

THE
Journal

ICNDT Journal

The Official
Journal of the
**International
Committee for
Non-Destructive
Testing**

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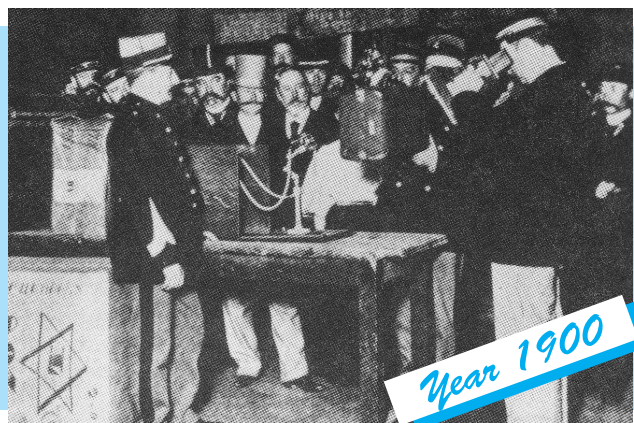
The world Organisation for NDT

C E L E B R A T I N G

the 1st anniversary of Nondestructive Testing 1900-2000

100 YEARS WITH NDT

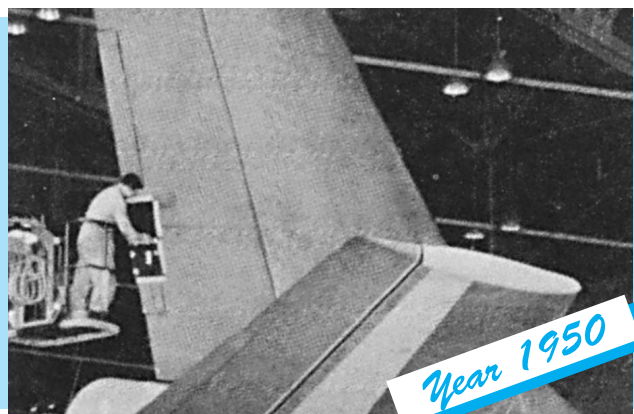
After Roentgen's discovery of x-Ray, the 1900's saw its first applications in the medical and industrial fields.



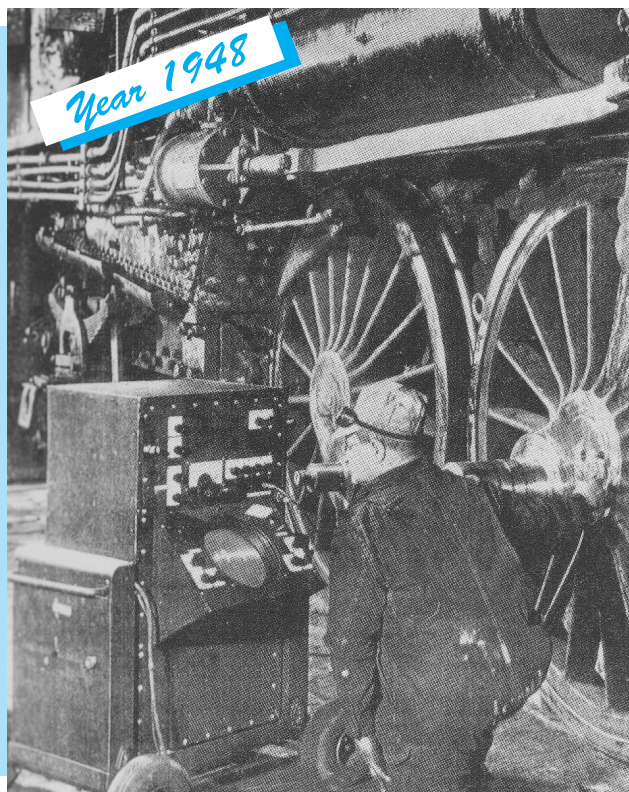
X-ray inspection carried out at French customs around 1900. (Agfa)



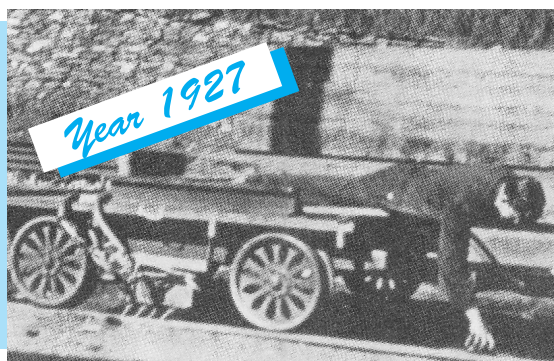
GE X-Ray Corporation skiagraph of Rubens' painting "Madona and Child with St. John" in Walker Art Center, 1940.



X-Ray on aircraft 1950.



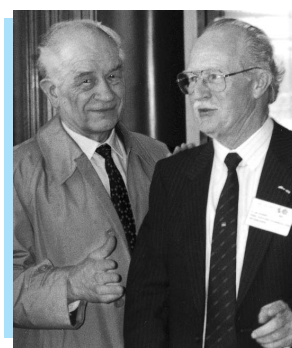
The January 5, 1948, issue of Life magazine, carried the above photo, with this caption: "CHECKING EQUIPMENT".



Early experimental electric field conduction test system (ca. 1927). (December 1976 Materials Evaluation; Sperry Rail Service)



1st Solvay Congress: Einstein, Mad. Curie, Plank, Bragg and many great phisics of the Century.



Prof. Z. Pawlowski and Mr. De Sterke distinguished persons in the history of ICNDT for scientific support and warm friendship.



