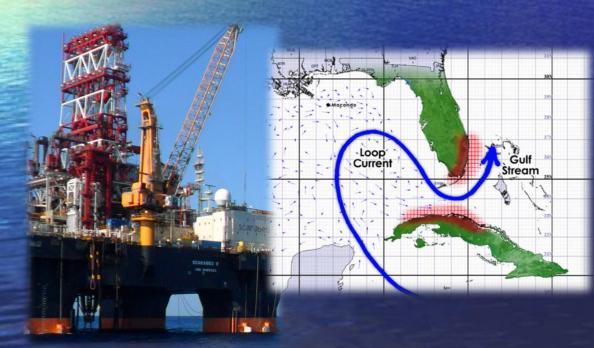
# The Evolution of US-Cuba Cooperation in Offshore Oil Spill Prevention and Response







Cuba began its offshore drillling activity ~ 20 years ago. (2004 Yamagua Well). No activity in recent years

 US offshore activities for almost 8 decades. (1938 first production of offshore oil took place in the Gulf of Mexico. First deepwater discovery came at Shell Oil Company's Cognac field in 1975)

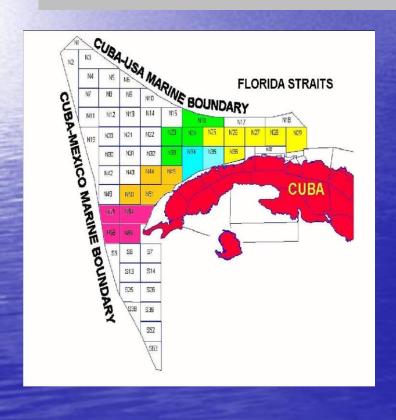
### DIFFERENT SAFETY CONCEPTIONS AND EXPERIENCES



- Regulatory regime based on Safety Case
- Strong environmental regime in place
- Lack of experience in offshore activities in domestic waters

- Prescriptive approach to regulations
- Mature and well developed environmental regime
- The greater operational experience worldwide.
- Excess of confidence in oil industry

# The Evolution Deepwater Oil Drilling Safety Regulation in Cuba: The three Major Stages



- Before Yamagua Well (2002 – 2004)
- After Yamagua Well (2005 – 2010)
- After Macondo (2010 - present time)

#### Major hazard accident prevention



Overconfidence Complacency Denial Danger Collapse

Frequency of occurrence: 1/ decades!

Testimony of IADC Vice-president Alan Spackman on IADC's experience in the implementation of Performance-Based Regulation in the form of a Safety Case

**June 2010** 

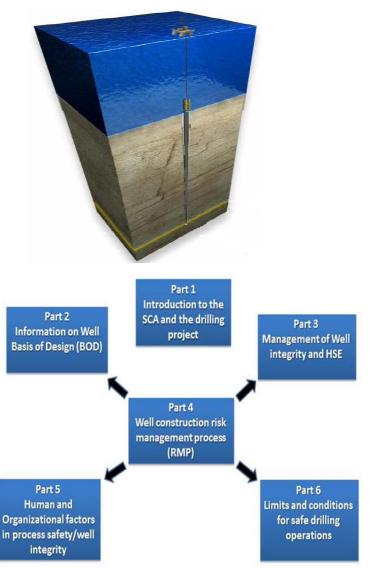


HOUSE
SUBCOMMITTEE
ON ENERGY AND
MINERAL
RESOURCES



Other countries that already mandate use of a Safety Case or HSE Case for offshore oil and gas activities include: Cuba......

## The Cuban Response to Macondo: The Safety Case Addendum



- Focuses on oil spill prevention
- Extends the Safety Case approach to well integrity aspects of drilling operations
- Ensures bridging between the Well Operator and the Drilling Contractor & subcontractors

# THE CONTEXT FOR THE INITIAL CONTACTS

Cuba's determination to reinitiate offshore drilling activities (4 exploratory wells)

