Save the Date

March 5th

Speaker will talk about Fiber Optic Systems

Our Speaker Mr. Doug Burleigh has a BS, in Physics, from Penn State University and also a MS, in Applied Physics of Materials, from Penn State University.

He has an ASNT Level 3 in Infrared Testing since 1985. He has over 50 technical publications.

Mr. Burleigh has worked at General Dynamics Convair, then Space Systems Div. This became Lockheed Martin. He served as Lead Engineer of the Physical Properties Laboratory in the M&P department.

The lab was involved in measurements of thermal and electrical properties of materials, explosives and ballistic testing, quality assurance, R&D, and NDT testing and development. Doug developed many applications of Infrared imaging, including NDT, Jet & Rocket plume studies on Cruise missiles, gaseous leak detection, and monitoring of materials under simulated space reentry conditions in Arc jet tunnels at NASA facilities. Mr. Burleigh also developed Laser Shearography for NDT of aerospace structures around 1989. He also worked at Rohr Inc., (became BFGoodrich Aerospace) Chula Vista CA. He was a Test Engineer on the X-33 program, responsible for materials testing at NASA Ames Research Center and NASA Johnson Space Center to qualify materials and structures for flight. Also performed IR NDT on large composite structures of the X-33 Space Launch Vehicle. He is also a Consultant, primarily involving NDT, applications of IR Thermography, NDT and materials engineering at NASA, United Space Alliance, TRW, Lockheed Martin, GE, Boeing, Goodrich Aerostuctures. SpaceX, ATK, NORDAM, Kakivik, and others in the aerospace and petroleum industries. Long term position at Kennedy Space Center to develop IR NDT techniques for inspecting Carbon composite parts (wing leading edge and nosecap) of the Space Shuttle return to flight. Performed IR and other NDT methods on large composite racing yachts for the America's Cup. This resulted in the detection of defects that could have resulted in catastrophic failure. Developed processes for detecting Corrosion Under Insulation (CUI) on oil pipelines on the North Slope of Alaska.

Title of the talk will be: “Infrared NDT in Aerospace and other applications of IR”. Mr. Burleigh has been using Infrared (IR) NDT since about 1985.

IR NDT has been used to inspect a wide variety of materials and structures, from electrical circuit boards to large composite aerospace structures, including those reinforced with honeycomb.

In some applications, IR NDT is an alternative method to Ultrasonic C-scan, which is well established in the aerospace industry. IR NDT can perform some inspections much more quickly and economically than UT.

The basic principle in IR NDT is that a defect in a material, such as a delamination in a composite panel, generally has thermal properties (thermal conductivity, diffusivity, density, specific heat, etc.) that are different from the rest of the (bulk) material. The material is heated and a defect may disrupt the heat flow in the material and cause a disturbance in the temperature distribution on the surface of the material. The surface temperature pattern is detected by an IR camera.

Various Heat sources may be used including Xenon flash lamps, quartz or incandescent lamps, lasers and electrical resistance.

Defect types that may be detected include delaminations, disbonds, impact damage, water entrapment honeycombs, porosity, cracks, FOD, insulation flaws, etc.

In addition to IR NDT, some other examples of the use of IR imaging in testing systems and structures will be discussed.

Year End Cash Raffle $250.00

will be drawn at the May 7th, 2019 Meeting. When you purchase a dinner you will receive a raffle ticket. The more meetings you attend the more possible tickets you will have to be entered into the drawing.

You must be present at the MAY 7th, 2019 MEETING to win.
Meeting Report December 4th, 2018

December 04 2018 the San Diego Section hosted the 4th Section Technical Meeting of the 2018 – 2019 year. The meeting was held at the Seven Seas Lodge, 411 Hotel Circle South, San Diego, CA with 24 members and guests in attendance.

Our Speaker for the evening was Mr. Michael Grubb; Director of the San Diego County Sheriffs Crime Laboratory.