Prof. M.N. Mikbeev USSR; he promoted the 10th WCNDT in 1982.



Gerold Tenney (right) shakes U.S. President John F. Kennedy's band. H. Tenney was one of the founder and more enthusiastic man of ICNDT.



(l-r) Paul Bastien, Giorgio Moravia, Georgés Homes e Kurt Fink, experts of industry and Professors of university that established the first nucleo of ICNDT.

ICNDT

ICNDT Publication

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ICNDT Founders

**100 years:
a cornerstone of the
NDT profession**

Today, we celebrate the first 100 years of NDT. A hundred years full of extraordinary achievements, the development of the strong role of NDT in engineering science, its contribution to ensuring safety to human life, the founding of institutions assisting the development of NDT.

The advanced state of NDT that we have today is the result of the synthesis of a division of labour that encompasses the discovery by scientists, of the principles underlying our methods, the efforts of the pioneers of NDT techniques, the work of entrepreneurs who design the equipment, the technicians who daily respond to the ever growing need for NDT, the founders of NDT Societies responsible for the promotion of NDT at national level and the network of ICNDT that tracks the course of NDT at an international level.

This 100 year anniversary is a testimony to enthusiasm and spirit that is the cornerstone of the NDT profession.

**G. Nardoni
ICNDT**

Letters, Messages, Events joined with ICNDT

CANADA

CANADIAN SOCIETY FOR NONDESTRUCTIVE TESTING HONOURS PETER BRADY

CSNDT Fellow and Past President Peter Brady, Vice President and Quality Assurance Manager for Atlas Testing and Services has been awarded the W.E.Havercroft Award for 2000. The W.E.Havercroft Award was presented to Peter Brady on May 26, 2000 at the CSNDT Annual General Meeting. The award is presented yearly in recognition of his outstanding contribution to the advancement of nondestructive testing in Canada. This honour recognizes the continuous and dedicated services Mr. Brady has given to the Canadian Society for Nondestructive Testing over the last thirty years.

Mr. Brady has been an Ontario Chapter member since 1970 the last eighteen years on the Ontario Executive and Chapter Chairman from 1992-1994. He is also a member of the CSNDT National Board of Directors where he has held various executive positions during the last twelve years. In 1994 he was elected as President of CSNDT and held the position for three years. Mr. Brady was the Conference Chairman for the societies 30th Anniversary in Niagara Falls, Ontario and President of the 1st PANNDT Conference held in Toronto, Ontario. His activities in other technical organizations include American Welding Society, Canadian Welding Society and American Society for Nondestructive Testing (ASNT) for the last 27 years. Mr. Brady holds Level 3 Certification in Radiography and Magnetic Particle, ASNT Level III, RT, LT and MT, Level II C.W.B. Welding Inspector and Senior Welding Inspector, A.W.S.

GERMANY

Röntgen Badge 2000 awarded to DGZfP member.

The 83rd recipient of the Röntgen Badge, awarded by the city of Remscheid to internationally renowned scientists every year since 1951, is an NDT expert once more: Government Director Dr Manfred Paul Hentschel, Head of the "X-ray Topographic Methods" Laboratory of BAM (Federal Office for Materials Research and Testing). Thus, after 5 years, a representative of non-destructive testing received the coveted award once more – at the suggestion of DGZfP. Dr Hentschel received the honour for his work on developing X-ray topographic methods for materials research, which represented pioneering work in materials research, as the eulogy said. Since 1989 the scientist has been a personal member of DGZfP.

New DGZfP Board elected in Innsbruck

Due to the sudden demise of Prof Dierk Schnitger in October last year, in the middle of his third period as DGZfP Chairman, an extraordinary Board election became necessary.

This was conducted at the General Assembly in Innsbruck on 30th May 2000. Dipl.-Ing. Hans Aisenbrey, who had acted as the interim Speaker of the Board, was elected as the new Chairman. New members of the Board: Wilfried Hueck of VEBA Oel AG. Previously on the Board and confirmed: Dipl.-Ing. Jörg Völker and the Managing Board Member Dr Rainer Link. The next ordinary election of the Board is scheduled for May 2001, on the occasion of the DGZfP Annual Meeting in Berlin.



Dipl.-Ing. Jörg Völker, Dipl.-Ing. Hans Aisenbrey, (Chairman), Wilfried Hueck and as Managing Board Member Dr Rainer Link (from left to right)

GERMANY

Cont'd

Ernst-Schiebold Commemorative Medal 2000 awarded

This year's Schiebold Commemorative Medal, with a prize money of DM 8,000, was awarded to Dipl.-Ing. Thomas Zweschper, born 1968, from the Institute for Plastics Research and Plastics Science in Stuttgart for his work on non-destructive and contact-less characterisation, using the Lockin thermography method. The dynamic transport of heat enables the registration of discontinuities in components. This is what the Lockin thermography is based on, which delivers the amplitudes and phase images of the modulated heat transport. In bonding technology, the focus is on changing border areas. Originally separate areas are pressed together. As the border area properties depend on the pressure of pressing the parts together, the Lockin thermography method is well suited to register the contact pressure.

The systematic investigations of Thomas Zweschper in screwed and riveted connections have yielded that the tightening force of the screws and the pull-off strength of rivets may be read from the phase angles without contact, following the respective calibration. It is particularly important for the practice, especially with regard to safety-relevant applications eg in aviation, to identify wrongly tightened screws or rivets speedily.

