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EURATOM

OFFICIAL SPOKESMAN

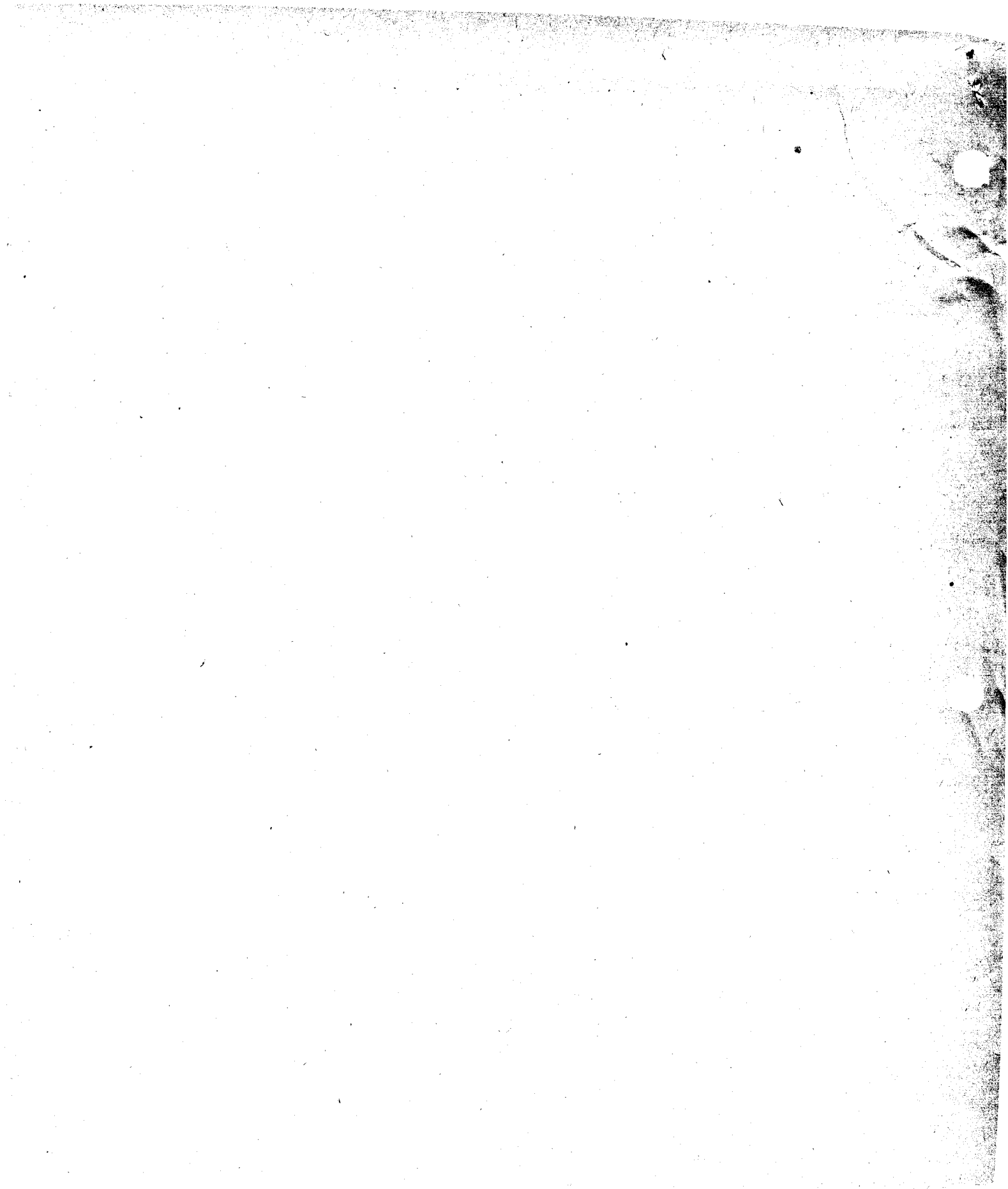
BRUSSELS, 20 JANUARY 1964

BACKGROUND INFORMATION

EURATOM HOLDS LIAISON MEETING ON NUCLEAR SHIP PROPULSION

ON FRIDAY, 17 JANUARY THE EURATOM NUCLEAR SHIP PROPULSION COMMITTEE MET, BRINGING TOGETHER EXPERTS FROM EURATOM AND ITS ASSOCIATION CONTRACT PARTNERS AS WELL AS REPRESENTATIVES FROM THE MEMBER GOVERNMENTS. THE MEETING PROVIDED THE OPPORTUNITY TO SURVEY THE WORK IN COURSE IN THE COMMUNITY.

