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STEVE WALKER SUMMARY RESUME

QUALIFICATIONS M.A.(Cantab), M.Sc. , MRINA,
C. Eng., Eur. Ing.
Professional experience 35 years Offshore Engineering

- Dynamic Analysis – compliant structures, shock, seismic, impact, vibration and underwater explosions
- IT and engineering support for Insurance claims and litigation.
- Naval Architecture – motion and transportation analyses
- Fire and Explosion Hazard Management
- Fire and Explosion Loading and Response
- Environmental loading, Reliability, Statistics
- Jacket Structural Design, Fatigue Analysis, Defect Assessment
- Safety and Risk Analysis
- Platform Abandonment
- Software Development



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Publications

A list of publications is included at the end of this resume, including the book 'Dynamic Analysis of Offshore Structures'. A CV and most publications by Steve may be found on the Logical Software Ltd. web site:- <http://www.software-web.com/cvsteve.htm>

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GENERAL SUMMARY

Steve Walker has 35 years experience in the conceptual, detailed analysis and computer simulation of environmental loads and responses of offshore structures For the last 20 years he has specialised in Safety, Hazard Management and Consequence Assessment for fires, explosions and the management of toxic releases from sour plant.

Since graduating, Steve has published 67 papers and two books in the offshore and computing fields. He has also developed finite element structural analysis packages and stability, motion response and fatigue analysis software.

As part of his involvement in fire and explosion assessment, Steve has been involved in generating codes, standards and Guidance for API, UKOOA/HSE, BP and ISO.

As part of his commercial and legal support activities, Steve has been active in the examination of Safety issues and Design verification for the resolution of large insurance claims. He has also been involved in the assessment of operating procedures, forensic engineering, framing of witness questions for depositions to Court and the preparation of software for negotiation purposes.

STEVE WALKER - DETAILS OF EXPERIENCE

AGIP KCO

HSE Group, Full field development (FFD) Kashagan field HSE

October 2006 – Present

The giant Kashagan field is in an environmentally sensitive part of the Caspian sea with high reservoir pressures and with sour gas (H₂S) at 15%. This part of the Caspian is Ice covered in Winter. The development will produce 1.5 million barrels per day in full production.

During concept selection (to November 2007) the project team has selected novel contained process solution founded on rock islands.

Responsible for engineering safety aspects of fires, explosions and toxic releases. Development of QRA rule sets for contained toxic process plant by consequence analyses relating to toxic gas dispersion, fire loading/response, risk management of internal explosions.

Development of systems to manage compartment toxic gas releases, HVAC and ignition prevention.

Other duties include, review of engineering design documents, development and maintenance of the hazards and effects register the basis of the Shell 'HEMP' system and QRA analysis of the production 'hubs' and minimum facility well-head platforms.

Atkins MSL

April 2006 – October 2006

AGIP – Kashagan Design of explosion proof enclosures

Project Manager of this £0.25 million, 3 month project to design explosion-proof enclosures for the process facilities. The sour (H₂S) nature of the gas at the Kashagan field has meant that a re-assessment of the layout of the field has been necessary to reduce the operating risk and availability of the planned facilities. One solution was to enclose the process units consisting of pile supported barges, pre-assembled units and modules founded on artificial islands. These enclosures must contain gas releases, fires and explosions as well as protecting plant under maintenance from the impact of these events on neighbouring enclosures.

The project team designed a number of enclosures to resist overpressures up to 8 bar to a level of detail suitable for FEED. Design and analysis of the enclosures was performed using SACS and ABAQUS. Constructability, transportation and installation issues were also addressed leading to cost estimates for this solution.

BCL - Client confidential

2001 - present

Steve has been responsible for the examination of the Safety, Management and Operational issues resulting in loss and subsequent insurance claims.

Sinking of the P36 semi-submersible production platform offshore Brazil.

