CONFIDENTIAL INCIDENT REPORTING: *A Potential Pathway to More Effective Safety Systems and High Reliability in Oil and Gas*

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Introduction

PROBLEM: O&G industry is facing heightened safety risks due to:

- Sophistication of process technology and systems
- Public safety concerns and social license to operate
- Dwindling experienced workforce
- Rising costs
- Human resource demands

SUCCESSFUL MODEL: ASRS is celebrating forty years of success utilizing a confidential incident reporting system involving:
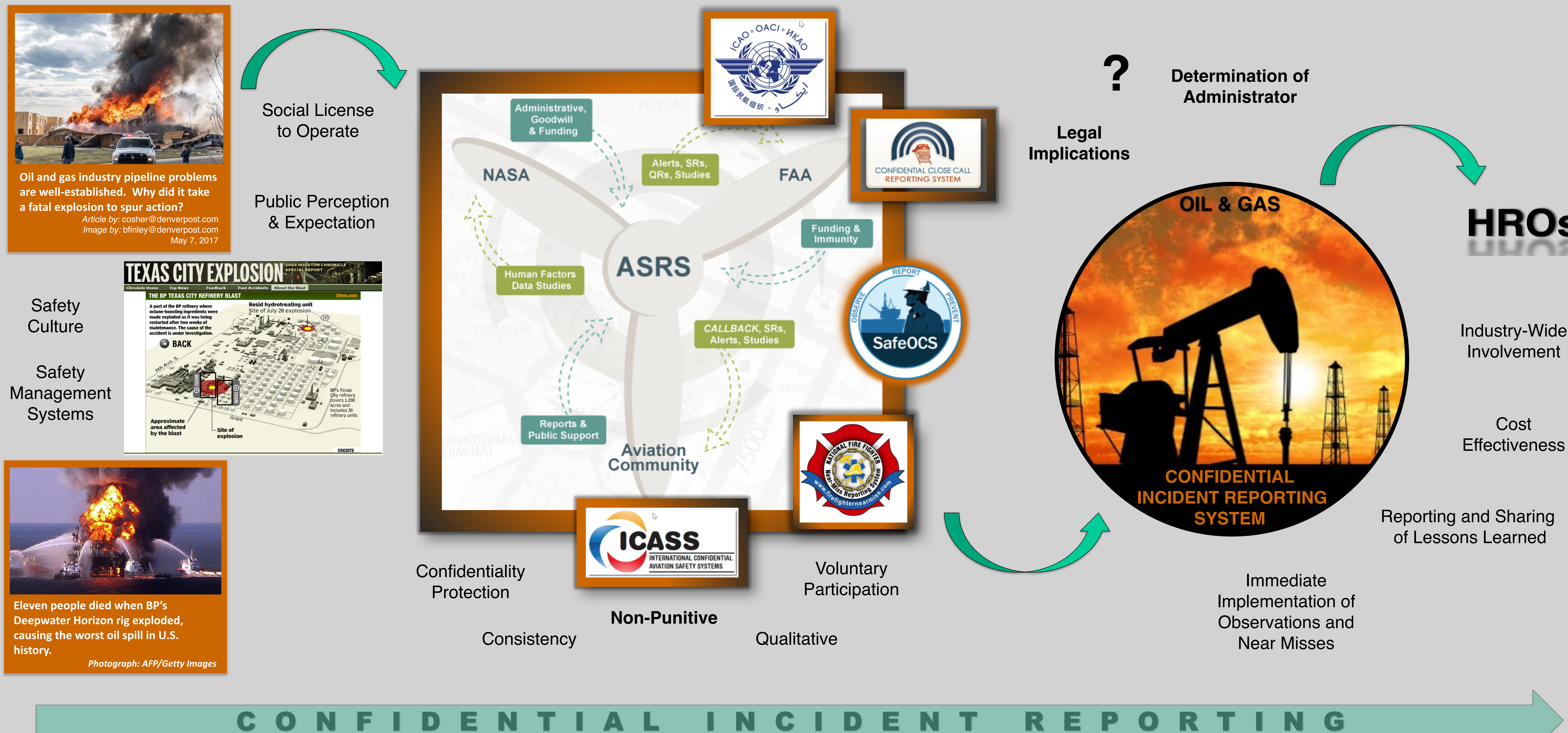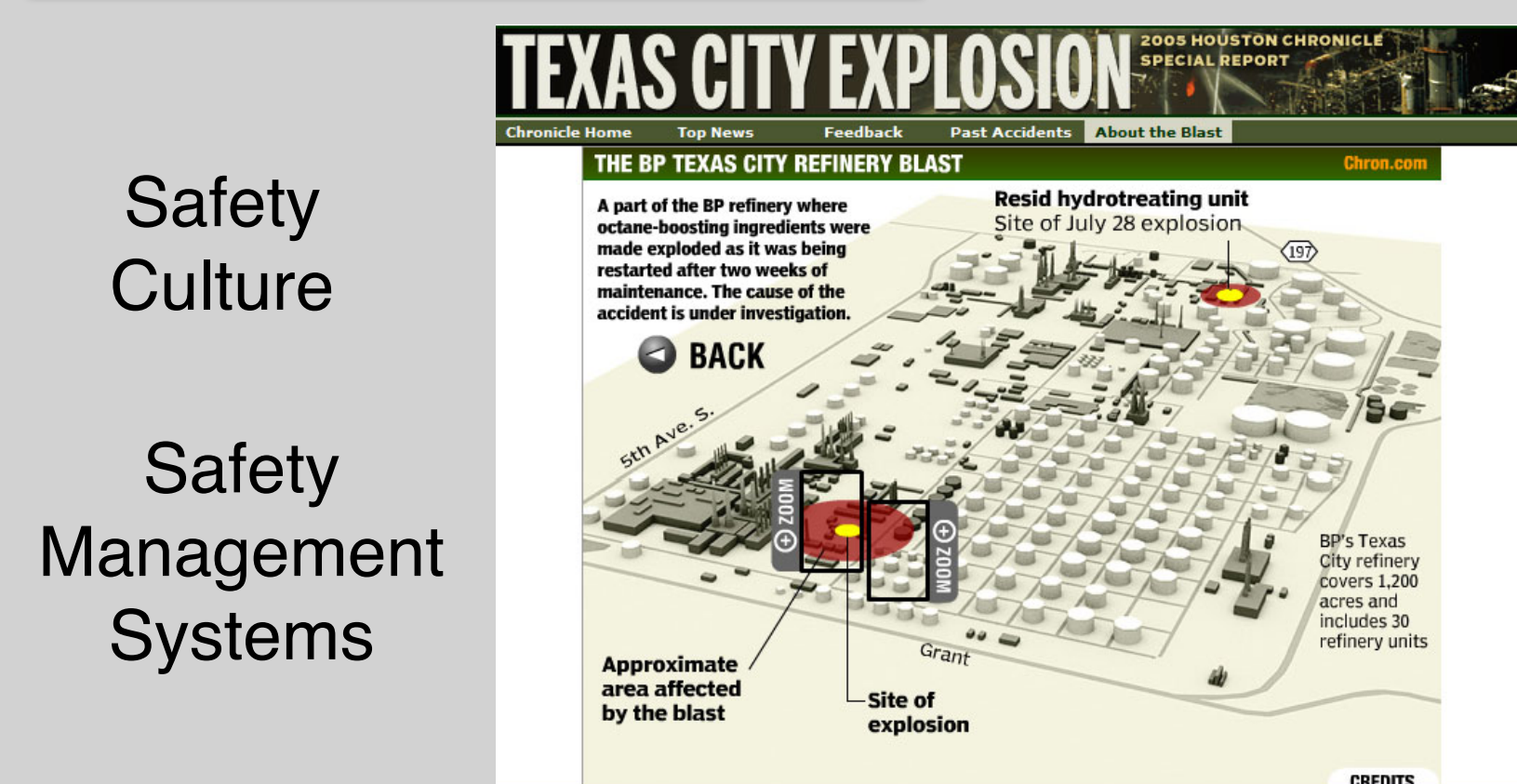
- Employees (pilots, air traffic controllers, attendants, mechanics, etc.) who share information involving observations, close calls and incidents.
- NASA, a third party administrator of the ASRS who processes reports, maintains a comprehensive database and distributes safety information for stakeholder use and improvement.