Berthold Award 2000

This year's Berthold Award of the DGZfP, with a prize money of DM 8,000, went to Dr Christiane Maierhofer, born 1964, of the Federal Office for Materials Research and Testing for her work on radar applications in the construction industry. Dr Maierhofer found out that certain properties of the construction materials, as for instance the moisture content, acid content and porous structure have a different influence on microwaves. Thus, there is the possibility of measuring problematic acid content and detrimental moisture content separately. Dr Christiane Maierhofer heads the DGZfP sub-committee 'Radar Methods' in the committee of 'NDT in the Construction Industry'. She is in charge of drawing up a DGZfP instruction leaflet there. She represents Germany on several international bodies in her professional area.



The organiser of this year's meeting of testing officials, Ing. G. Aufricht (left) and the moderator Dr J. Wirsberger, both from ÖGfZP

DACH meeting 2000 in Innsbruck

The joint DACH meeting of the three German language societies for non-destructive testing DGZfP (Germany),

ÖGfZP (Austria) and SGZP (Switzerland) in Innsbruck from 29th to 31st May was well attended by around 550 participants. There were 65 papers presented and 51 poster contributions under the heading of 'NDT on the threshold to the 3rd millennium' covering more or less all areas of NDT. DGZfP Chairman Dipl.-Ing. Hans Aisenbrey said in his opening speech that 'important impulses for the design of international standards, for training and new communication structures' had emanated from the DACH organisation. ÖGfZP President Dipl.-Ing. Artur Salcher stated that in the world of NDT, the term DACH had become 'a synonym for successful international cooperation – and not only a lip service'. Some 70 testing officials had met on the day before for an international exchange of experience.

ISRAEL

The Israeli National Society for Non-Destructive Testing

The community of Non-Destructive Testing (NDT) in Israel consists of 200 to 300 persons. Some of them work in the defence industries and others in the private industry. For about 25 years they were organized professionally as a chapter of the Israeli Metallurgical Association. The NDT activity at that time consisted of an annual one-day seminar and a number of meetings of the NDT Committee each year.

For a long time the Committee was headed by Professor Amos Notea who did much to advance the aims of NDT, to initiate contacts with World Conference of NDT, with the international NDT community and to increase awareness of the NDT profession. Professor Notea is active in research in the theory and applications of NDE.

For some 15 years efforts were made to join the European Federation of NDT, but for political reasons these efforts were not successful. With Israel's orientation towards Europe an Israel Standard IS 1031, which was based on the European Specifications EN 45013 and EN 473 was published. A committee for the examination and certification of NDT personnel was formed but was unable to operate as the requirements of receiving the European accreditation were not met.

In 1998 Mr. Gabi Shoef (one of the founders of NDT in Israel) presented to the Assembly of the European NDT Federation a summary of NDT activities in Israel and submitted the application for membership, on behalf of The Israeli NDT community. The Federation accepted NDT Israel with conditions to be filled.

Joining the Federation necessitated the formation of an independent NDT society (ISRANDT), which today has some 200 Members, the formation of the Certification Body (ISRACERT) and the meeting of all the requirements of EN 45013, the documents that interpret it and all the requirements of the European Accreditation.

The Society received generous help from Dr. Nardoni, the President of ICNDT, Mr. John Thomson from The British Institute of NDT and others, as well as from the Israeli Manufacturers Association. Contact was established with SINCERT the national accreditation body of Italy. As part of the preparations an Examination Center was set up at the Technion, Haifa, a Quality Manual and Operating Instructions was prepared, initial examinations (of candidates) were performed by ISRACERT and additional candidates were examined du-



ring the witness assessment of the SINCERT team.

At the end of September 2000, we received notification that SINCERT has approved the accreditation of the ISRACERT activities, and we are currently modifying our Certificates of logos to include the SINCERT logo. Recently, we have applied to the Committee for Multilateral Recognition in England to be included in their scheme.

We have not neglected other objectives of the Society. We have founded an Israeli Section of the ASNT, which is made up of members holding Level III ASNT certifications and others. The Section operates with the assistance of ISRANDT. As a significant part of the Israeli Industry works according American standards, it is important for us that ASNT certified Level III experts will participate in examining and certifying Level II and Level I inspectors, and we filled up the application that our Examination Center will be approved by ASNT. The Certification Body of ISRACERT signed an agreement with TUVCERT Essen for examining in Israel NDT personnel according the requirements of PED 97/23 Article 13.

We have conducted two International Congresses in Israel, one member participated in Congresses organized by the ASNT in the USA, in the Plenary Session of the Confederation in Paris, in the Congress of the Balkan Countries in Bulgaria, and we have held a Seminar on NDT in Nigeria and Sofia. Our delegation, 13 members will participate at the 15th World Conference on NDT Rome this October, giving 5 scientific presentations. We will continue in our activities and focus on the education for Quality and Perfection, with the aim of enhancing the qualification level of NDT personnel in Israel and to participate in national and international projects for research and development.

Mr. Gavriel Shoef, President of ISRANDT, prepared this article.

BANGLADESH

BSNDT-ISNT JOINT WORKSHOP & 10th ANNUAL CONVENTION OF BSNDT

Bangladesh Society for Non-destructive Testing [BSNDT] and Indian Society for Non-destructive Testing [ISNT] Joint workshop on 'NDT Certification, Standards & Calibration' and 10th Annual Convention of BSNDT was held on 9th September 2000 at the Auditorium of Atomic Energy Centre, Dhaka, Bangladesh. There were two sessions- technical & BSNDT business session. In technical session 5 papers were presented related to the NDT Certification, Standards & Calibration. In a special message on this occasion, ICNDT President G. Nardoni wished the success to BSNDT 10th annual convention & joint workshop and praised BSNDT for her past activities including a member of ICNDT Community. He also urged to the members of BSNDT to continue their best efforts for development of NDT technology.