2001 – 2006

For this dispute between the Operating and Construction Insurers, Steve acted for the Design Contractors and construction insurers. It was necessary to examine all the design documentation in

order to assess Safety and Operational issues along with documentation of events leading up to the loss.

The activities undertaken during the four years of the project included:-

- Rebuttal of Plaintiff's claims and preparation of the defence of the Design.
- Examination of P&ID's and Operating procedures including the performance of a HAZOP of the relevant process systems.
- Examination of compliance of the Design with the appropriate codes and standards including hazardous area classification regulations applicable offshore Brazil.
- Use of the relevant Process Design codes to verify details of the design.
- Examination of the staff competence, management, maintenance and Operating procedures.
- Verification of the instrumentation systems and their operation before and during the incident.
- Verification of the vessel design from the point of view of stability, ballast, fire response, maintenance and mitigation systems
- Generation of a document database for document retrieval, identification of missing information, recording of received documents.
- Examination and classification/comparison of witness statements for consistency.
- Forming of deposition questions for the Brasoil management and operations staff on behalf of the Design contractors and Design Insurance underwriters.

Steve attended and presented at the dispute resolution meeting for this claim.

Dispute relating to coating failure on the Sable Tier 1 Platforms.

2003 - 2006

Engineering drawings were used to rigorously calculate and record the areas of the structural elements (members and plates) for each platform. An assessment of the severity and extent of damage sustained by area was performed from the photographic evidence. All the above information was brought together in an interactive database to enable negotiations to proceed.

The bottom line costs/durations and manpower requirements were derived using a purpose built cost model.

Nigeria – damage to swamp facilities

2004 - 2007

Following wilful damage to a number of oil/gas installations in the Niger Delta region, Atkins MSL was engaged to perform the following activities:-

- Engineering assessments – assessment of the status of the equipment items before and after the civil action and during on-going repairs.
- Inclusion of information relating to the process and instrumentation systems.

These activities have involved the generation of a number of linked equipment databases for each installation to aid in costing, inspection, condition assessment and repair.

Semi-submersible drilling rig – thrusters repair

2003

Following damage to a semi-submersible and claims for two sets of repairs and loss of hire revenue, the scope was to identify the costs associated with the necessary repairs, to the exclusion of costs associated with maintenance, betterment and unnecessary support services.

A 'Negotiation Spreadsheet' was developed to enable a flexible interpretation of the information available and designed to allow the loss adjusters to examine the options for apportioning the claimed costs during subsequent discussions with the assured.

Sable – delayed start up claim

2005

Evaluation of the lost profits sustained by a Sable partner resulting from delayed start up of production. Cost models were developed to estimate the lost profits under a number of 'start of production' assumptions.

MSL Engineering Limited

2000 – April 2006

HSE/BP - Response Spectra

Steve managed the project to develop Explosion Response Spectra. The main Objective was to derive equivalent static Design pressures for sizing main structures and barriers. The HSE have supplied all the Spadeadam explosion test results and BP have supplied the corresponding FLACS simulations.

UKOOA/HSE – FAB - Responsible for editing and assembling the new Part 1 Guidance “Guidance on design and operational considerations for the avoidance and mitigation of explosions”

API - Involved in the development of the new Recommended Practice for the Design of Offshore Facilities against Fire and Blast Loading ‘API RP 2FB’ from the BP Guidance below.

BP – Sole author of the document ‘Guidance for the protection of offshore structures against fires and explosions’ for use by BP worldwide. This was adopted as the basis document for the API RP 2FB on fire and Blast named above.

BP – Clair – Explosion assessment review.

BP – Holstein SPAR – Explosion and fire hazard assessment.

Exxon – ASABO - Assessment of three platform complex in Nigeria for explosion response.

Minerals Management Service (MMS) of the US Department of the Interior.

MMS commissioned MSL to coordinate an international technical workshop on fires and blast considerations in the design of offshore facilities. Industry sponsors (oil and gas companies, regulatory authorities, classification societies, design houses) participated in the workshop, which was held in Houston, Texas over the period June 12-14, 2002. Steve mapped out the conference structure/subject matter and generated the prototype web site for the event.