The title of his talk is; “A New Sheriff's Crime Lab – and an Interesting DNA Case”. Since 1994 the Sheriff’s Regional Crime Lab has been located in the old Clairemont Hospital, a building that is now 55 years old. Deterioration of the building led to approval by the Board of Supervisors to construct a new Sheriff’s Crime Lab at the County Operations Center in Kearny Mesa. The Crime lab moved into the new building/laboratory in August 2018. Mr. Grubb provided a quick photo tour of the new lab.

Mr. Grubb then presented a couple of DNA cases on not just conventional DNA and associated database but digging deeper into using Familial DNA to solve cases.

In 2013 a child molester was active in Escondido and San Marcos, CA area. He would enter homes in the middle of the night and fondle little girls. This presentation discusses a novel way of using DNA to detect who the perpetrator was. Mr. Grubb also covered the Golden State Killer and how he was caught using DNA evidence.

The audience expressed its appreciation of the presentation and engaged the speaker with questions on various DNA techniques/processes used.

The Section thanked Mr. Grubb for his talk and presented him with a speaker gift and certificate of appreciation.

Monthly Raffle prizes were sponsored by Peter Pelayo of Met-L-Chek, Dave Walt of Fujifilm, Larry Olsen of Northrop Grumman and the San Diego Section. This evening was the annual Christmas event, Spouses / Significant others night. There was a White Elephant gift exchange and all spouses/significant others in attendance received a gift from the section.
2018-2019 Technical / Administrative Program

San Diego Section of the American Society for NDT, Inc.

2018:

September 4th: John Stewart, Executive Director of AATA, “Evaluating the shortage of NDT Technicians in the USA”.

October 2nd: Peter Cawley, CEO of Kimtron Inc., “Total Cost of Ownership (TCO) of NDT X-ray Equipment”.

October 28th-October 31st: ASNT Annual Conference 2018 at George R. Brown Convention Center / Houston, Texas.


December 4th: Mike Grubb, San Diego Sheriff Crime Lab “A New Sheriff’s Crime Lab – and an Interesting DNA Case” - Christmas Event-Spouse / Companion / Guest night: All spouses (significant others) will have dinner provided by the section. Each person in attendance to bring a wrapped white elephant gift ($10.00 - $15.00)

2019:

January 1st: (Dark-No Meeting-New Year’s Day)

February 5th: “Past Chairman’s Night”, Doug Burleigh; “Infrared NDT in Aerospace and other applications of IR”

March 5th: Dave Blair or Ed Valigursky of Luna Inc. (Fiber Optic Systems)

April 9th: Zeki Gokce of Eddyfi (Date Changed due to Research Symposium)

April 1st - 4th ASNT 28th Research Symposium 2019. Hyatt Regency Orange County / Garden Grove, California

May 7th: “Annual Science Fair Awards” (NDT-related projects).

June (TBA): Ramon Thomson, Change of Gavel

November 18 - 21 ASNT Annual Conference 2019 - Westgate Las Vegas Resort and Casino / Las Vegas, Nevada
We have posted a list of potential training courses for the 2018-2019 year (August through June).

Please contact **Education Chair - Gary Bass** with your requests, which will he attempt to accommodate if we obtain sufficient volunteer instructors for **Saturday** lectures. Please note instructors are not paid; however, they get recertification points if they hold ASNT/ACCP Level III.

**Contact:** Education Chairman Gary Bass  
Email: gbchulavista@AOL.com  
Phone: 619-794-6118

Chairman Ramon Thomson  
Email: ramonjthomson@gmail.com  
Phone: 619-822-8185

BOD - sd-asnt@cox.net  BOD contact: 619-444-2319

**To promote** the general advancement of the [NDT] industry;  
◆ **To educate** the public in the area of nondestructive testing;  
◆ **To provide** a forum for exchange of [NDT] technical information;  
◆ **To facilitate** training, education and research in the [NDT] field;  
◆ **To engage** in any and all lawful activities incidental to the foregoing purposes except as restricted herein.

Level I & Level II courses satisfy the requirements of SNT-TC-1A/NAS-410. **Non-member fees** (which includes a one-year ASNT membership). 24, 32, and 40-hour courses: held Saturdays, 8:00 to 5:00 unless facility or instructor availability are different.