A good number of delegates from ISNT and different NDT users, industries, academic institutions and professional bodies of Bangladesh participated in the forum.

ICNDT'S INITIATIVES IN ISO

"It is significant and timely to hold a Seminar on ISO 9712 in Roma" said Prof. Onoe in his article

Morio Onoe, Professor Emeritus, University of Tokyo
Honorary Member, ICNDT
Chairman of ISO/TC135 for 1993-1998

ISO/TC135 (NDT)

It is significant and timely to hold a seminar on ISO9712 in Rome during the 15th WCNDT. This is because ICNDT has been a major promoter of international harmonization of qualification and certification of NDT personnel and its realization is now in a crucial stage. Non-Destructive Testing (NDT) is an indispensable tool for product quality control and plant maintenance. Many standards have been developed to ensure consistent, reliable and effective uses of NDT. The growth of global trade and international activities called for truly international standards rather than numerous national and regional standards. ISO/TC135 was established in 1969 to meet this demand.

The first plenary meeting was held in London in 1970 and 6 SCs (Vocabulary, RT, UT, ET, MT and PT) were established. The interval of plenary meetings was 5 years for the first few meetings and then has been reduced to 2 years to reflect the increased activities.

All NDT can do is indirect observations of defects. As such, the quality of NDT operation and interpretation heavily depend on the skills of personnel. Hence many national NDT societies introduced qualification and certification schemes of personnel in 1960's. A need for harmonization of these systems soon became apparent. TC135 at that time, however, was not enthusiastic to expand its activity beyond traditional NDT methods and resolved so in the first plenary meeting in 1970. This was reversed in the second meeting in Philadelphia in 1975 and SC7 was established to cover qualification and certification of NDT personnel. But the first meeting of SC7 was not held until 1983.

ICNDT recommendations

In the meantime, ICNDT established Task Group on Harmonization in 1973, which produced in 1985 a collection of recommendations as shown in Table 1. Since ICNDT is a voluntary organization, the task of international standardization was transferred to ISO. Both ISO9712:1992 and CEN EN413:1993 -European Standard- essentially came out from this same root. It was unfortunate that there were many differences between two standards. Although recent revisions in 1998 reduced the number of differences, a complete integration of two standards will take a few more years. Other ICNDT recommendations, such as minimum requirements (training syllabuses) of various NDT methods, have rested on a shelf waiting standardization, although International Atomic Energy Agency (IAEA) used much of contents in its NDT training guide: TECHDOC-407 (1987). Very wasteful, indeed! These minimum requirements could be good companions with ISO9712. Training time and marking schedule of examinations specified in ISO9712 will have real meanings when its contents will be well defined. ICNDT Task Group WHxx-85 lead by Mr. Aufricht will present a new revision of minimum requirements in Rome. It is hoped to incorporate these requirements into ISO9712 without wasting time.

ISO and CEN

A few words on a comparison between ISO standards and CEN standards will be in order. ISO standards are recommendations only and hence a country is free to adopt partially or modify its contents to make it easier for domestic acceptance. This spoils a value of global standards. A CEN standard becomes mandatory to all participating countries, when it is formally adopted by voting described below. Each member country of ISO has equal vote. Democratic! But there is little room to reflect the size of industry and its technical expertise of a large industrial country. Formal adoption of a CEN standard is decided by a weighted majority vote of all member coun-

tries and is binding all of them. Hence when a CEN standard is once formally adopted, it is difficult to amend it in ISO standardization process. This is especially true, if two dozens of vote held by European countries are counted. The global coverage of ISO suffers distance barrier. Few countries have financial and human resources to participate in frequent meetings, of which venues spread all over the world. CEN has no such problem, since most European cities can be reached within a few hours of flight.

ISO TCs work rather independently despite efforts of mutual liaisons and the coordination by Technical Management Board (TMB) of ISO Central Office. Hence the adoption of such overall management systems as ISO 9000 and 14000 series has been slow and uneven. The lack of an ISO document equivalent to CEN's EN45013: General criteria for certification bodies operating certification of personnel has caused much difficulty in harmonization of certification of NDT personnel. European Union countries have had to unify their regulatory standards in the fields of safety, health and environment. Hence there is a high incentive to speed up standardization. Closeness in distance, similar cultural background and weighted vote already mentioned also helps to speed up processes.

ISO's problem and remedy

Global consensus aimed by ISO is nice, but a long time required to achieve the ideal is too slow in this rapidly changing world. Recently TMB set the time limit, 43 months from the registration of a new work item to a final publication of standard. Even this time limit seems too long in today's standard. ISO 9712, a key document of certification of NDT personnel, however, took more than one decade before the publication. Table 2 shows its time marks.

There is a clear need to speed up standardization processes within ISO and improve mutual collaboration between ISO and CEN. The Vienna Agreement is bilateral in its spirit. But its implementation much depends on how fast ISO can develop a standard. Adoption of a CEN standard as an international standard without modification by a fast track will save much time and work. In view of large emerging as well as existing markets outside of Europe, however, global consensus, which ISO has aimed, cannot be ignored. Once a CEN standard is issued, its modification within ISO processes is rather difficult as already mentioned. Hence a mutual collaboration is desirable in early stage of CEN standard. At one time, Working Groups of CEN/TC138, which corresponds to TCs of ISO/TC135 and conduct most actual work, were closed to non-European countries. Even if it were opened, few outside countries could participate in frequent meetings because of distance barrier.