ISO - Involved in the recent development of the ISO Standard ISO 19901-3 ‘Topside Structures’ Section 7.10 ‘Accidental actions’ (to December 2003)

UKOOA/HSE - Involved in the development of the Part 2 Guidelines – “Guidance on design and operational considerations for the avoidance and mitigation of fires”

CREA Consultants

1999 - 2000

HSE - Monitoring of the structural response of the Spadeadam test rig to explosion loads.

This project involved the design of the sensor system to measure high and low frequency structural response and the indirect measurement of vented gas velocities in the Phase 3b tests performed in September 1999.

Odebrecht - SLP Engineering

1997 - 2000

Technical Consultant

HSE - The interpretation of Spadeadam test results. - Phase 1.

Project Manager with Century Dynamics Phase 1 involved a review of the experimental results and the development of a scope of work to interpret and simulate the results of selected experiments.

SLP Engineering

1991 - 1997

Shell Shearwater – Design of Cabins module to resist explosions.

Shell Shearwater – Riser jacket - installation analysis.

Conoco MacCulloch - flare boom design and topside analysis.

Elf Enterprise Claymore - Bridge transportation, wave slam and motions analyses.

Elf Enterprise Claymore - Accommodation and transportation motions.

HSE – Explosion capacity and response of tested panels using Bigg's method.

Steve Walker – Experience continued

Texaco - Captain – Explosion response analyses.

Shell - SPOTS Compression module - blast wall risk analysis.

HSE - Development of a method for the prioritisation of research needs.

Agip UK Tiffany - Transportation motion analysis.

HSE - Review of approaches to fire, blast and accidental loads.

Project manager - This project involved a review of codes including military, earthquake, Nuclear, Norwegian, and US codes in order to identify useful approaches for offshore application.

JIP - Composites Topsides Study - Review of safety issues

Responsible for the definition and examination of fire and explosion scenarios relevant to the safety of novel topsides designs involving the extensive use of GRP.

Various - Minimal facilities Platforms - Fire consequence analyses

Statoil - Siri Accommodation module - Consequence review of jet fire impact

Examination of the consequences ALARP load cases involving jet fire impingement on the TR for the Siri jackup platform

HSE - Sensitivity of response of offshore structures to fire and blast

Project Manager of a major study of the sensitivity of response of structures to explosions, fires and combined fire and explosion scenarios. The Direct Probability Method was developed and used to develop response surfaces and calculate directly probabilities of failure and other reliability measures. These measures were used to rank the resistance variables in order of importance.

Connemara FPSO - Motion loads and blast response

Shell Galleon - Pile/leg impact monitoring and simulation

Conoco Boulton - Spectral wind response analysis

Britannia - Pipeline covers impact analysis

Elf - Tiffany - helideck vortex shedding fatigue calculations

Arco Trent and Tyne - Design of flare vents against wind and transportation loads

Shell Leman 'F' - Conductor reclamation, shock and fatigue investigation

Elf Enterprise Caledonia Claymore - dropped object studies

Agip UK Tiffany - Severe shock studies, explosions and ship impact

Marathon Ireland Kinsale - Identification of wind induced vortex shedding fatigue

E.C. GRP Caissons - Vortex shedding loads and response

J.I.P. PATC SLP/John Brown - Platform abandonment explosion loads

BP/Shell/Unocal - Seabed stability of debris

Unocal Britain Heather abandonment - toppling dynamics

HSE – Project Manager -The fatigue resistance of watertight jackup compartments

Marathon Ireland Kinsale Platforms - Blast pressures and blast consequence analysis

Elf Enterprise Claymore - Dropped object study

Agip UK Tiffany - Severe shock studies, explosions and ship impact

B.P. Engineering

- Blast and fire resistance studies
- Forties - Blast resistance capacities
- Thistle - Fire loads and response, blast response
- Buchan - Fire loads
- Clyde - Fire and blast response, response to projectiles
- Magnus - Fire response