MEXICO

CUBA

MARINE

BOUNDARY

MEXICO

CUBA

MARINE

MARINE

MEXICO

MEXICO

MARINE

MARINE

MEXICO

The impact of Macondo disaster in oil industry worldwide



# 2010. Initial contacts First IADC delegation to visit Cuba

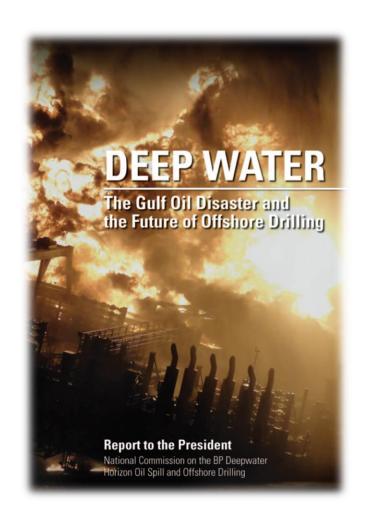


August 2010. An historical visit

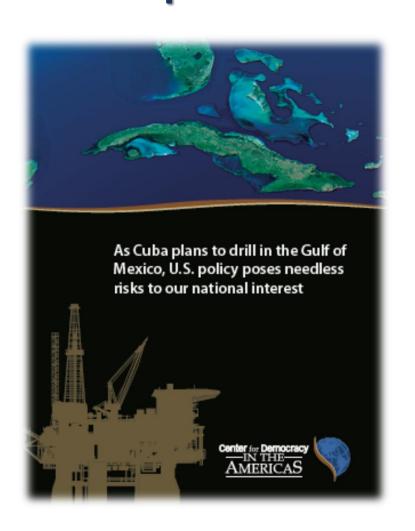
#### **2011: A DECISIVE YEAR**

### JANUARY OIL SPILL COMMISSION REPORT

"It is in our country's national interest to negotiate now with these near neighbors to agree on a common, rigorous set of standards, a system for regulatory oversight, and the same operator adherence to the effective safety culture called for in this report, along with protocols to cooperate on containment and response strategies and preparedness in case of a spill".



### FEBRUARY CDA's report on Cuba drilling and US policy



•embargo imposes real constraints on the government's ability to protect our nation against the ....consequences of an environmental disaster linked to drilling for oil

 embargo denies Cuba acces to US equipment for drilling and environmental protection



#### **MAY**

IADC Environmental Conference and Exhibition, Trinidad and Tobago.

OFAC Authorized IADC to invite a Cuban Delegation to attend a meeting outside US

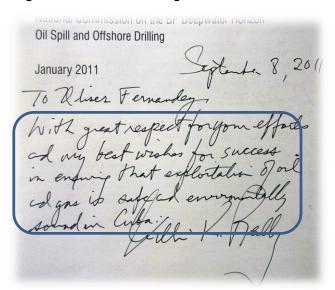
#### **SEPTEMBER**

IADC & EDF arranged visit of US Delegation including Co Chairman of Presidential Oil Spill Commission for DWH



#### William Reilly 's impressions



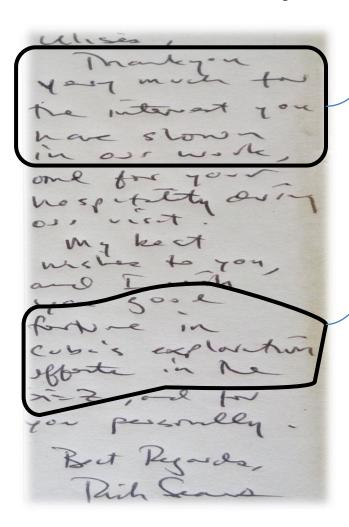


With great respect for your efforts and my best wishes for success in ensuring that exploration of oil and gas is safe and environmentally sound in Cuba

#### Richards Sears's impression







Thank you very much for the interest you have shown in our work

Good fortune in Cuba exploration effort in the EEZ

# OCTOBER HEARING OF THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE



TO EXAMINE THE STATUS OF RESPONSE CAPABILITY AND READINESS FOR OIL SPILLS IN FOREIGN OUTER CONTINENTAL SHELF WATERS ADJACENT TO U.S. WATERS.

By working through the International Maritime Organization, we've garnered support for a regional, multilateral seminar ... to which other Caribbean nations including the Bahamas, Jamaica, Cuba and Mexico for the purpose of discussing oil spill prevention and response issues.

**ADMIRAL BRIAN SALERNO** 

### DECEMBER 1st IMO Workshop







OPRC SEMINAR ON DEVELOPING NATIONAL PLANS FOR MARINE POLLUTION READINESS AND RESPONSE RELATED TO OFFSHORE UNITS AND REGIONAL COOPERATION.







 First encounter with US governmental agencies (USCG,EPA,BOEMRE,NOAA,DOS)

#### AAAS engagement

 December: A delegation of independent U.S. scientists, facilitated by the AAAS and the Cuban Academy of Sciences, traveled to Havana to engage in technical discussions with Cuban scientists.

