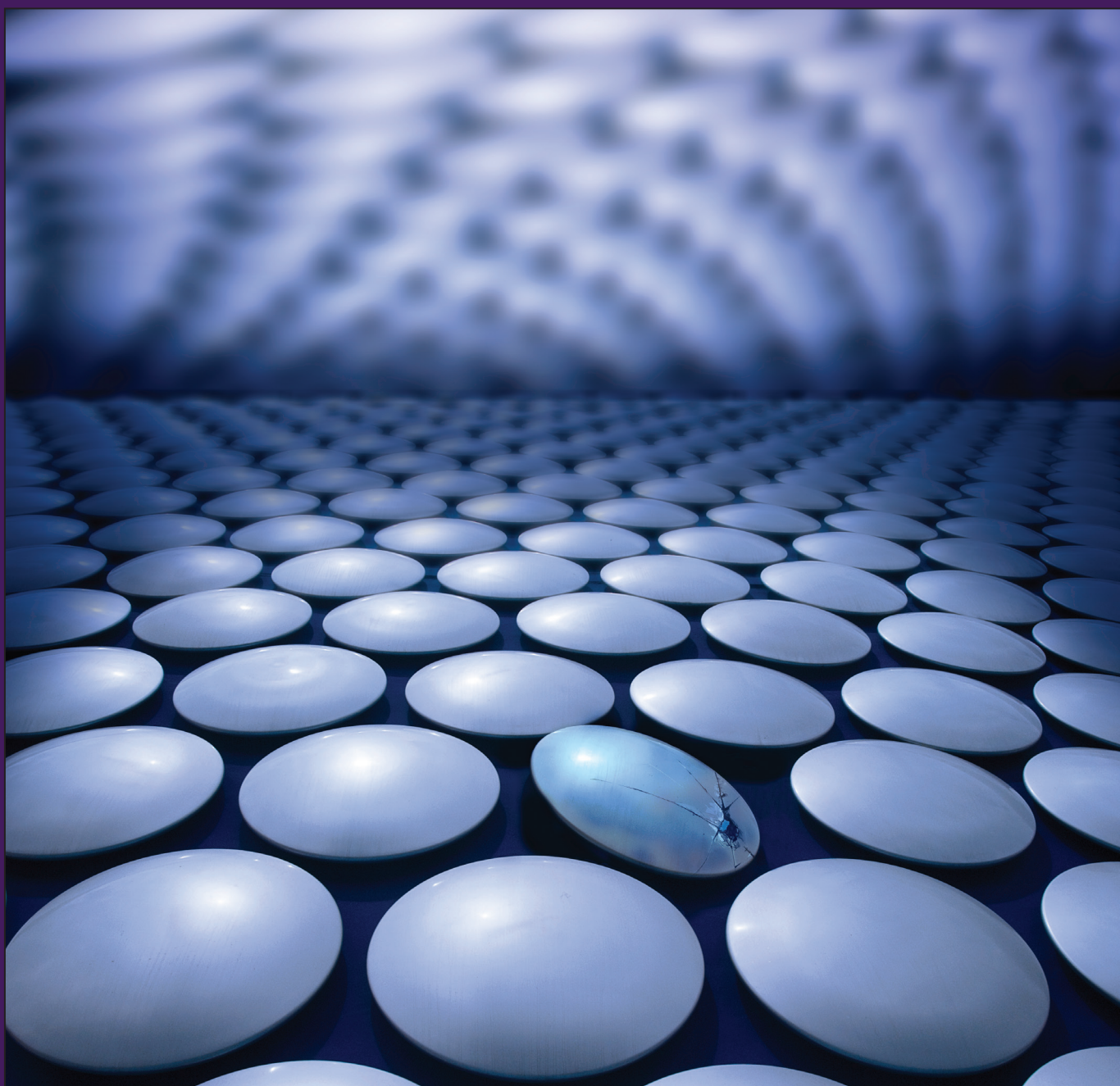


ASSET INTEGRITY FOR DRILLING OPERATIONS



ASSET INTEGRITY FOR DRILLING OPERATIONS



Asset Integrity for Drilling Operations
2nd Edition

ISBN: 978-0-986-4401-4-4

Copyright © 2015 International Association of Drilling Contractors (IADC), Houston, Texas.
All rights reserved. No part of this publication may be reproduced or transmitted in any form
without the prior written permission of the publisher.