Shell - Risk based inspection strategy study

Elf Enterprise Claymore Accommodation Platform - Crane pedestal fatigue

Spirit of Columbus semisub - Payload in 1000m

Rasmussen FPSO - Motion response characteristics, lifted object impact

HSE – Project Manager - Classification of semi-submersibles conversion to FPS

Wimpey Offshore

1987 - 1991

Analysis Group Leader

TRANSPT – Developed Software for calculation of transportation loads

EXPL – Developed Software for the calculation of underwater explosion and bubble pulse loads

British Gas Allington - Fire and explosion consequences of gas release

VORTEX - Software for calculation of vortex shedding loads and response

Shell -Brent- Prepared 'Explosion Protection - Project Specification'

B.P. Miller - Barge motions for accommodation module transportation

B.P. Bruce - Transportation loads for accommodation module

CEGB Sizewell B - Concrete culvert installation loads and response

Shell Leman - Accommodation module removal lift analyses

Shell - Brent- Blast assessment of Brent 'D' cellar deck

Amerada Hess Rob Roy - Blast screen projectile and blast load assessment

BP Artificial Lift Consortium - Barrier wall design

Shell Brent 'C' and Spar - Blast wall and explosion relief review

BP Artificial Lift Consortium - Machinery Vibration Study

Chevron Alba - Conceptual design dynamics studies

B.P. Forties - Platform toppling feasibility study

Occidental - Toppling of Piper Alpha, toppling dynamics and underwater explosion loads

Chevron Alba - Conceptual design of steel and concrete platform options

John Brown Engineers and Constructors Ltd (JBOS)

1984 - 1987

Advanced Analysis Group Leader, responsible for the following:

Mobil Beryl 'B' - Dynamic re-analysis of topsides and deck piling loads

Statoil Veslefrikk - Vortex shedding checks

BP Clyde - Machinery vibration checks

BP South East Forties - Dynamic analyses

Shell Eider - Dynamic analyses - vortex shedding and finite element analyses

Statoil Statpipe - Vortex shedding analyses

USSR Sakhalin - Earthquake, ice loading, installation and response analyses

Shell Brent 'C' - Defect assessment for column transition joints

British Gas - Hydrodynamic loading and F.E. analysis of hybrid concrete/steel platform

Engineers India Godavari Basin - Fatigue and In-place analysis

Agip Bouri - Fatigue and earthquake analyses

Agip Bouri - Strength and fatigue of SPM/Tanker system

Bechtel UK Limited

1983 - 1984

Hamilton Bros. Argyl/Duncan - Naval architectural aspects of semisubmersible conversion to an FPS

Interig Limited

1982 - 1983

Principal Naval Architect

Cluff Oil/Interig - Semiflex compliant semi-submersible design

Structural Dynamics Ltd. - Senior Consultant Engineer

1979 - 1981

Occidental Claymore - Dynamic in-place analyses

Statoil - Alexander Kielland - Attempted uprighting ballast sequence simulations

Foster Wheeler - Articulated riser system/semisubmersible motions simulation

Stone and Webster - Response of fermenter vessel to internal hydrodynamic loads

Phillips Maureen - Machinery Vibration Analyses

University of Southampton - Dept. Civil Engineering

1976 – 1978

Research Fellow (Offshore Structures)

Imperial College London

1973 – 1976

Research Assistant

Mullard Research Laboratories

1968 – 1969

Research Assistant

STEVE WALKER PUBLICATIONS

BOOKS

"Dynamic Analysis of Offshore Structures" C.A. Brebbia and S. Walker, Newnes-Butterworths, 1980.

"Boundary Element Techniques in Engineering" C.A. Brebbia and S. Walker, Newnes-Butterworths, 1980.

PUBLICATIONS

Steve Walker, Brian Corr, Roland Martland, 'Response Spectra for explosion resistant design and assessment', FABIG Newsletter, January 2007.