THE PARTICIPANTS WERE UNANIMOUS IN THEIR APPROVAL OF THE PROJECTS ALL OF WHICH THEY HELD TO BE SCIENTIFICALLY PROFITABLE. THEY INDICATED THEIR SATISFACTION WITH THE ROLE OF CO-ORDINATION AND STIMULATION PLAYED BY THE EURATOM COMMISSION. DURING THE MEETING RECENT EXPERIMENTS AND RESEARCH PLANS FOR THE IMMEDIATE FUTURE WERE DESCRIBED. THE REPORT OF THE GERMAN DELEGATION GAVE RISE TO PARTICULAR INTEREST BY PROVIDING FULL DETAILS OF THE TECHNICAL ASPECTS OF THE TYPE OF PRESSURIZED WATER REACTOR WHICH WILL POWER THE 16,000 DWT EXPERIMENTAL BULK CARRIER WHOSE KEEL WAS LAID IN OCTOBER 1963 AND WHICH IS NOW UNDER CONSTRUCTION. THIS PROJECT IS BEING UNDERTAKEN BY THE G K S S (G E S E L L - S C H A F T F U E R K E R N E N E R G I E V E R W E R T U N G I N S C H F F B A U U N D S C H I F F A H R T).



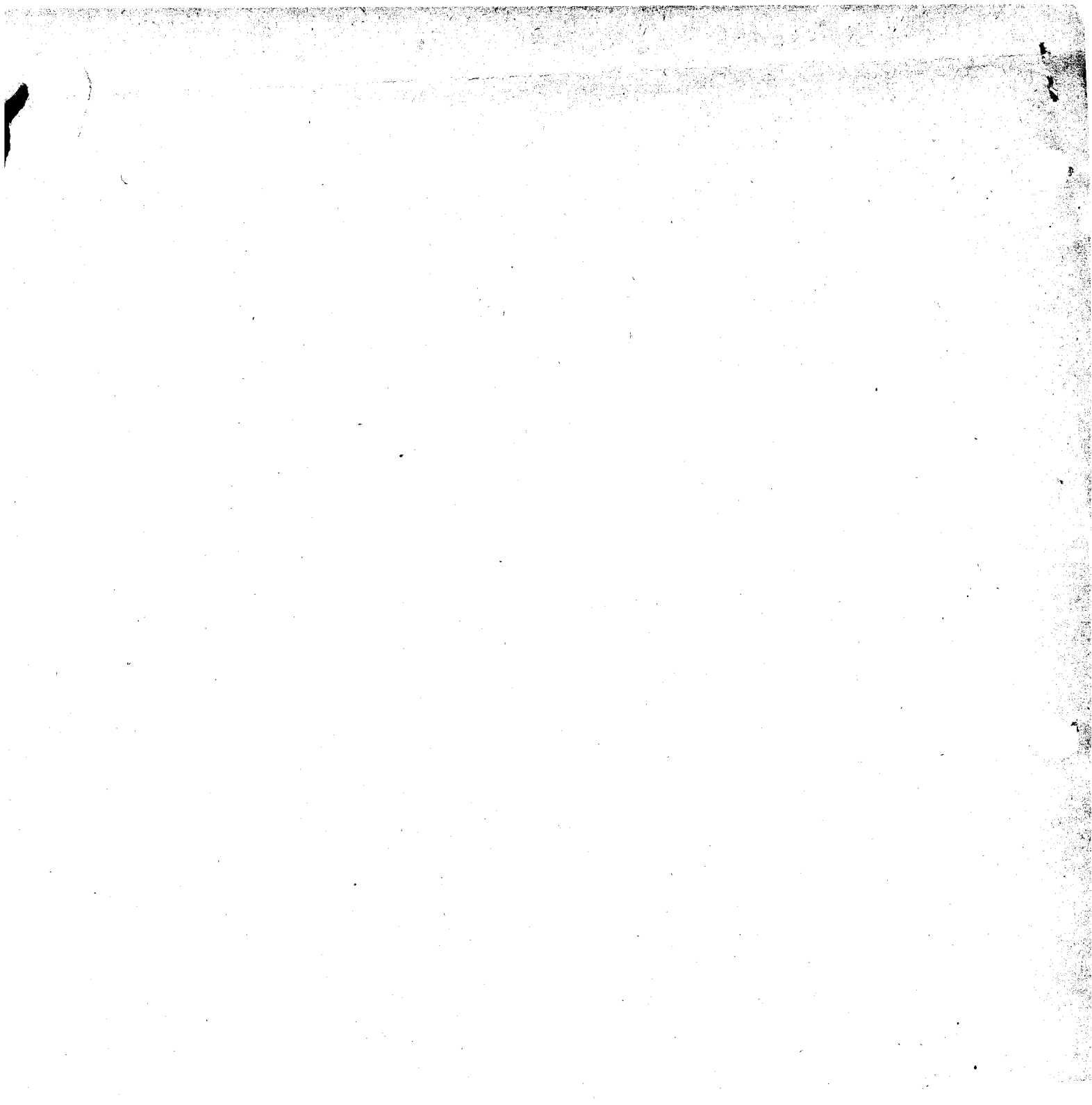
THE ITALIAN AND GERMAN DELEGATIONS ALSO GAVE EXPLANATIONS OF THE COLLISION EXPERIMENTS INVOLVING THE STUDY OF THE STRUCTURE TO BE INCORPORATED IN THE HULL CONSTRUCTION FOR THE PROTECTION OF THE CONTAINMENT VESSEL OF AN ATOMIC REACTOR IN CASE OF COLLISION.

