

Nondestructive Testing Personnel Certification in Turkish Aerospace Industries and National Aerospace Nondestructive Testing Board in the Turkey

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Introduction

This Poster presents Nondestructive Personnel Certification in Turkish Aerospace Industries and the National Aerospace Nondestructive Testing Board in the Turkey.

1- Nondestructive Testing Personnel Certification in the Turkish Aerospace Industry

In the Turkish aerospace industry the qualification and certification of personnel for Non-Destructive Testing is carried out in compliance with EN 4179 and NAS 410 Rev 2.

Generally, Responsible Level 3 (EN 4179, Paragraph 4.5.3) and Outside agency (EN 4179 Paragraph 4.5.4) are provided all necessary services (Written practices, training and qualification examinations) to aerospace sector in the Turkey.

TSE NDT Laboratory has been providing training and examinations in Non-destructive Testing for the international aerospace industry including airlines, maintenance and overhaul companies for 7 years.

Aerospace NDT Training is situated in the maintenance hangar and classroom on the Airports.



Figure 1. Maintenance Hangar



Figure 2. Theoretical Part of Training



Figure 3. Practical Part of Training

2- National Aerospace Nondestructive Testing Board in the Turkey

National Aerospace NDT Boards (NANDTB) have been formed in many countries in Europe, as a direct result of European Aerospace Safety Agency (EASA) regulation part 145, which mandates the implementation of European Standard EN 4179 (2005 Aerospace series - qualification and approval of personnel for non-destructive testing) by maintenance organisations subject to the regulation.

EASA Part 145.A.30(f) states that NDT personnel must be qualified to a European standard recognised by the Agency.

AMC 145.A.30(f) declares that the European standard recognised by the Agency is EN 4179 and does not include EN 473.

According to Turkish Civil Aviation Authority Regulation, **SHY-145 (01)** which mandates the implementation of TS EN 4179, An independent national aerospace Board was founded on 21.06.2007 in the Turkey.

Turkish National Aerospace Board is chartered by aerospace maintenance organizations, airlines and training organizations. Turkish national aerospace board is recognised by the Turkish Civil Aviation Authority (**SHGM**) to provide or support NDT qualification and examination services in accordance with TS EN 4179.



Figure 4. Turkish National Aerospace Nondestructive Testing Board

Table 1. Turkish National Aerospace Nondestructive Testing Board Members

	Name	Representative for	Status
1	NESLİHAN MAHMUTYAZICIOĞLU	TSE NDT LAB.	Chairman
2	ERCAN TANRISEVER	THY TECNICS	Vice Chairman.
3	ORHAN PEHLİVANLI	TSE NDT LAB	Secretary
4	YILMAZ SAMASTI	THY TECNICS	Member
5	M.İLKER SUNAOĞLU	HAVA TEK. OK. KOMUTANLIĞI	Member
6	MEHMET SAYGIOĞLU	THK TÜRKKUŞU GEN. MÜD.	Member
7	OĞUZ ÇETİN	ONUR AIR	Member
8	MURAT ÖZDEMİR	2.HİBM. K.LIĞI/KAYSERİ	Member
9	ALİ AKSOY	PRIMA AVIATION	Member
10	M. SAİT SÖLMEN	KALE AIR	Member
11	EROL KOÇER	MNG UÇAK BK.	Member
12	VAHAP ÖNEN	PEGASUS AIRLINES	Member
13	FÜSUN AKDOĞAN	THY A.O.	Member

2.1. Board Structure

The Board shall comprise up to 13 persons. At least 1/2 of its members have current NDT Level 3 and Level 2 qualifications, however all members have a relevant technical aerospace background or knowledge. The officers are the Chairman, Deputy Chairman and Secretary. The Chairman position is restricted to a current Level 3 operative. All three positions will be elected from within the Board.