Steve Walker, Brian Corr, Vincent Tam, Roland Martland, Rashid Shahsavari, RR484 – 'Response Spectra for explosion resistant design and assessment', HSE Publications October 2006.

Steve Walker, Brian Corr, Vincent Tam, Roland Martland, Rashid Shahsavari, "Response spectra for explosion resistant design and assessment", OMAE2006-92512, OMAE Conference, Hamburg, Germany, June 2006.

Steve Walker, Brian Corr, Vincent Tam, Murray Shearer, "Response spectra for explosion loading and response", OTC 17242, Offshore Technology Conference, Houston, May 2005.

Steve Walker, Sirous Yasseri, "Exceedance Curves and the Definition of Load Cases for Explosion Assessment", Article 505, FABIG Newsletter, Issue 28, January 2004.

Steve Walker, Graham Morrison, "Progress on Guidance on Fires and Explosions", Paper 10, ERA Conference, Major Hazards Offshore, London, December 2003.

Authors as below, "Part 1 – Guidance on design and operational considerations for the avoidance and mitigation of explosions – Commentary", MSL Consortium report, C268900R007 Rev. 2, December 2002. (www.fireandblast.com)

Authors as below, "Part 1 – Guidance on design and operational considerations for the avoidance and mitigation of explosions – Main Guidance", MSL Consortium report, C268900R006 Rev. 2, December 2002. (www.fireandblast.com)

S Walker, Rod Bleach, Steve Carney, Greg Fairlie, Luke Louca, "New Guidance on the Design of Offshore Structures to Resist the Explosion Hazard", OMAE 2003, Cancun Mexico, June 2003.

S Walker, Brian Corr, Vincent Tam, J Bucknell, P O'Connor, "New Guidance on Fire and Explosion Engineering", OMAE 2002, Oslo, Norway, June 2002.

S Walker, "Guidance for the protection of offshore structures against fires and explosions", MSL Report for BP CH152R002 API Draft 1, November 2001.

Walker S., Corr B., Tam V., Bucknell J. and O'Connor P., "Simplified Approaches to Fire and Explosion Engineering", Paper 3.3.1, ERA Conference, 'Major Hazards Offshore', London 27-28 November 2001, ERA Report 2001-0575

S Walker, Greg Fairlie, "Interpretation of experimental results from Spadeadam explosion tests", OTO 2001/086, HSE Books, 2001.

S Walker, C Rogers, S. Medonos, "Analysis of structural response measurements – Phase 3B Spadeadam", OTO 55/2000, HSE Books, 2000.

S. Walker, Paper 7.6, "The design of a temporary refuge to resist an external blast", 'ERA Report 99-0808 - Safety on Offshore Installations' - Conference Proceedings, 30th November - 1st December 1999, London U.K.

OTO 1999 028, "Review of Approaches to Blast, Fire and Accidental Loads", S. Walker, ODB Consultants, HMSO, December 1999.

S. Walker, M. Howarth and R Martland, "Sensitivity of Response of Topside Structures to Fires and Explosions", OTO 97 043, HSE Publication, HMSO.

S. Walker et. al, the reference above is included in ERA Report 96-1072, "Offshore Structures - Hazard & Integrity Management - Conference Proceedings", March 1997.

FABIG Technical Meeting Notes, "Blast Resistant Design of Offshore Structures", SCI July 1997.

W.P.M. Mercx, P.C.J de Bruijn, Steve Walker, "Development of a lightweight blast walling system", Final report of the EU Contract TH/03322/89, SLP/TNO, December 1996.

S. Walker, M. Howarth and R Martland "Sensitivity of Response of Structures to Fires and Explosions", 5th Intl. Conference - Offshore Structures - Hazard and Integrity Management, London, 4-5 December 1996.

FABIG (Fire and Blast Information Group) Article R238, "Sensitivity Study on Structural Aspects of Fire and Blast (Phase 1)", Issue 16 May 1996.