# 2012: Subsequent IMO Workshops • Curacao (Willmstead) February 2012

Jamaica (Kingston) April 2012

Mexico (DF) August 2012

## EDF Report "Bridging the Gulf". June 2012





Flading Consum Ground on Divisormental and

Safety Preparedness for Offshore Of and Gas in Oaka

"Shared environmental resources at risk"

"The United States and Cuba should develop a bilateral agreement that maximizes protection for ecosystems in both countries."

### 2013: MTOP agreeded

Bahamas Workshop (95% agreed MTOP document)



### IADC Environmental Conference New York. April 2013

 By IADC invitation, Cuban delegation from CUPET, CITMA, former Cuba Interest Section in US attended the conference



#### 2 RELEVANT VISITS.

The interest in cuban regulatory regime continues.



Carol Browner. Director of the Office of Energy and Climate Change Policy 2009-2011

Former EPA Administrator

**Bob Graham co chair of the Oil Spill Presidential Commission** 

#### **CLEAN GULF CONFERENCES**

**2013 TAMPA** 

MTOP Meeting arranged by USCG

1<sup>st</sup> Multilateral Technical Visit November 15<sup>th</sup>, 2013 USCG Air Station- Clearwater, Florida **2014 SAN ANTONIO. TX** 

MTOP Meeting arranged by USCG

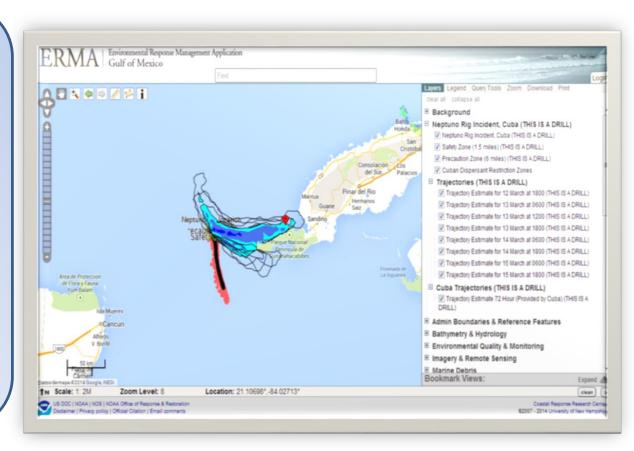


Results of Virtual Table Top Exercise presented by Cuba



#### VIRTUAL TABLE-TOP EXERCISE LESSON LEARNED

Use of NOAA's
ERMA Platform
proved to be a
highly useful tool
that permitted to
have similar
understanding



#### **QUICK EVOLUTION**

**Professional and** respectful

relationship (



**Achievement** of Practical Way for cooperation (MTOP)

Mutual Recognition of Competences





**Common Interest** 





Identification/Discovery

### Process safety research cooperation lessons

- The process safety science is still under development
- Knowledge is needed from other disciplines.
- Complex interactions between man-technology and organizations (the so-called "human factors") not yet fully understood.
- New comers often lack adequate resources but can make valuable contributions.
- It is imperative to coordinate efforts among countries in the GOM and the Caribbean Region.



### Governmental agreements

- Marine Potected Areas Nov 2015
- Joint Statement on Environemtal Protection Nov 2015
- Terrestrial Protected Areas and Wild Life Conservation
- Meteorology
- Seismology(December 2016)
- Twinning agreement between Cienaga de Zapata National Park and Everglades National Park

#### Last but not....

### OIL SPILL PREVENTION AND RESPONSE AGREEMENT



Havana January 9, 2017.

#### National Security Presidential Memo June 16, 2017

Sec. 2. Policy

It shall be the policy of the executive branch to:

... (f) Ensure that engagement between the United States and Cuba advances the interests of the United States and Cuban people. These interests include: ... advancing the understanding of the United States regarding the scientific and environmental challenges.

## 2017: 4 Major Joint marine scientific expeditions

 Regional connectivity study of the mesophotic reefs of Cuba, R/V Walton Smith, FAU, May 16 to June 14

 Collection of environmental data from the Gulf of Mexico from the northwestern coasts of Cuba, R/V Weatherbird II USF from May 10 to 25.

 Ocean acidification campaign in the Gulf of Mexico, R/V Ronald H. Brown, NOAA July 11 to August 16

## 2017: 4 Major Joint marine scientific expeditions (cont..)

 Survey the most protected and restricted marine area in all of Cuba "Gardens of the Queen" from the research vessel Alucia. It was the first non-Cuban vessel to be granted permission to conduct a comprehensive research program within during 23 days. (November).

# 2019: Bilateral Coordination Plan adopted

