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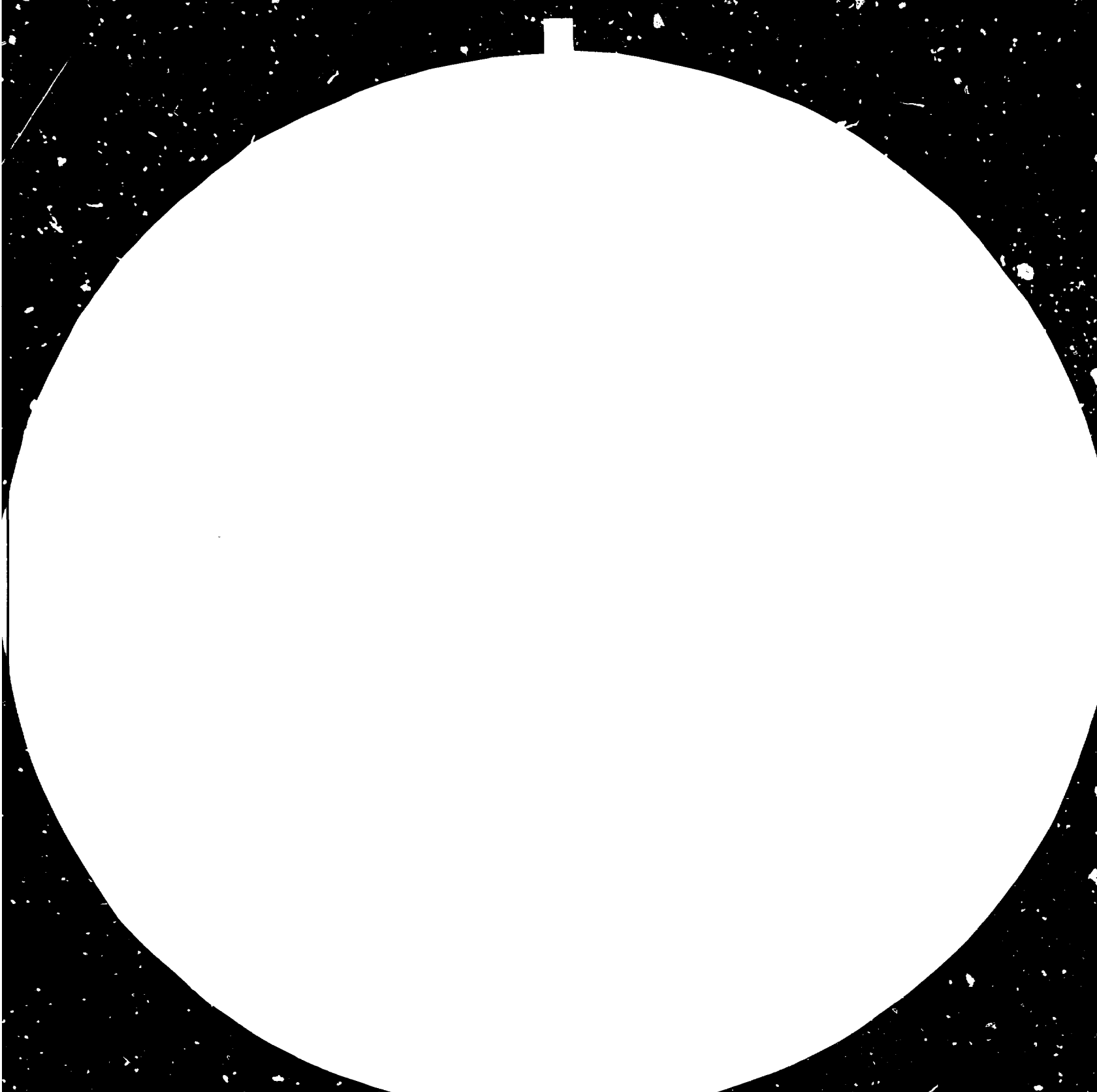
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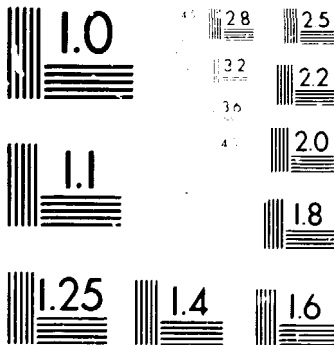
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Expert Group Meeting on Shipbuilding and
Shiprepair Development for the Asian and
Pacific Countries

Jakarta, Indonesia, 26-31 March 1984

REPORT. (Meeting on Shipbuilding
in Asian and Pacific countries).