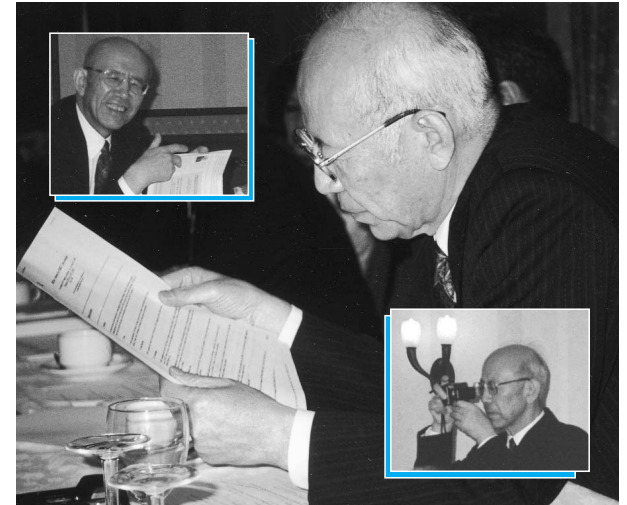
Traditional workflow of standardization based on daily mails and occasional meetings has become obsolete and unable to solve these pressing needs. Recent advances in electronic communication, however, especially the Internet offers much opportunities to improve mutual understanding, enable discussions in early stages of development and speed up every steps of standardization with a substantial saving in cost, time and man power. Document handling and management, which are cores of standardization, can also greatly improved. Traditional paper documents distributed by mail or facsimile needs retyping and reprinting, whereas electronic documents on the Internet are reusable and recyclable. Indexing, version control, database and archive are almost automatically obtained in electronic documents. At the same time, much of printing, mailing and travelling cost can be saved.

Face to face personal contacts in a meeting are indispensable. The value of a meeting, however, is much enhanced by mutual E-mail contact between NDT experts and preview of documents over the Internet. Fast distribution of minutes and resolutions within a few days over the Internet, not months by mail, will speed up follow-up processes.

The phenomenological growth of the Internet in many human activities has reason. It provides global coverage with speed and economy. Not only text but also such multimedia information as images, voices, videos can be interactively communicated without little additional cost. Browsers provide universal office environment for viewing and writing with user-friendly man-machine interface. Degree of security has been improved to allow monetary transaction and distribution of copyrighted material.

ICNDT Task Group on Internet will present a report in Rome. It contains several recommendations to improve and speed up operations of ICNDT through the use of Internet.

ISO recognized these trends and set up Information Technology Strategies Implementation Group. It is a



Prof. M. Onoe

right direction. But much work has to be done in timely manner. Similar situations, problems and possible remedy by the Internet, exist in national and regional standardization. Hence a change of workflow within ISO is not good enough. Simultaneous re-engineering of national and international workflow in standardization is desirable. There have been information gaps between a national committee (an ISO member representing its country), domestic technical committees and experts in ISO WGs. Sometimes the national committee casted negative votes against documents prepared by their own experts. Hence NDT societies shall exercise their proper influence on domestic as well as international standardization processes.

Conclusion

ICNDT is the only global entity comprising NDT societies and professionals. As such ICNDT shall encourage its members to pursue deserved influence in domestic and international standardization process. The use of Internet will provide many opportunities. ISO9712 is a monument of initiatives taken by ICNDT more than a quarter century ago. But it is not completed yet. It is hoped that this seminar in Rome will accelerate the final finish through mutual cooperation.

Web References

CEN: <http://www.cenorm.be>

IAEA: <http://www.iaea.org>

ICNDT: <http://www.aipnd.it>

<http://www.ricoh.co.jp/net-messena/NDTWW/INTERN/ICNDT.html>

ICNDTnet - Internet for ICNDT:

<http://www.ricoh.co.jp/net-messena/NDTWW/INTERN/ICNDT/ICNDTNET/ICNDT-WH-85>:

<http://www.ricoh.co.jp/net-messena/NDTWW/INTERN/ICNDT/DOC85/>

ICNDT WH-00: <http://www.ricoh.co.jp/net-messena/NDTWW/INTERN/ICNDT/DOC00/>

ISO: <http://www.iso.ch>

ISO guide for the use of information technology in the development and delivery of standards: <http://www.iso.ch/infore/directiv.htm>

ISO/TC135: <http://www.ricoh.co.jp/net-messena/NDTWW/INTERN/ISO135.html>

Table1-ICNDT Recommendations, 1985

ICNT WH 15-85: Basic Requirements for National Personnel Qualification and Certification Scheme, November 3, 1985

ICNT WH 22-85: Guidelines for training times, Nov. 3, 1985

Minimum Requirements of Technical Knowledge of NDT-Personnel

ICNT WH 16-85: UT, August 26, 1982

ICNT WH 17-85: RT, March 18, 1983

ICNT WH 18-85: ET, Nov. 7, 1985

ICNT WH 19-85: MT, Nov. 7, 1985

ICNT WH 20-85: Liquid PT, Nov. 7, 1985

ICNT WH 21-85: LT, Nov. 7, 1985

ICNT WH 23-85: Model agreement on the Mutual Recognition of Qualification and Certification Scheme for NDT Personnel, Nov. 7, 1985

Table 2- Time marks of ISO9712

1973: ICNDT Task Group on Harmonization

1975: Establishment of SC7

1983: The first SC7 meeting

1985: ICNDT Recommendations

1989: CEN/EN 45013

1992: ISO 9712

1993: CEN/EN 473

1998: ISO/DIS 9712 revised



(l-r) Prof. H. Kopinek (Germany), Prof. Z. Pawlowski (Poland), V. Klyuiev (Russia) outstanding members of ICNDT; they strongly collaborated on the minimum training requirements ICNDT - WH - 85 adopted by ISO as reference for ISO 9712.