International Association of Drilling Contractors
10370 Richmond Avenue, Suite 760
Houston, Texas 77042
USA

ASSET INTEGRITY FOR DRILLING OPERATIONS

TABLE OF CONTENTS

Preface	1
Ensuring Reliability, and Proving It	
<i>By Linda Hsieh, Managing Editor with reporting by Jesse Maldonado, Associate Editor.</i>	2
3-Year Study Concludes Industry Needs Stronger Focus On Asset Integrity	
<i>By Taf Powell, Executive Vice President, Policy, Government & Regulatory Affairs, IADC.</i>	10
Life Extension For Mobile Offshore Units Requires Robust Management:	
How Old Is Too Old?	
<i>By Gerhard Ersdal, Arne Kvitrud, Petroleum Safety Authority Norway;</i>	
<i>Wayne Jones, Malcom Birkinshaw, UK Health and Safety Executive.</i>	16
NOPSA: Operators Must Rigorously Apply Existing Asset Integrity Management Techniques	
<i>By Facility Integrity Team, National Offshore Petroleum Safety Authority (NOPSA)</i>	20
Stakeholders Must Understand, Share Asset Integrity Responsibilities, Dutch Regulators Say	
<i>By Jan de Jong, Jos Marx and Michael de Vos, State Supervision of Mines</i>	25
Communication And Collaboration Make The Difference In Asset Integrity	
<i>By Katie Mazerov, Contributing Editor</i>	29
Winslett: Process Safety Management Ensures Asset Integrity In Offshore Lifting Operations	
<i>By Katherine Scott, Editorial Coordinator.</i>	31

Preface

By Steve Colville, IADC President & CEO

Asset integrity and reliability is the most fundamental and possibly the most challenging aspect of the drilling industry's business. Asset integrity is defined as the ability of an asset to perform its required function effectively and efficiently while protecting health, safety and the environment. It is the means of ensuring that the people, systems, processes and resources that deliver integrity are in place, in use and will perform when required, over the entire lifecycle of an asset.

It is a topic that remains of considerable interest to the regulatory groups that make up the International Regulators Forum (IRF). In December 2007, this group convened in Miami, Fla., to focus attention on asset management and safety in the offshore industry. They were challenged by IADC to publicize their perspective on asset management and did so in a series of articles that appeared in *Drilling Contractor* throughout 2008 and 2009. These articles, plus other asset integrity-related articles that have been published in *Drilling Contractor*, are re-formatted for this publication. They are intended to promote further interest and encourage dialogue and action in addressing the variety of concerns raised by the regulatory authorities.

At IADC, we share the IRF's interest in the topic of asset integrity. We continuously engage with government policy makers, regulators and producers to sensibly influence new policies, to advocate better regulatory practices to enable drilling contractors to perform to their best and to give stewardship to the values of our industry. This active leadership creates trust and gives the space for us to improve reliability and asset integrity in our rigs, people and equipment. Working together, IADC's members are developing and creating the solutions to industry's needs that will propel us forward to a successful future.

About IADC: The International Association of Drilling Contractors

Since 1940, the International Association of Drilling Contractors (IADC) has exclusively represented the worldwide oil and gas drilling industry. Membership is open to any company involved in oil and gas exploration, drilling or production, well servicing, oilfield manufacturing or other rig-site services. IADC's vision is for the drilling industry to be recognized for its vital role in enabling the global economy and its high standards of safety, environmental stewardship and operational efficiency. Its mission is to catalyze improved performance for the drilling industry.

About IRF: The International Regulators Forum

The International Regulators Forum (IRF) is a group of ten regulators of health and safety in the offshore upstream oil and gas industry. It exists to drive forward improvements in health and safety in the sector through collaboration in joint programmes, and through sharing information.

IRF participants are:

- National Offshore Petroleum Safety and Environmental Management Authority, Australia (NOPSEMA)
- Petroleum Safety Authority, Norway (PSA)
- US Bureau of Safety and Environmental Enforcement (BSEE)
- Danish Working Environment Authority (WEA)
- National Hydrocarbons Commission, Mexico (CNH)
- New Zealand Department of Labor (DOL)
- Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) and Canada-Nova Scotia Offshore Petroleum Board (CNSOPB)
- Brazilian National Petroleum Agency (ANP)
- The Health and Safety Executive, Great Britain (HSE)
- State Supervision of Mines, the Netherlands (SSM)