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National Defence
Research and
Development Branch

Défense nationale
Bureau de recherche
et développement

ABSTRACTS and SUMMARIES

of

**3rd (7th) CF/CRAD MEETING on
NAVAL APPLICATIONS of MATERIALS
TECHNOLOGY**

and

INTER NAVAL CORROSION CONFERENCE

held at Halifax, Nova Scotia, Canada

22 - 24 April 1997

Compiled by J.R. Matthews

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3rd (7th) CF/CRAD Meeting on
Naval Applications of Materials Technology
and
Internaval Corrosion Conference

ABSTRACT

This was the seventh naval materials CF/CRAD (Canadian Forces/Chief Research and Development) meeting. These meetings have been held every two years since 1985. The first four meetings were devoted to fabrication and inspection of submarine pressure hulls with sessions on welding, inspection and fracture. The last three have expanded to include all aspects of naval materials.

The purpose of these meetings has been to bring together industrial research contractors, university contractors, defence scientists, and NDHQ (National Defence Headquarters) design authorities from the naval materials technology area and invited scientists and engineers from other countries to share advances in naval materials technology in a conference like setting. In 1997 the meeting was held in conjunction with the Inter Naval Corrosion Conference.

The combined program includes welding and laser surface modification, fracture and fatigue, Non-Destructive Evaluation, firesafe materials, organic materials (polymers), vibration and damping materials, and of course, corrosion and coatings.

Troisième (Septième) Réunion Du CR Dev/Dés FC
Sur Les Applications De La Technologie
Des Matériaux Au Domain Naval
Et
Conférence Intermarine Sur La Corrosion

RÉSUMÉ

Le CR Dév/FC a tenu sa septième réunion sur les applications de la technologie des matériaux au domaine naval. Ces réunions ont lieu tous les deux ans depuis 1985. Les quatre premières rencontres ont porté sur la fabrication et l'inspection des coques épaisses de sous-marins. Elles comprenaient des ateliers sur la soudure, l'inspection et la rupture. Les thèmes des trois plus récentes réunions couvraient tous les aspects des matériaux appliqués au domaine naval.

Ces réunions ont pour objet de rassembler des entrepreneurs spécialisés en recherche industrielle ou provenant du secteur universitaire, des scientifiques de la défense représentants du QGDN responsables de projets de conception dans le domaine de la technologie des matériaux appliqués au secteur naval ainsi que des scientifiques et des ingénieurs invités venus de l'étranger afin de leur permettre de partager leur savoir sur les progrès de la technologie des matériaux dans le cadre de rencontres de type conférence. En 1997, la réunion a eu lieu de concert avec la Conférence intermarine sur la corrosion.

Les thèmes abordés au cours de la réunion portaient entre autres sur la soudure et la modification d'une surface au laser, la rupture et la fatigue, l'évaluation non destructive, les matériaux assurant une protection contre l'incendie, les matériaux organiques (polymères), les matériaux antivibrants et la vibration ainsi sur la corrosion et les revêtements.

3rd (7th) CF/CRAD MEETING
on
NAVAL APPLICATIONS OF MATERIALS TECHNOLOGY
and
INTER NAVAL CORROSION CONFERENCE

8th floor
Hotel Halifax
22nd, 23rd and 24th April 1997

Welcome: Commodore D.G. Faulkner
Chief of Staff, Maritime Command Headquarters

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Chairman: Dr. J. R. Matthews, DREA

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Wednesday EVENING, 23rd April
RECEPTION and BANQUET
Hotel Halifax
Bluenose Room 8th Floor

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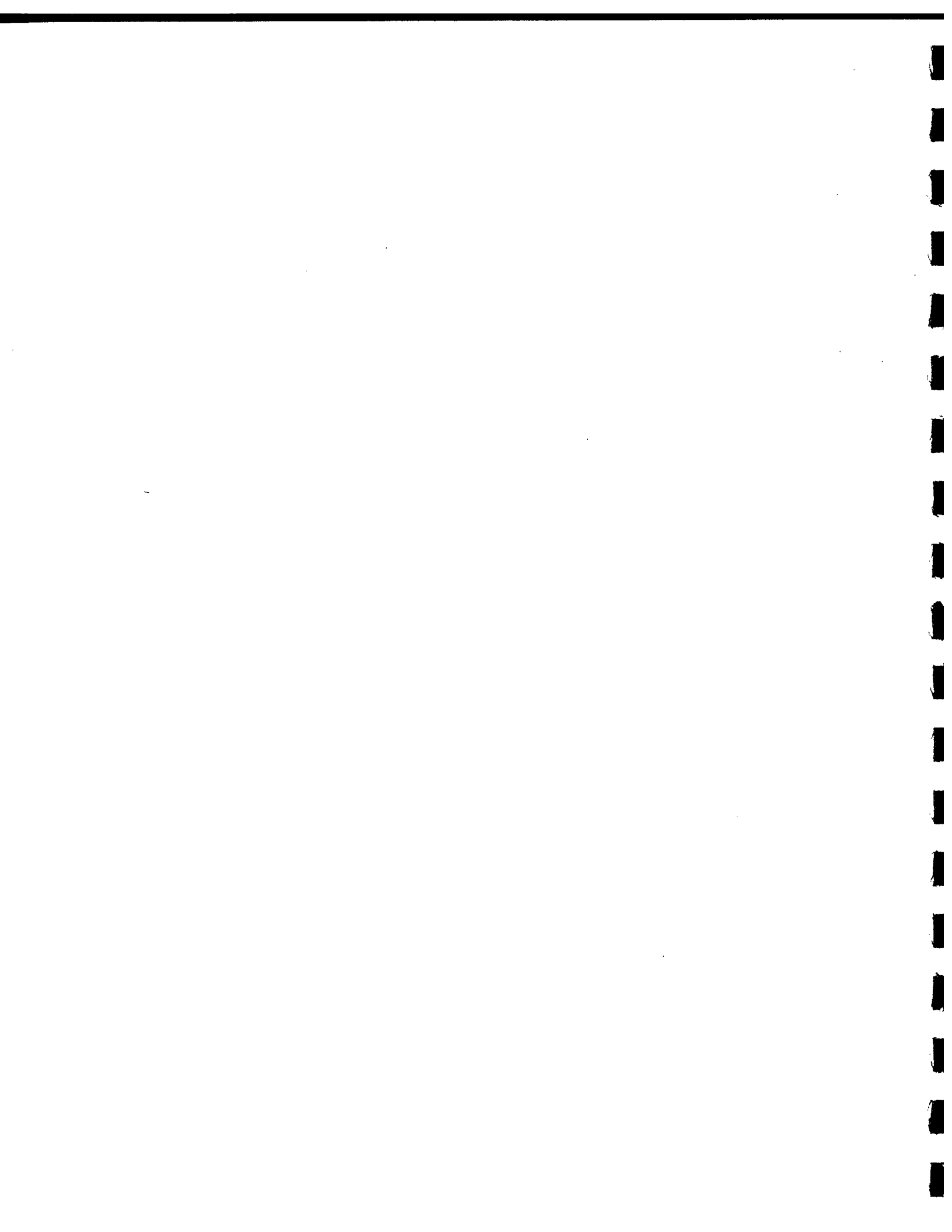
48. A Summary of Experimental Strain Measurements on Canadian Patrol Frigates, Mr. John Porter, DREA, Mr. Mike Brauss, Proto Manufacturing, Mr. Rod Kennett and Bruce Paterson, NETE, and Richard Yee, Fleet 677

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Introduction to 3rd (7th) CF/CRAD Meeting

by

**J.R. Matthews
DREA**

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