Mr. Murphy (Canada)
ISO representative
in ICNDT



15th World Conference on Non-Destructive Testing

Roma (Italy) - 15-21 October 2000

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Reflections of the Holy Father JOHN PAUL II on authentic culture expressed during His pastoral mission.

The man of culture

“Through your scientific and professional capacity you can offer a service of authentic intellectual charity to your colleagues, to students, to society and all its institutions”.

“The real man of culture is not only an intellectual who reflects, evaluates and contemplates truth in an individualistic ivory tower but is solidly involved in a prophetic task of forming sensitive consciences of saying NO to death, to hatred, to violence, to terror, to degradation, and saying YES to the good, to the beautiful, to truth, to justice, to responsibility, to life, to peace, to love”.

Harmonize technology with conscience

“Love for truth, sought after in humility, is one of the great values capable of uniting men and women of today across the various cultures”

“All authentic cultures are open to the essential, and there is no truth which cannot be universal”

“I trust that the man of science will preserve the sense of man’s transcendence over the world, also of God’s transcendence over man “and will link that universal sense of culture with a universal sense of fraternal love”

“It is even more evident that cultural progress is closely related with building a more just and more fraternal world”

“The dialogue between science and faith shall enter into an even more positive stage”

The believer and the world of culture

“The man of faith is conscious of covering a path together with the rest of mankind within a history in which God achieves his plan of love”

“Faith, in its relation with culture presents itself as a clarification of God’s project, as an aid and complement to rationality; but rationality is not impoverished by having recourse to the Faith.

Letter of the NDT Community to the Holy Father

Dear Holy Father

John Paul II

The people of the NDT Community enjoy and express their grateful thanks for the privilege we have of joining you in this Papal Audience.

We are as Pilgrims, coming from 75 Countries, we are part of the greatness of the Jubilee 2000.

In this extraordinary time, we pray to enrich our faith.

Our work is to guarantee the integrity of materials, to prevent failures, for ensuring the safety of people.

Our profession takes us close to the harmony that exists in the universe, to its beauty and splendour bringing us closer to the mystery of creation and to the greatness of God.

Fundamental to our desire for a better world, is the awareness of the need for freedom, peace, social equity and love.

You give to all people an admirable testimony of faith and courage in the way you promote peace and love at all times.

You have broken down the borders among religions bringing people of different faiths closer, maintaining their dignity;

Entering the 3rd Millennium You tell to all of us:

“Don’t be afraid”

“Non abbiate paura”

melting our anxiety and shaping a vision of hope and serenity.

Thanks for this illumination.

This Jubilee highlights the 2000th anniversary of the birth of Jesus.

His life, His parables are still today a fundamental guide in religious life as in the social life.

We take part in your joy, in your enthusiasm, and in your love for Jesus.

Going home, we take with us the intense emotion we feel in your presence.

We will pray to God to give you the grace to continue your divine mission for a long time.

Thanks for all that we have received.

ICNDT The International Committee for Nondestructive Testing



G. Nardoni
President



*“Don’t be afraid”
“Non abbiate paura”*

John Paul II





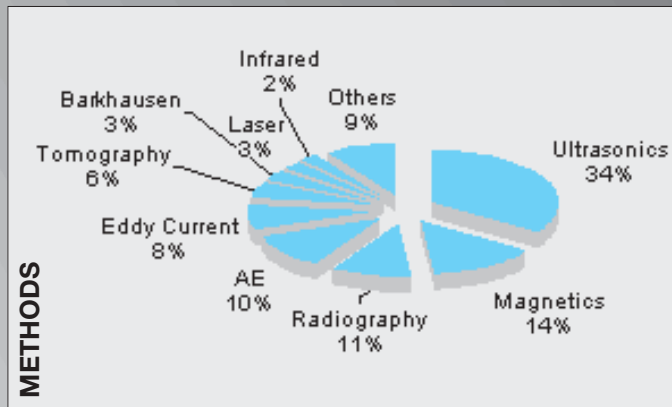
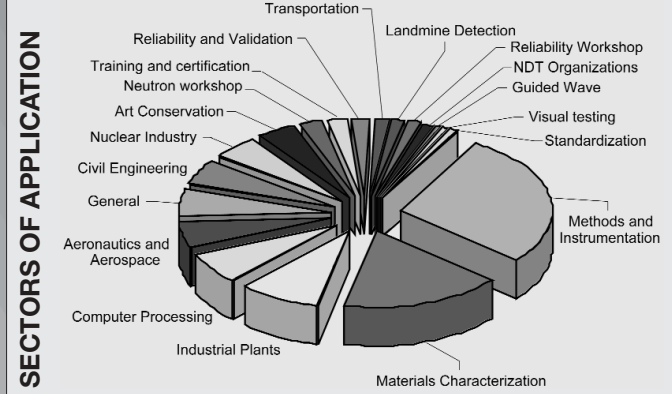
15th World Conference on Non-Destructive Testing

Roma (Italy) - 15-21 October 2000

Major sponsor **AGFA**

773 papers from 54 countries

- Bangladesh
- Kenya
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- Vietnam
- Latvia
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- Lithuania
- Switzerland
- Venezuela
- Indonesia
- Austria
- Israel
- Turkey
- Bulgaria
- Hungary
- Denmark
- Greece
- Slovenia
- Sweden
- Argentina
- Czech
- Taiwan R.O.C.
- Netherlands
- Finland
- Spain
- Brazil
- Romania
- Belgium
- Canada
- Poland
- Croatia
- Korea
- Algeria
- Belarus
- Japan
- United Kingdom
- Ukraine
- India
- USA
- France
- Italy
- P.R.China
- Russia
- Germany