2468

PREFACE

The shipbuilding and shiprepair industry is of increasing importance in developing countries. The commitment of UNIDO to this industry is seen in the Lima Declaration ^{1/}, adopted at the Second General Conference of the United Nations Industrial Development Organization (UNIDO), held at Lima, Peru, in March 1975, which called for the creation of national, regional and interregional enterprises in maritime transport, an activity based on the shipbuilding and shiprepair industry. Accordingly, the technical assistance of UNIDO to the developing countries includes this engineering activity.

The thirty-eighth session of the Economic and Social Commission for Asia and the Pacific (ESCAP) held at Bangkok, in March 1982, noted that the fleets of the developing countries in the region had been steadily expanding, and that an increasing amount of foreign exchange was being disbursed for the repair and maintenance of such fleets abroad. It also noted the need for urgent action to assist developing member countries to improve and expand their shipbuilding and shiprepair capabilities.

At the sixth session of the ESCAP Committee on Shipping and Transport and Communication held at Bangkok in December 1982, participants from the developing countries gave their full support to a proposed meeting of experts to review and recommend practical steps for the improvement of shiprepair and shipbuilding capabilities of the developing countries of the region and to promote regional co-operation in this field.

At its thirty-ninth session, held at Bangkok in April 1983, ESCAP directed its secretariat to carry out a survey of shipbuilding and shiprepair facilities in the region and to convene an intergovernmental meeting in this field in 1984.

^{1/} Report of the Second General Conference of the United Nations Industrial Development Organization (ID/CONF.3/31), chapter IV, "The Lima Declaration and Plan of Action on Industrial Development and Co-operation".

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INTRODUCTION

1. The Expert Group Meeting on Shipbuilding and Shiprepair Development for Asian and Pacific Countries was held at Jakarta, from 26 to 31 March 1984, under the auspices of the United Nations Industrial Development Organization (UNIDO) in co-operation with the Economic and Social Commission for Asia and the Pacific (ESCAP) and the Government of Indonesia. The aims of the Meeting were to exchange know-how and experience in the shipbuilding and shiprepair industry and off-shore technology. The meeting was attended by 68 participants from 22 countries (see annex I). Two plenary and four technical sessions were held during the Meeting, and visits were made to shipyards in Surabaya and Jakarta.

RECOMMENDATIONS

2. The Meeting adopted the following recommendations:

(a) Co-operation between developing countries in shipbuilding and shiprepair and ancillary industries should be encouraged and should be concentrated on:

- (i) Promotion of practical training at all levels;
- (ii) Exchange of information and views;
- (iii) Joint ventures and collaborations.

To facilitate this recommendation, it was agreed that an institution under the auspices of the United Nations should be established. Prior to the establishment of such an institution an ad hoc committee should be set-up to determine the form and functions of the body. In that regard, Indonesia had suggested Jakarta as the site of the institution;

(b) The United Nations should strengthen its assistance to the countries of the region;

(c) The developed countries should strengthen their financial assistance through soft-term financial loans to the developing countries according to the latter's requirements;

(d) Training on shipbuilding and shiprepair in the developing countries should be increased with assistance from the developed countries;

(e) Shipbuilding and shiprepair facilities and production in the developing countries of the region should be modernized;

(f) The Government of each country of the region should be urged to facilitate the development of that industry with appropriate policies and direct involvement in such enterprises;

(g) The ancillary industries should be developed in the Asian and Pacific countries;

(h) The maritime data bank being developed by the ESCAP secretariat should be expanded to include data on the region's shipbuilding and shiprepair industry, including ship design;

(i) Further work should be undertaken on the standardization of design and equipment for ships, since it would help economic production and thus assist in the development programmes;

(j) Further research and development should be carried out on the use of wind-power to drive ships. Classification societies should be requested by UNIDO to formulate rules and regulations on that subject. Also the International Maritime Organization (IMO) should be requested to formulate appropriate safety rules.