- Visual/Dimensional Level I / Level II (24hrs)  
- VT (24hrs) Members: $425  Non-member: $500
- **Liquid Penetrant Level I / II** (32 hrs)  
- PT - I / II (32 hrs) Members: $750  Non-member: $825
- Magnetic Particle Level I / II (32 hrs)  
- MT - I / II (32 hrs) Members: $750  Non-member: $825
- Ultrasonic Level I (40 hrs)  
- UT - I (40hrs) Members: $600  Non-member: $675
- **Ultrasonic Level II** (40 hrs)  
- UT - II (40hrs) Members: $600  Non-member: $675
- Radiography Level I (40 hrs)  
- RT - I (40hrs) Members: $600  Non-member: $675
- Radiography Level II (40 hrs)  
- RT - II (40hrs) Members: $600  Non-member: $675

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USA

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**Parker**  
Magnetic Particle Inspection Instruments  
www.parkerhannifin.com

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**Michael L. White**  
Penetrant Professors Approved  
NDT Inspection Materials  
1639 Euclid Street, Santa Monica, CA 90404  
Phone: (310) 450-1111  
Fax: (310) 452-4046  
Email: info@met-l-chek.com
Nondestructive Testing Training Course
Penetrant Testing Level 1 / 2 (32 Hours)

Course curriculum will meet ASNT: SNT-TC-1A, ASNT CP-189 and NAS 410 requirements for classroom training.
Level 1 / Level 2 – 32 hrs.

Class Location:
Chromalloy
7007 Consolidated Way
San Diego, CA. 92121

To Be Determined based on number of registered participants.

Instructor: Gary Bass/Ramon Thomson
Note: This class has been scheduled,
If interested in taking this class, see below for contacts.
Registration Deadline is January 25, 2019.

Note minimum class size is 5
If this class is not filled by the registration deadline the course will be rescheduled immediately.

Contact Information / Class Registration:
Gary Bass (619) 794-6118
gbchulavista@aol.com
Ramon Thomson (619) 822-8185
ramonithomson@gmail.com
Larry Olsen (619) 228-5449
e-mail: sd-asnt@cox.net

Course Fees: $825.00 Total Non Member W/Fee
$750.00 Total Member

Those attending these courses that have a current ASNT Membership will have their attendance fees reduced by $75.00.

All fees are due at 1st class or before. Unless other arrangements have been made.

NOTE to all course attendees:
Non-Chromalloy students will be required to complete and sign a release form.
Personal Protective Equipment is required when going into the work area.
Safety Glasses and Steel Toe footwear.
Long Pants are always required in the building.

Class Dates:
Date: Saturdays 07:00AM – 3:30 PM
February 9, 2019
February 16, 2019
February 23, 2019
March 2, 2019

Basic Outline of Course to be presented;

Level 1
* Introduction to Penetrant Testing
* Liquid Penetrant Processing
* Penetrant Test Methods
* Liquid Penetrant Test Equipment
* Penetrant Indications
A detailed course outline will be provided as part of the final documentation package upon course completion.

Level 2
* Inspection Procedures
* Liquid Penetrant Process Controls
* Test Procedures and Standards
* Safety Health, and Disposal

Other Nondestructive Testing Courses are listed on www.sd-asnt.org
Call for Nominations for the Board

Think of someone you might want to see on the
San Diego Section Board of Directors
San Diego Section Members of ASNT
This is a Call For Nomination of Officers and Directors for 2019–2020.

The Electronic Ballot will be distributed in April 2019 for your vote.
Nominations will be published and placed on the electronic ballot.
Nominations needed:
Chair:
Vice Chair:
Treasurer:
Secretary:
Director at Large:
Director at Large:
The nomination requests from the membership, please provide your nominations to the following. Check next months newsletter for the person to contact with your nominations.
Please Save the date:
March 13th, 2019
Volunteers are needed for
Judging at the
Greater San Diego Science &
Engineering Fair
Preview Projects On Evening of
March 12th
Contact by February 1, 2019
Denise McKay
poppydancer@yahoo.com
THE BEST CR-RESOLUTION!