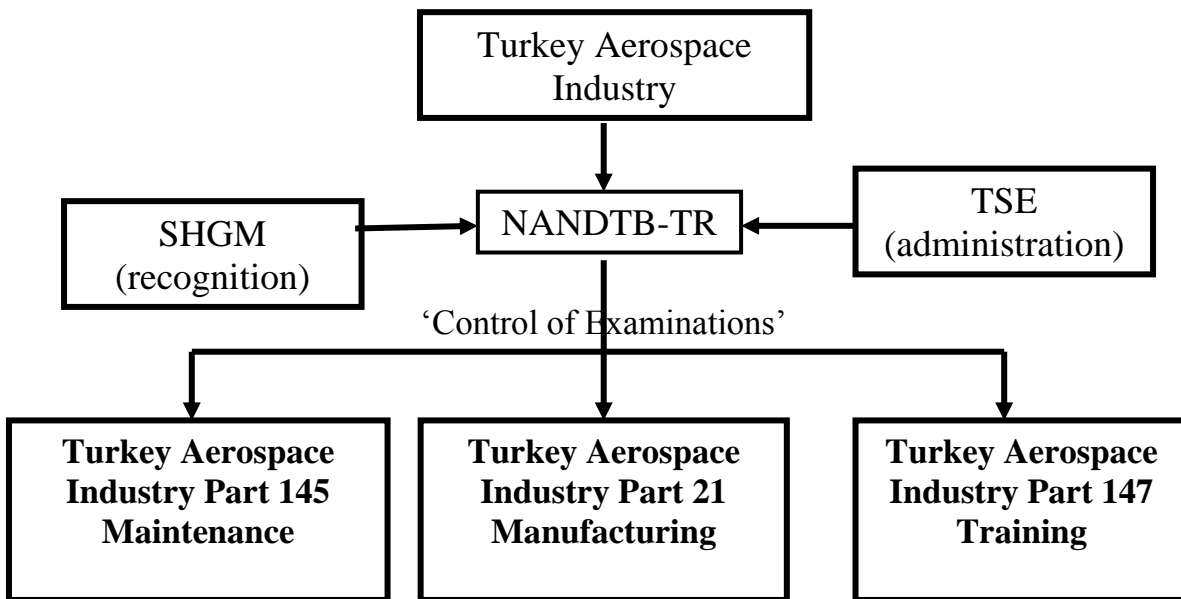


Figure 5. NANDTB-TURKEY Organisation Scheme

Table 2. NANDTB-Turkey Rules

NANDTB-TR 01- Aims and Objectives
NANDTB-TR 02- Method of Operation
NANDTB-TR 03- List of NANDTB-TR Members
NANDTB-TR 04- Review of Aero requirements against TS EN 4179 (2005) criteria
NANDTB-TR 05- Minimum Requirements for NDT Training Provider
NANDTB-TR 06- Audit Checklist for NDT Training Schools
NANDTB-TR 07- Employment of external Level 3 personnel
NANDTB-TR 08- Approved NDT Training Provider
NANDTB-TR 09- Examination Regulations
NANDTB-TR 10- Policy on recognition of aerospace certificates
NANDTB-TR 11- Training and approval of personnel in new technologies

2.2. Aim and Role of NANDTB-Turkey

- Establishing NDT personnel training, experience and examination requirements for certification in 'other' NDT methods.
- Administering procedures for qualification and certification of NDT personnel.
- Recognising equivalence of qualification and certification. (according to international recognized Standards).
- Providing general guidelines for NDT training, course outlines, examination questions and exam procedures
- Publishing a quarterly NANDTB –TURKEY report in NDT News

3. European Forum for National Aerospace NDT Boards (EF ANDTB)

The second meeting of the European Forum of NANDTBs was held in Istanbul on 29 th June 2007.

The letter of application from the Turkish NANDTB for full membership of the forum was also submitted in accordance with the provisions of the Forum's constitution, clause 1.3.

Turkish NANDTB is formally accepted as full members of the Forum.



Figure 6. Second EF ANDTB Forum in İstanbul

Table 3. Aerospace NDT Board Forum Members and Representatives

AEROSPACE NDT BOARD FORUM



MEMBERS AND REPRESENTATIVES

ANDBF/02			ISSUE DATED 2007-08-20
Board	1 st nominee	2 nd nominee	Status
Australia	HOCKINGS, Colin ^{**3}		Full member (2007-06-29)
Austria	WOTTLE, Roman		Full member (2006-12-01)
Belgium	TOMASOVIC, Ante		Full member (2006-12-01)
Czech Rep	ZAVADIL, Zbynek		Full member (2006-12-01)
Denmark*	SORENSEN, Kirsten		Full member (2006-12-01)
Finland	MANNINEN, Pekka	YLITALO, Marko	Full member (2006-12-01)
France	BERNARDI, Joseph	AUGE, Patrick ^{**1}	Full member (2006-12-01)
Germany	HENRICH, Rudolph	HOLSTEIN, Ralf	Full member (2006-12-01)
Greece	SOTIRAKIS, Stamou	FYTOS, Minas	Full member (2006-12-01)
Hungary	JUHASZ, Peter		Full member (2006-12-01)
Iceland	THVERDAL, Bjorn		Full member (2006-12-01)
Ireland	BUGGIE, Frank	McCLOREY, John	Full member (2006-12-01)
Italy	MERLETTI, Luigi	DEL TORO, Roberto	Full member (2006-12-01)
Luxemburg	CRAB, Danny		Observer
Malta	MUSCAT, Albert		Observer
Netherlands	DAM, Dick	STROO, Arie	Full member (2006-12-01)
Norway*	SCHJELDERUP, Harald		Full member (2006-12-01)
Poland	WILCZYŃSKA-BOROWIECKA, Alicja	WISNIEWSKI, Gracjan	Full member (2006-12-01)
Portugal	NASCIMENTO, Sérgio Dias		Full member (2006-12-01)
Serbia	SAMARDZIC, Tatjana		Observer
Slovakia	<i>Represented by Hungary</i>		Observer
Slovenia	GRUM, Janez		Observer
Spain	FRAILE, Fermín Gómez		Full member (2006-12-01)
Sweden*	GRYBACK, Thomas		Full member (2006-12-01)
Switzerland	KLIEBER, René	LINDGENS, Juergen	Full member (2006-12-01)
Turkey	MAHMUTYAZINCIOGLU, Neslihan	PEHLIVANLI, Orhan	Full member (2007-06-29)
UK	BIDDULPH, Jon ^{**2}	THOMPSON, John ^{**3}	Full member (2006-12-01)

* represented by a Scandinavian Board (SCANDT)

^{**1} NANDTB Forum Chairman

^{**2} NANDTB Forum Vice Chairman

^{**3} NANDTB Secretary

References:

- [1] EASA Part 145
- [2] SHY 145 (01)
- [3] ANDTBF/02