S. Walker and N Tahan, "Dropped Objects - Impact Probabilities and Consequences", 4th Intl. Conference - Offshore Structures - Hazards, Safety and Engineering, London 12-13 December 1995.

S. Walker et. al, the two references below are included in ERA Report 94-0730, 'Offshore Structural Design - Hazards, Safety and Engineering - Conference Proceedings', June, 1995.

S. Walker and M. Klair, "The Escalation Consequences of Accidental Shock Loads", 3rd Intl. Conference and Exhibition - Offshore Structures Design - Hazards and Safety Engineering, London, 15 - 16 November 1994.

N. Tahan, R.W. Nicholson, S. Walker and D. Tandberg, "The Design and Testing of a Louvred Blast Relief System", 3rd Intl. Conference and Exhibition - Offshore Structures Design - Hazards and Safety Engineering, London, 15 - 16 November 1994.

FABIG (Fire and Blast Information Group) Article R139 - "A Rational Approach to Fire Consequence Assessment", Issue 9, June 1994 (with N.Tahan).

FABIG (Fire and Blast Information Group) Article R108 - "The Fire Resistance of Aluminium", Issue 7, November 1993 (with N Tahan).

FABIG (Fire and Blast Information Group) Article R73 - "Determining the Response of Protected Steel to Fire Loading", Issue 5, May 1993 (with N Tahan).

MTD Ltd, 1992, "Probability Based Fatigue Inspection Planning" (Modification of paper by H.O.

Madsen), The Marine Technology Directorate Ltd. London. ISBN 1 870553 08 X.

OTH 89 313 ISBN 11 413315 8 "Seabed Stability of Debris",

OTI 92 590 ISBN 0 11 882061 3 "The Use of Alternative Materials in the Design and Construction of Blast and Fire Resistant Structures", (with C S Hu).

Joint Industry Project on Platform Abandonment by in-situ demolition, "The use of Explosives", PATC Technical Report, March 1997.

S. Walker, J.R. Williams, "Engineering Aspects of Jacket Toppling as a means of Platform Abandonment", Proceedings Conference, 'North Sea Innovations and Economics' Institution of Civil Engineers, January 1993.

S. Walker, D. Rogers, B. Diab, N. Tattersall, "VBLAST - A Computer Program for the Design of GRP Blast Wall Systems", OMAE, Calgary, 1992.

S. Walker, C.S. Hu, B. Diab, J.R. Williams, "Assessment of the Blast Resistance of Offshore Topsides Modules", Proc. Seminar, Predicting the Consequences of Fire and Explosions, I.Mech.E., 14th May 1991.

S. Walker, C.S. Hu, J.R. Williams, "Assessment of the Blast Resistance of Offshore Topsides Structures", OTC 6636, Proc. Offshore Technology Conference, Houston, May 1991.

C.S. Hu, B. Diab, J.R. Williams and S. Walker, "The Use of Lightweight Materials in Blast and Fire Protection Systems", OTC 6638, Proc. Offshore Technology Conference, Houston, May 1991.

C.S. Hu, B. Diab & S. Walker, "The Use of Alternative Materials in Blast and Fire Resistant Structures", Proc. WEMT 1991, Offshore Operations Post Piper Alpha, Inst. Mar. Eng., London February 1991.

C.S Hu, J.R. Williams, S. Walker, "The Design of a Variable Draught Semi-submersible Floating Production Vessel", F.P.S. - Blueprints for the 90's, Monte Carlo, 1991.

"STAPLA - The Design of a Variable Draught Semi-Submersible Floating Production Vessel", European Offshore Mechanics Symposium, EUROMS - 90 Trondheim, Norway 20-22 August 1990.

"Offshore Decommissioning - Underwater Explosion Loads", Decommissioning 1990, Second International Conference, 24-26 April 1990 UMIST.

"Deconstruction of Steel Platforms - Technical Aspects" Offshore Abandonment and Removal Conference OAR90, 27-29 March 1990, Aberdeen Exhibition and Conference Centre.