#### THE ASSOCIATION CONTRATS

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ONE OF THE CONTRACTS IN COURSE WITH THE GKSS CONCERN FOR THE GENERAL RESEARCH INTO SPECIAL PROBLEMS OF DESIGN AND OPERATING REACTORS AT SEA AT THE GEESTHACHT CENTRE NEAR HAMBURG. EURATOM IS CONTRIBUTING 60 0/0 OF THE COST OF THE RESEARCH. THE MAIN SUBJECTS OF EXPERIMENT AT GEESTHACHT ARE SHIELDING PROBLEMS AND THE EFFECTS OF THE MOVEMENT OF A SHIP ON REACTOR OPERATIONS. THE LATTER EXPERIMENTS INVOLVE THE USE OF A 'SCHLINGERSTAND' ('ROLLING STAND') TO SIMULATE THE ROLLING AND HEAVING OF A SHIP. EXPERIMENTAL WORK AT GEESTHACHT IS ALSO BEING CARRIED OUT FOR AND IS CLOSELY LINKED WITH EURATOM'S TWO OTHER MARINE PROPULSION RESEARCH PROJECTS, AND THE 'SCHLINGERSTAND' IS ALSO BEING USED FOR TWO OTHER GERMAN PROJECTS WITH WHICH EURATOM IS NOT DIRETLY LINKED. THE SHIELDING EXPERIMENTS HAVE BEEN UNDERTAKEN IN PARALLEL WITH THOSE AT THE ITALIAN SALUGGIA CENTRE, THE RESULTS OF ONE SET OF EXPERIMENTS BEING USED TO CONFIRM THE FINDINGS OF THE OTHER. THE THEORETICAL PART OF THIS WORK IS ALSO BEING PERFORMED BY THE R.C.N. AND EURATOM'S ISPRA ESTABLISHMENT.

A SECOND ASSOCIATION CONTRACT IS WITH THE DUTCH R E A C T O R C E N T R U M N E D E R L A N D (RCN), THE WORK BEING PERFORMED MAINLY AT PETTEN IN ASSOCIATION WITH EINDHOVEN TECHNICAL UNIVERSITY, THE SUBJECT OF RESEARCH BEING THE PROBLEMS ASSOCIATED WITH THE DESIGN OF AN ADVANCED PWR TYPE REACTOR FOR SHIP PROPULSION.



A THIRD IS WITH THE ITALIAN FIAT AND ANSALDO CONCERNS WITH THE SUPPORT OF THE CNEN (COMITATO NAZIONALE PER L'ENERGIA NUCLEARE). THE FIRST STAGE OF THE RESEARCH WAS DEVOTED TO A COMPARISON OF THE RELATIVE MERITS OF TWO TYPES OF PWR (NATURAL AND FORCED CIRCULATION) AND TWO TYPES OF BOILING WATER REACTORS (BWR) (DIRECT AND INDIRECT CIRCULATION) FOR THE PROPULSION OF A LARGE TANKER. WITH THE SELECTION OF THE FORCED CIRCULATION PWR AS THE MOST PROMISING THE FIRST STAGE OF THE RESEARCH HAS BEEN COMPLETED. PLANS FOR THE EXECUTION OF THE SECOND STAGE OF THE CONTRACT HAVE BEEN PREPARED, THE EXTENSION OF THE CONTRACT ITSELF STILL BEING UNDER DISCUSSION.

NEGOTIATIONS ARE PENDING CONCERNING A POSSIBLE EURATOM PARTICIPATION IN THE CONSTRUCTION OF THE REACTOR TO BE INSTALLED IN THE GKSS SHIP.

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