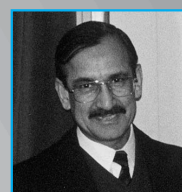
- ### SOCIAL EVENTS
- Sunday 15 Oct. 17.00
Welcome at Palazzo Colonna
 - Monday 16 Oct. 12.30
Opening Cocktail Reception at Congress Palace
 - Monday 16 Oct. 21.00
Concert at S. Ignazio Church
 - Wednesday 18 Oct. 10.00
Papal Audience
 - Wednesday 18 Oct. 20.00
Gala Dinner at Villa Miani



B. Raj



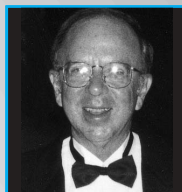
M. Farley



A. Khan



R. Green



D. Bray



V.V. Klyuev



P. De Meester



B. Larsen

APPOINTMENTS

- Sunday 15 - **26th ICNDT Meeting**
- Tuesday 17 - **ISO 9712 Seminar**
- Tuesday 17 - **Visit to Flight Testing Centre of Italian Air Force**
- Wednesday 18 - **EFNDT General Assembly**
- Thursday 19 - **27th ICNDT Meeting**
- Friday 20 - **EFWG Certification**
- Saturday 21 - **Panel Discussion on Certification in Aircraft Industry**

Plenary Lectures

Tuesday 17

- 8:45 P. de Meester (Belgium)
Evolution of NDT
- 9:15 M. Farley (UK)
Harmonisation and Mutual Recognition of Personnel Certification - cooperation or competition ?
- 9:45 V. Vengrinovich (Belarus)
Computer Processing and Simulation of NDE Data - new capabilities for practical NDE

Thursday 19

- 8:45 A. Khan (Austria)
The Role of IAEA for the promotion of NDT Technology around the World
- 9:15 G. Tober (Germany)
NDT in Aeronautics - State of Art
- 9:45 B. Raj (India)
NDT for realising better Quality of Life in Emerging Economies like India

Friday 20

- 8:45 R. Green (USA)
Advances in Non-destructive Materials Characterization
- 9:15 V. Klyuev (Russia)
Ecological Diagnostics-One of the Most Important NDT Activities in the 21-st Century
- 9:55 V. Mazzocchi (Italy)
The role of ISPESL as Notified Body for European Directive 97/23/CE (PED)

Saturday 21

- 9:00 D. Bray (USA)
Historical review of Technology Development in NDE
- 9:30 E. Grinzato (Italy)
Thermal NDE enhanced by 3D numerical modeling applied to works of art

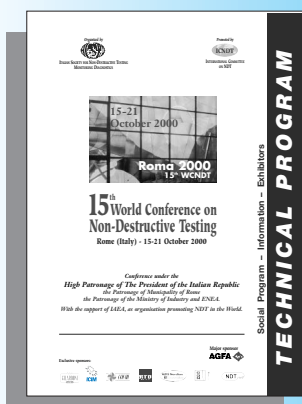


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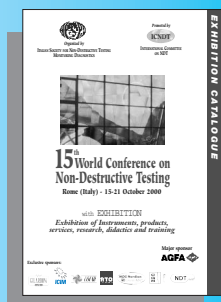
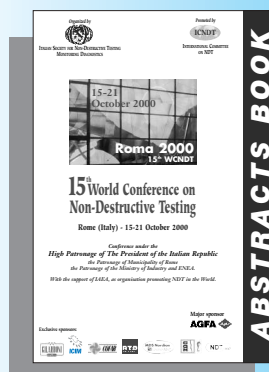
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ICNDT Regional Groups: *Activities and perspectives*

AUSTRALIA



The Asian-Pacific - Conference on NDT

The Asia-Pacific Conference on Non-Destructive Testing has its origins at the 7th WCNDT Conference in 1973. During discussions between Dr Tenny and Professor Ishii the proposal "That it would be of benefit to the Pacific-rim region if NDT Technology and Industry were promoted" was put. The first Pan-Pacific conference was held in Tokyo, in 1976. Delegates from Korea, Japan and the USA attended. With the advent of non-Pacific-rim Asian countries applying to become members, the proposal was put to a postal ballot that the name be changed to the "Asian-Pacific" Committee on NDT (APCNDT) and at the Conference in Canada in 1987 the name was ratified.

Member countries include Canada, China, India, Indonesia, Japan, Korea, New Zealand, Philippines, Taiwan, Thailand, Singapore, USA, and Australia.

The committee consists of a President, Vice President, Immediate Past President and one each voting delegate from Member Countries. A-PCNDT aim is the dissemination and exchange of NDT information and technology. Conferences are held every two to three years, except World Conference year. As well as the presentation of technical papers, there is an industry equipment exhibition. The next conference is in Brisbane, Australia, during September 2001 and the following conference in Korea.

Derek Olley
President 10th

LIBYA

Attention to Secretariat of the conference AIPND I read in ICNDT journal, issue n. 1 January, sub title SPECIAL SESSIONS AND WORKSHOP. Would be glad to have details about Education, Training in NDT and Antipersonnel landmine detection. Looking forward to hearing from you; your help is highly appreciated. I want you to e-mail me as soon as possible. Best regards
Dr. F.A. Elbakkoush

Neutron physics and radiation shielding, Tripoli Libya

Dear ICNDT Journal
I am interested in ICNDT Journal. I would like partake and contribute to this journal. Please send me Application form (Journal - Subscription form. I return to you as soon as possible. Thank you very much.