"STAPLA - A Variable Geometry Semi-Submersible for Floating Production" Proc. International conference on Floating Production Systems for the 1990's. Royal Institution of Naval Architects, November 1988.

"Spectral Methods in Offshore Design", Proc, seminar "What's wrong with Morison's Equation? Spectral Methods in Offshore Design", Society for Underwater Technology, Inst. Mech-Engrs. April 1988. (Conference organiser).

"Economic Dynamic Analysis of Offshore Structures", Proc. Conference 'Energy sources Technology Conference and Exhibition', ASME, Dallas, February 1987.

"Piled Vs Gravity Offshore Structures for Seismically Active Arctic Regions", Proc. Conference. 'Energy Sources Technology Conference and Exhibition', ASME, Dallas, February 1987.

"The Design of Deepwater Jackets: Dynamic Effects" Proc. Conference 'Developments in Deeper Waters', RINA, London, October 1986.

"A Compliant Semi-submersible for Offshore Production" RINA Symposium, Semi-submersibles - The New Generations: March 1983.

"On the Hydrostatics of Floating Bodies with Articulated Appendages". Trans RINA, July 1983, Volume 125 pp 229-236.

"Approximate Fundamental Solutions and Alternative Formulations", Proc. Conference 'Boundary Element Methods' 3rd International Seminar in BEM. Ed. C A Brebbia, Springer-Verlag Berlin, Heidelberg, New York.

"Project to Upright the Alexander L Kielland" Proc. OTC 4027. Houston, May 1981.

"Technical Systems Used in the Attempted Salvage of the Alexander L Kielland", Proc. Conference Acoustics '81', Newcastle 1981.

"Fundamental Solutions" Chapter in: Progress in Boundary Element Methods, Volume 1. Ed C A Brebbia, Pentech Press.

"Vortex Shedding Forces and the Fatigue Analysis of Offshore Structures (2)", EUROPEC 80, London, 21-24 October.

"Vortex Shedding Forces and the Fatigue Analysis of Offshore Structures" Proc. International Conference on recent Advances in Structural Dynamics, July 1980, Southampton ISVR.

"Boundary Elements in Fluid/Structure Interaction Problems (2)" Applied Mathematical Modelling, July 1980.

"Boundary Elements in Fluid/Structure Interactions Problems" in 'New Developments in Boundary Element Methods' Ed. C A Brebbia (1980) CML Publications.

"Harbour Resonance Problems Using Finite Elements" in 'Offshore Structure Engineering' Ed. C A Brebbia, C L Carneirs and A J Ferrante (1979).

Conference Report: Fourth International Conference on Port and Ocean Engineering (Newfoundland, Canada, 26-30 September 1977), Applied Ocean Research, January 1980.

"Introduction to Boundary Element Methods", Proc, First International Seminar on recent Advances in Boundary Elements, Southampton, 5-7th July 1978.

"Harbour Resonance Problems Using Finite Elements" Advances in Water Resources, Volume 1, Number 4, June 1978.

"Simplified Boundary Elements for Radiation Problems" (Research Note), Applied Mathematical Modelling, Volume 2, Number 2. June 1978.

"General Formulation of Approximating Techniques in Engineering Sciences", System Structures in Engineering - Economic Design and Production, Ed.O. Bjorke and O.I Franksen, Tapir 1978.

Conference Reports: International Conference on Applied Numerical Modelling (Southampton, 11-15 July 1977) Advances in Water Resources, Volume 1, Number 2, December 1977.

"Wave Oscillation Problems in Deep and Shallow Waters", Chapter in Offshore Structures Engineering 1, Ed. F.L.L.B. Carneiro, A.J. Ferrante, C.A. Brebbia - Gulf Publications, 1979.

"Wave Oscillation Problems in Deep and Shallow Waters" Proc, International Conference on Offshore Structures Engineering, Rio De Janiero, September 1977, Pentech Press

