



MANAGEMENT OF MAJOR OIL SPILL INCIDENT IN MALAYSIA: DEVELOPMENT OVER THE LAST 20 YEARS

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PIMMAG

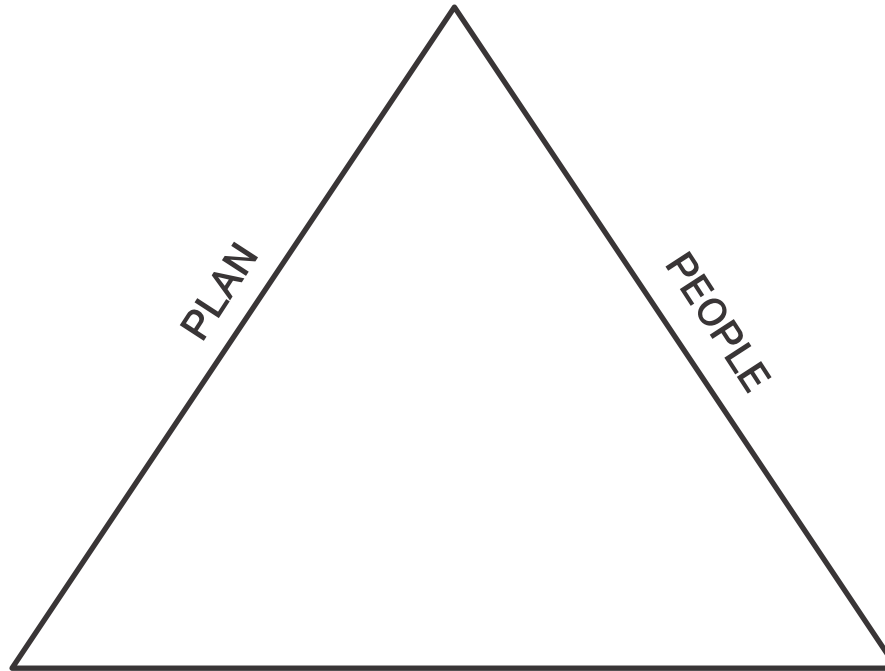
PETROLEUM ASSOCIATION OF JAPAN WORKSHOP

FEBRUARY 2, 2017

PREVENTIVE & PREPAREDNESS



GOVERNMENT OF MALAYSIA



OIL & GAS INDUSTRY



SHIPPING



EQUIPMENT

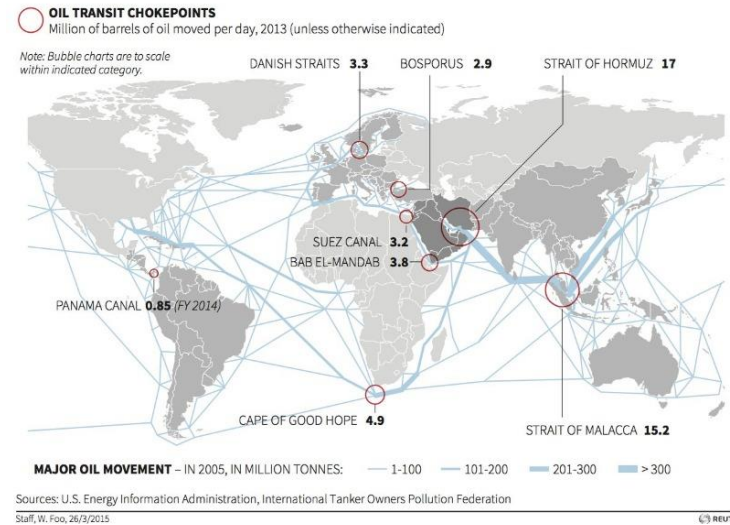
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PRESENTATION OUTLINE

- SETTING THE SCENE
- PREVENTIVE MEASURES – IMO
- GOVERNMENT – POLICY & PLAN
- SHIPPING PREPAREDNESS – MARDEP & MMEA
- OIL & GAS PREPAREDNESS – PIMMAG TRANSFORMATION
- RITAG
- CHALLENGES
- RECOMMENDATION
- CONCLUSION

SETTING THE SCENE

- SETTING THE SCENE
- THE STRAITS OF MALACCA:
- HIGH RISK AREA
 - BUSY TRAFFIC
 - SHALLOW WATER
 - PIRACY
- 100,000 SHIPS PER YEAR
- 15.2 MILLION BARRELS OF CRUDE OIL PER DAY
- LONGEST STRAITS IN THE WORLD
- SHORTEST SEA-ROUTE – MIDDLE EAST & EAST ASIAN COUNTRIES
- VLCC BETWEEN MIDDLE EAST & NORTHEAST ASIA:
 - LOMBOK STRAITS
 - SAVE 1,000 NM
 - 3 DAYS SAILING