Beast regard
Dr. F. Bakkoush
Tripoli Libya

BRASIL



M. Gebrael J.A. Conte

ICNDT President has been invited to participate to the annual conference of ABENDE the 21-23 August 2000. In his speech at the opening of the meeting President NARDONI take the greetings of ICNDT and gives words of compliments to ABENDE for its activity, publications, and good communications at international level. The conference has been opened from ABENDE President M. GABRIEL and the general Secretary J.A. Conte. The meeting was highly successive. Two seminars, one on research and one on aircraft have been organized inside the Conference. Excellent the equipment and services exhibition.

SPAIN

Barcelona 2002

by Jesus Serrano

Chairman of Organising Committee of 8th ECNDT

Dear Colleagues,
It seems like yesterday, but it has already been over two years since the Board of Directors of the European Federation for NDT (EFNDT) honoured our Society by giving us the responsibility of organizing the 8th European Conference in Barcelona in the year 2002.

This is a big challenge for our Society since the capability and professionalism of the seven organizing societies and hosting cities (Mainz, Vienna, Florence, London, Sarajevo, Nice and Copenhagen) that preceded us, raised the conference standards to such a high level that meeting or even exceeding these standards becomes a difficult task. However, we are sure that we will successfully achieve our goals with the efforts of the Organizing Committee and the other Committees (Scientific, Technical etc.) enhanced by your invaluable help.

Up to now, we all have worked incessantly in the first stages of the conference organization. As we all know, these stages do not give short term results, but rather pave the way for future activities. We hope to be able to count on your attendance at this European event, the most important one in the world of NDTs. This will be the first conference organized by the new-born European Federation for NDT, the first in the 21st Century and the first in the era of recently coined European Currency.

Suffice is to say that you will have precious memories from your stay in breathtaking and welcoming Barcelona; its friendly people, splendid infrastructure and its enticing urban landscape bursting with culture and heritage. As time goes by, your memories of Barcelona's beauty will bring to mind the scientific and technical contents of the 8th European Conference, enhancing them.

" See you in Barcelona 2002 "

HUNGARY

Subject: Hungarian membership in ICNDT

Dear Mr. Nardoni,

I have the pleasure to inform you that the two non-destructive organisations operating in Hungary (organisation of Non-destructive Testing in Scientific Society of Mechanical Engineering (GTE) and Hungarian Association for Non-destructive Testing (MROVISZ) concluded an agreement with each other on Hungary's mutual representation in international organisations.

GTE hereby informs ICNDT that on the basis of the co-operation agreement concluded between GTE and MAROVISZ Hungary will be represented in ICNDT by GTE. Voting delegate: Dr. T. Konkoly, Prof. emeritus, Non-voting delegate: Dr. István Karsai.

Please take notice of the aforesaid.

Yours sincerely,

Dr. Lajos Borbas

Vice-president responsible for foreign affairs

EFNDT EUROPE

Regional group

EFNDT European Federation for Non-Destructive Testing

Meeting of Board of Directors in Berlin

The Board of Directors met in Berlin on May 13 and 14, 2000. The meeting, chaired by the president in-charge Bjarne Larsen, was hosted by the German Society for NDT (DGZfP e.V.) and took place in Zeuthen close to Berlin. The Board of Directors worked on numerous topics.

One of the most important topic (topics) under discussion was the question how to increase and optimise the flow of information among the members of EFNDT and other interested parties with respect to new activities within EFNDT, important decisions of the Board of Directors, the Working Groups and the General Assembly. It was agreed that after each meeting a brief press release will be drafted which will be published after approval by the Board of Directors. Media for publication may be journals or news letters of the members and the home page of EFNDT.



The current status and the follow-up actions of EFNDT with respect to the mutual recognition of personnel certification with ASNT and ASME was discussed extensively. The meetings with ASNT which currently do not develop as expected or to be honest, are totally lacking currently, will be continued. However, a higher priority will be given to direct discussions with ASME. The General Directions of the European Commission DG III "Enterprise" which is responsible for the European Pressure Equipment Directive will be invited to participate in future meetings.

A task force was established under EFNDT which is authorised to proceed with this topic. Members are Bjarne Larsen, Roger Roche, John Thompson and Ulrich Kaps. Progress in this respect will be recorded under the EFNDT web page continuously. Another important project of EFNDT is the establishment of the European Certification Programme ECP. This programme will not replace standards dealing with NDT personnel certification which are currently enacted. moreover, ECP will improve the quality of examinations through the development of a harmonised catalogue of examination questions and the harmonised description of test specimens to be used during examination sessions.

This programme which is under development within the EFNDT member societies of France, United Kingdom and Germany will be available by end of the year 2000. The conditions for participation will be published end of the year by the Board of Directors of EFNDT. Finally, the Board of Directors agreed to become member of EUROLAB as observer and to accept EPERC as new associated member of EFNDT. Ireland was agreed to be a new full member of EFNDT.

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Mr. Gilbert, INSIGHT

"Help to promote the ICNDT Journal"

Secretariat

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(c) = National Committee

(o) = other organisations

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VENEZUELA	Asociacion Venezolana de Ensayos No Destructivos	Apartado P. 47533	Caracas	1041	+58 2 6933 970	+58 2 6933 323		J. Blanco	
VIETNAM	VANDT- Vietnam Association for NDT	46-Nguyen Van Ngoc St. - Thu Le - Ba Dinh	Ha Noi		+84 4 7661 796	+84 4 7333 566	lhdin@netnam.vn	N. Van Ban	
YUGOSLAVIA	Yugoslav Centre for Non Destructive Testing	Vojvode Stepe 51	Belgrade	11000	+381 11 460 465	+381 11 469 514		B. Sladojevic	(o)