3. The Meeting requested UNIDO to organize another meeting in this field in co-operation with ESCAP and IMO. It also requested UNIDO to send the report of the Meeting to the countries in the region and to reproduce and distribute to all participants the papers presented during the Meeting.

I. ORGANIZATION OF THE MEETING

4. The Meeting was opened by Mr. Eman Yogasara, Director General of the Basic Metal Industry, on behalf of the Minister of Industry of the Government of Indonesia. The Minister in his opening address read by Mr. Yogasara, noted that considerable progress had been achieved by some of the developing countries in the field of the shipbuilding and shiprepair industry. However, the majority of the developing countries in the Asian and Pacific region still needed to improve and develop their facilities and their skill and knowledge in order to meet the requirements of the industry. In that respect, he regarded that technology transfer and international co-operation were essential and hoped that the Meeting would foster those aims.

5. A representative of UNIDO thanked the Government of Indonesia for hosting the Meeting and welcomed the participants. He spoke of the intention of UNIDO to strengthen its services to developing countries in industrial engineering, including water-borne transport and maritime equipment, and to support and promote international co-operation in those activities.

6. A representative of ESCAP pointed out that the most important problem facing the majority of the developing countries that were members of ESCAP was the creation of an efficient shiprepair industry.

7. A representative of IMO described some technical co-operation projects of IMO in shipbuilding and shiprepair in Asian and Pacific countries.

Election of officers

8. The Meeting unanimously elected the following officers:

Eman Yogasara (Indonesia)	Plenary Chairman
Abdul Manap Ali Hasan (Malaysia)	Vice Chairman
A. Tabiat (Indonesia)	Vice Chairman

Chairmen of the sessions

P.R. Govil (India)	Session 1
Urip Markaban (Indonesia)	Session 2
Seow Tan Hong (Singapore)	Session 3
George H. Orere (Papua New Guinea)	Session 4

Rapporteurs of the session

Apenisa Naigulevu (Fiji)	Session 1
Wares Ali (Bangladesh)	Session 2
Diyabalanage (Sri Lanka)	Session 3
Habib Ghani (Pakistan)	Session 4

Adoption of the agenda

9. The following agenda was adopted:
1. Opening of the Meeting
 2. Election of officers
 3. Approval of the agenda
 4. The present position, major trends and specific problems of the shipbuilding and shiprepair industry in Asia and the Pacific
 5. Shipyard structures for building and repair of ships and boats. Production technology, required equipment and locally available construction materials
 6. Potential for constructing parts for supply vessels and components for drilling platforms for the growing offshore industry
 7. Techniques and specific methods for the design and construction of sea-going ships and fishing boats
 8. Onboard equipment, machinery and power units for ships and boats
 9. Ways of co-operation at regional level in information marketing, promotion of joint ventures, TCDC and ECDC
 10. Visits to Pt. Pal Shipyard, Surabaya, and to shipyards in Jakarta
 11. Adoption of the report
 12. Informal discussion on technical co-operation

Adoption of the report

10. The report of the Meeting, including the recommendations, was adopted in plenary on 31 March 1984.

II. REPORT OF THE DISCUSSION

11. Reports were presented (see annex II) and discussed during the Meeting by experts from participating and observer countries and organizations on the following subjects:

(a) The present position, major trends and specific problems of the shipbuilding and shiprepair industry in Asian and Pacific countries;

(b) Shipyard facilities, production technology and construction materials;

(c) Offshore industry;

(d) Ship equipment, ship design, standardization problems and wind-power.

12. The discussion centred on the problems faced by participating countries, particularly the development of the shipbuilding and shiprepair industry differs from country to country due to historical background; geographical location and features; prevailing socio-economic conditions; and size of yards involved.

13. The Meeting discussed the validity these differences in order to identify possible implications in development assistance programming; it also considered the likely influence of cultural lifestyles or regional similarities. Based on these discussions it was agreed that the conclusions should be kept in general terms to cover as many countries as possible. Detailed implications could be worked out later at a follow-up meeting.