PROPOSED SOLUTION: This capstone proposes using the successes of the ASRS to:

Create a sustainable system of safety performance, enforcement and high reliability for O&G sector stakeholders, encouraging better collaboration, sharing and transparency among private, public, government and non-government entities.

Acronym Legend

ASRS – Aviation Safety Reporting System
CIRS - Confidential Incident Reporting System
C3RS – Confidential Close Call Reporting System
HRO - High Reliability Organizations
ICASS - International Confidential Aviation Safety System
NASA – National Aeronautics & Space Administration
NGOs - Non-Government Organizations
O&G – Oil and Gas
SafeOCS – Safe Offshore Continental Shelf Reporting System
SLO - Social License to Operate

Oil and gas industry pipeline problems are well-established. Why did it take a fatal explosion to spur action?
Article by: cosher@denverpost.com
Image by: bfinley@denverpost.com
May 7, 2017

TEXAS CITY EXPLOSION

Eleven people died when BP's Deepwater Horizon rig exploded, causing the worst oil spill in U.S. history.
Photograph: AFP/Getty Images

Social License to Operate

Public Perception & Expectation

Safety Culture

Safety Management Systems

Confidentiality Protection

Consistency

Non-Punitive

Voluntary Participation

Qualitative

? Determination of Administrator

Legal Implications

OIL & GAS

HROs

CONFIDENTIAL INCIDENT REPORTING SYSTEM

Industry-Wide Involvement

Cost Effectiveness

Reporting and Sharing of Lessons Learned

Immediate Implementation of Observations and Near Misses

C O N F I D E N T I A L   I N C I D E N T   R E P O R T I N G

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Further Information

- Determine appropriate pathway for implementation of Observation and Near Miss Reporting
- Establish Memorandum of Understanding with stakeholders (Government, Private, Public, NGOs)
- Conduct Stakeholder Information Workshops with breakout sessions:
  - Legal and Government - discuss necessary measures to establish protectionary statute(s)
  - Human Factor Analyses – refine and adapt existing classification system for O&G
  - Administration – determine budget, advisory committee and other items of business
- Consideration to adopt fully-implemented CIRS, including incident and accident sharing
- Paradigm shift from human error and blame to value of human information in incident reporting

Key Literature Cited

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