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Easy transition from film

DICONDE - ISO - ASTM
Compliant to all relevant standards

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www.duerr-ndt.com
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Willick Engineering
www.willick.com
562-946-4242

DÜRR NDT
NDT Training, Scheduled courses for January – December 2019

Greatly Expanded Schedule of Classes for 2019

We will be Scheduling WEEKEND TRAINING COURSE please contact Cathy for dates

**NDT Level I and II Courses**

**Magnetic Particle Level I/II** SNT-TC-1A
(24 hours) $845
February 4-6, April 1-3, June 3-5, August 5-7, October 7-9, December 2-4

**Penetrant Level I/II** SNT-TC-1A
(16 hours) $695
February 7-8, April 4-5, June 6-7, August 8-9, October 10-11, December 5-6

**Ultrasound Testing Level I**
(40 hours) $1295
February 11-15, April 8-12, June 10-14, August 12-16, October 15-18, December 9-13

**Ultrasound Testing Level II**
(40 hours) $1295
February 18-22, April 15-19, June 17-21, August 19-23, October 21-25, December 16-20

**Radiation Safety (IRRSP Preparation)**
(40 hours) $1295 (Approved by State of CA)
January 7-11, April 22-26, August 26-30

**Radiography Testing Level I**
(40 hours) $1295
January 14-18, April 22-May 3, September 9-13

**Radiography Testing Level II**
(40 hours) $1295
January 21-25, May 6-10, September 16-20

**Film Interpretation** (40 hours) $1295
January 28-February 1, May 13-17, September 23-27

**Eddy Current Testing Level I** (40 hours) $1295
March 18-22, July 15-19

**Eddy Current Testing Level II** (40 hours) $1295
March 25-29, July 22-26

**Visual Testing Level II** (24 hours) $845
January 2-4, July 1-3, Sept 30-Oct 2, Nov 25-27

**Phased Array Training**
These are Level I and II UT PA courses to meet the SNT-TC-1A (2011) certification requirements

**Introduction to Phased Array**, (16 hours) $1195
March 4-5, October 28-29

**Ultrasonic Phased Array Level I** (SNT-TC-1A) (40 hours) $1995
March 4-8, October 28-November 1

**Ultrasonic Phased Array Level II** (SNT-TC-1A) (40 hours) $1995
March 11-16, November 4-8

**Ultrasonic Phased Array Composite Inspection**
New for 2019 (40 hours) $1995
July 8-12, November 12-15

**Back for 2019, Scheduled, ASNT NDT Level III Examination, Refresher Courses**

**Basic Level III** – Includes textbook package worth over $300 (40 hours) $1395
February 25-March 1

**Eddy Current Level III** (24 hours) $995
July 29-August 2

**Visual Testing Level III** (16 hours) $795
September 4-5

**Magnetic Particle Level III** (16 hours) $795
May 20-21

**Penetrant Level III** (16 hours) $795
May 22-23

**Radiography Level III** (24 hours) $995
May 28-30

**Ultrasonic Level III** (40 hours) $1395
June 24-26

**Additional “Ad Hoc” NDT Training Courses**
Please call for dates for the below courses

**Magnetic Particle Level II NAS 410** (32 hours) $1195

**Penetrant Testing Level II NAS 410** (32 hours) $1195

**Ultrasonic Thickness Testing** (40 hours) $1295

**Digital Radiography Testing** (40 hours) $1995

**Eddy Current Array Aerospace** (40 hours) $1996

**Back for 2019**

**CWI Examination Preparation Course** (40 hours) $1595
Note: This will be scheduled over 4 (10 Hour) Saturdays.

Qualification Examinations prepared, and administered, procedures written, level III outside agency services and contracts available.

Any of our courses can also be held at your facility just for your staff. Call for details

OUR POLICY IS NOT TO CANCEL COURSES IF YOU ENROLL & PAY 2 WEEKS IN ADVANCE
For questions or to enroll contact us at www.testndt.com, email ndttrain@aol.com, Ph (714) 255-1500