14. It was stated that to some extent Asian and Pacific countries faced similar problems in the development of the shipbuilding and shiprepair industry. Those problems related predominantly to a lack of expertise, managerial skills, qualified technicians, sufficiently skilled labour, appropriate technology and standardization, and also to scarce financial resources and an inadequate business base.

15. The Meeting discussed extensively the subject of human resources. It recognized that at higher management levels proven managerial skill was not always a prerequisite for appointments, with adverse effects on management performance. It was also noted that trained personnel often could not be retained as they moved to better-paid jobs in other sectors and abroad. In respect of training, the Meeting considered that the identification of training requirements had to be established on a country-level basis together with an inventory of available training opportunities and their quality.

16. It was recognized that the shipbuilding and shiprepairing industry was considered a high-risk industry in some countries, leading to a reluctance on the part of some financial institutions to support development through adequate loans. This, coupled with the inadequate business base of many shipyards particularly in view of the world-wide economic recession, seriously hampered a healthy industrial development. While some developing countries tried to broaden their base by diversification, sometimes in non-shipbuilding activities, it would seem that such diversification was intended to be of a temporary nature only.

17. It was agreed that dependency on imported materials, machinery and equipment needed for the shipbuilding and shiprepair industry in the countries of the region resulted in increased delivery time and costs.

18. The production of new ships was still limited, however, the development of the industry was dependent on the continuous flow of orders, government policies and financial support programmes that would enable the industry to fully utilize its capacity, which would result in a lowering of prices.

19. Co-operation between member countries of UNIDO in the Asia and Pacific region in the shipbuilding and shiprepair industry was still limited and had to be explored with a view to strengthening their self-reliance in maritime transport.

20. The use of computer techniques in design and manufacture was limited, which perhaps should be the subject of a feasibility study.

Annex I

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United Nations bodies

The Meeting was attended by representatives from ESCAP, United Nations Development Programme, UNIDO and IMO.

Annex II

LIST OF DOCUMENTS

Boatyard and shipyard structures for building and repairing of boats and ships B. Mazurkiewicz	ID/WG.413/1
Wind-power vessels for coastal and inter-islands use in the ESCAP region Division for Shipping, Ports and Waterways, ESCAP	ID/WG.413/2
The facilities and technical aspects of shipbuilding and shiprepair in Bangladesh A.K.M. Wares Ali	ID/WG.413/3
Shipbuilding and shiprepair development in Papua New Guinea George H. Orere	ID/WG.413/4
Possible influence of offshore industry on the activities of developing countries B. Mazurkiewicz	ID/WG.413/5
Offshore construction in Indonesia A. Rachman Idris and S. Oediargo	ID/WG.413/6
Present situation and perspective of shipbuilding and shiprepair in Indonesia Sutito	ID/WG.413/7
The Indonesian shipbuilding and shiprepair industry, present position, major trends and specific problems Wasono	ID/WG.413/8
Shipyard structures for building and repairing ships and boats T. Mulyoharsono	ID/WG.413/9
Techniques and specific methods for the design and construction of sea going ships at PT PAL Indonesia Suleman Wiriadidjaja	ID/WG.413/10
Modes and ways of co-operation at regional level Sutito	ID/WG.314/11
Country paper of Thailand Banyong Maneedit	ID/WG.413/12
The Philippine shipbuilding and shiprepair industry Reynaldo B. Vea	ID/WG.413/13
Shipbuilding and shiprepairing industry in Singapore T.H. Seow	ID/WG.413/14

On the application of CAD/CAM in shipbuilding in Korea Suk Chang	ID/WG.413/15
Present position, major trends and specific problems of shipbuilding and shiprepair industry in Asia and the Pacific S. Srinivasan	ID/WG.413/16
Present position, major trends and specific problems of shipbuilding and shiprepair industry in Pakistan Habib Ghani	ID/WG.413/17
Repairs to bronze propellers A.K. Diyalanage	ID/WG.413/18
Shipyard structures for building and repair of ships and boats. Modes and ways of co-operation S. Srinivasan	ID/WG.413/19
Productivity improvement in shipbuilding P.A.C. Slu	ID/WG.413/20
Shipyard development planning James R. McCaul	ID/WG.413/21
Upgrading of productivity of shipbuilding in I.H.I Nobuji Hamada	ID/WG.413/22

