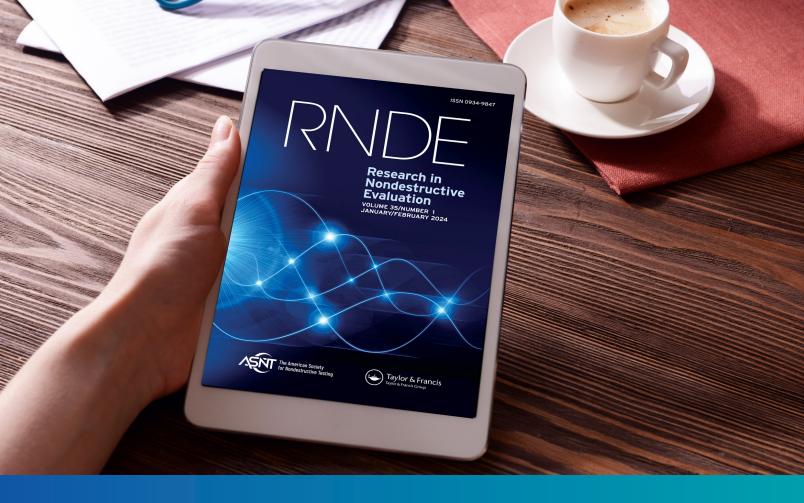
LEADERSHIP FROM P. 65

Interestingly, ASNT's Strategic Management Committee is addressing the very issue McMaster highlighted almost 40 years ago. Currently, the NDT industry lacks a standardized file format, resulting in significant inefficiencies. Although formats like DICONDE exist, they have limitations including inflexible metadata structures, and they primarily support image data, excluding other data types such as waveforms. This lack of standardization leads to difficulties with data sharing, increased costs, and errors. Additionally, it complicates the management of digital NDT data, results in growing file sizes, and creates issues with converting proprietary formats.

ASNT plays a crucial role in setting standards, providing certifications, and promoting best practices. NDT is essential in various industries, including aerospace, construction, and automotive. It ensures the integrity and reliability of materials and structures without causing damage. Look to *Materials Evaluation* and other ASNT communication channels in the coming months as we work to address the persistent challenges facing NDT.

And with only a touch of irony, I quote McMaster from the introduction to his article: "We are often reminded that those organizations and individuals who do not know their own history are forced to live it again." ME





RESEARCH IN NONDESTRUCTIVE EVALUATION

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SCOPE

ASNT ELECTS NEW



The American Society for Nondestructive Testing (ASNT) is pleased to announce the addition of five distinguished professionals to its Board of Directors, each serving a three-year term starting 1 July 2024. Michael Childers, Joshua de Monbrun, Roger Engelbart, and John Derrick McCain were elected by their fellow members in the general election held 15 March-15 April, and Wade Jenstead was nominated by the ASNT Leadership Development Committee and was appointed as a director at the June 2024 meeting of the ASNT Board of Directors. Each new director brings a wealth of expertise and a shared commitment to advancing the field of nondestructive testing (NDT). Their collective experience and leadership are set to drive ASNT's mission forward, fostering innovation, education, and industry excellence. Read on to meet them!



MICHAEL CHILDERS

Michael Childers has been a member of ASNT since 2010. His professional certifications include API RP 578 for XRF and OES technologies, and he is also a certified instructor by the American Society for Training and Development.

Childers is a graduate of Glendale Community College where he studied business administration, psychology, and English. He brings a wealth of experience from his 28-year tenure at Southwest Gas Corp., where he has held multiple positions, including specialist/corporate engineering staff/operations, corporate supervisor/operations staff, technical instructor, welding crew leader, and welder.

Within ASNT, Childers has actively served in several leadership roles, including chair, vice chair, and treasurer of the Arizona Section, and as a member of the Engineering Council and the NDE Engineering Education Committee. Childers has chaired the API/AGA Joint Committee/API 1104 for six years and has been an active member of the API and AGA for 15 years, serving as a voting member on several committees. Additionally, he has been involved with the Gas Technology Institute, Pipeline Research Council International, Western Regional Gas Conference, Western Energy Institute, American Welding Society, and the National Petroleum Council, contributing his expertise and leadership to advance the industry.

As a newly elected director, Childers's goal is to promote and advance safety, technology, education, and opportunity for ASNT members and their respective industries. In addition, he aims to represent ASNT within the oil and natural gas industry and to be a part of shaping the future of NDT under the direction of ASNT executive leadership, for current and future members.