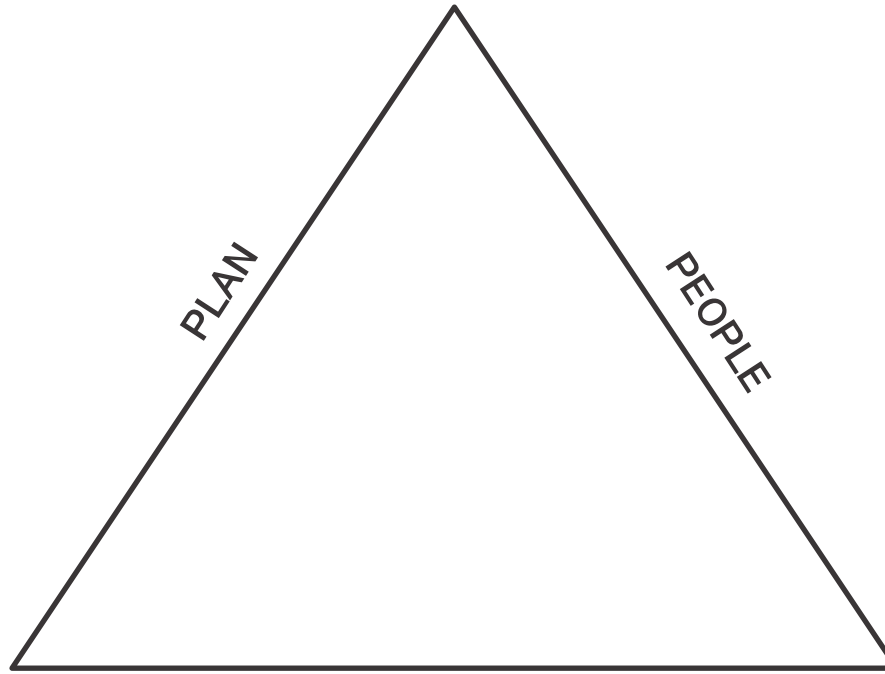
PREVENTIVE MEASURES: IMO

- SAFETY OF NAVIGATION
- AIDS TO NAVIGATION SYSTEMS
- GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM
- AUTOMATIC IDENTIFICATION SYSTEM
- ELECTRONIC NAVIGATIONAL CHARTS
- TRAFFIC SEPARATION SCHEME
- SHIPS' ROUTEING – ONE- FATHOM BANK TO HORSBURGH LIGHTHOUSE
- UNDER KEEL CLEARANCE – 3.5 METRES
- STRAITS OF MALACCA SHIP REPORTING SYSTEM
- SHIP VETTING BY OIL MAJORS

PREPAREDNESS



GOVERNMENT OF MALAYSIA



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SHIPPING



EQUIPMENT

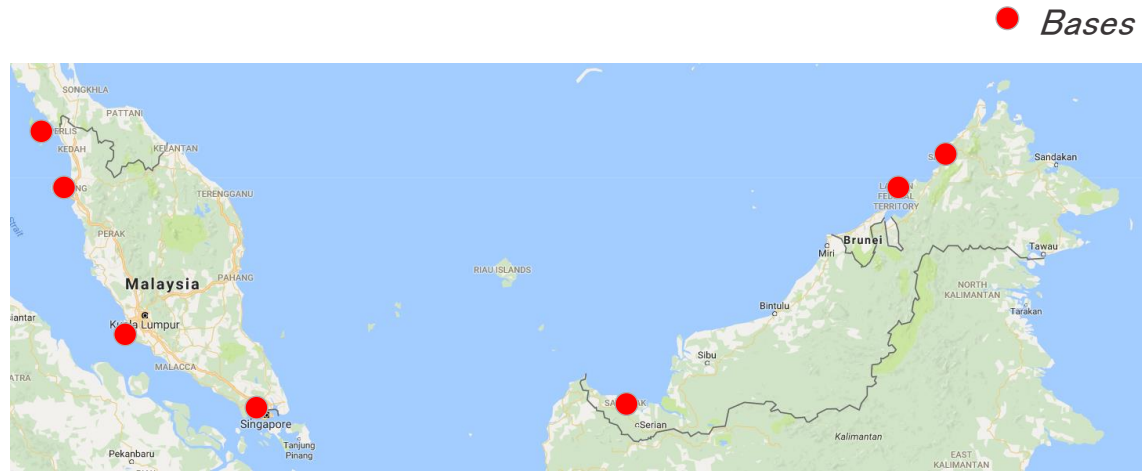
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GOVERNMENT: POLICY & PLAN

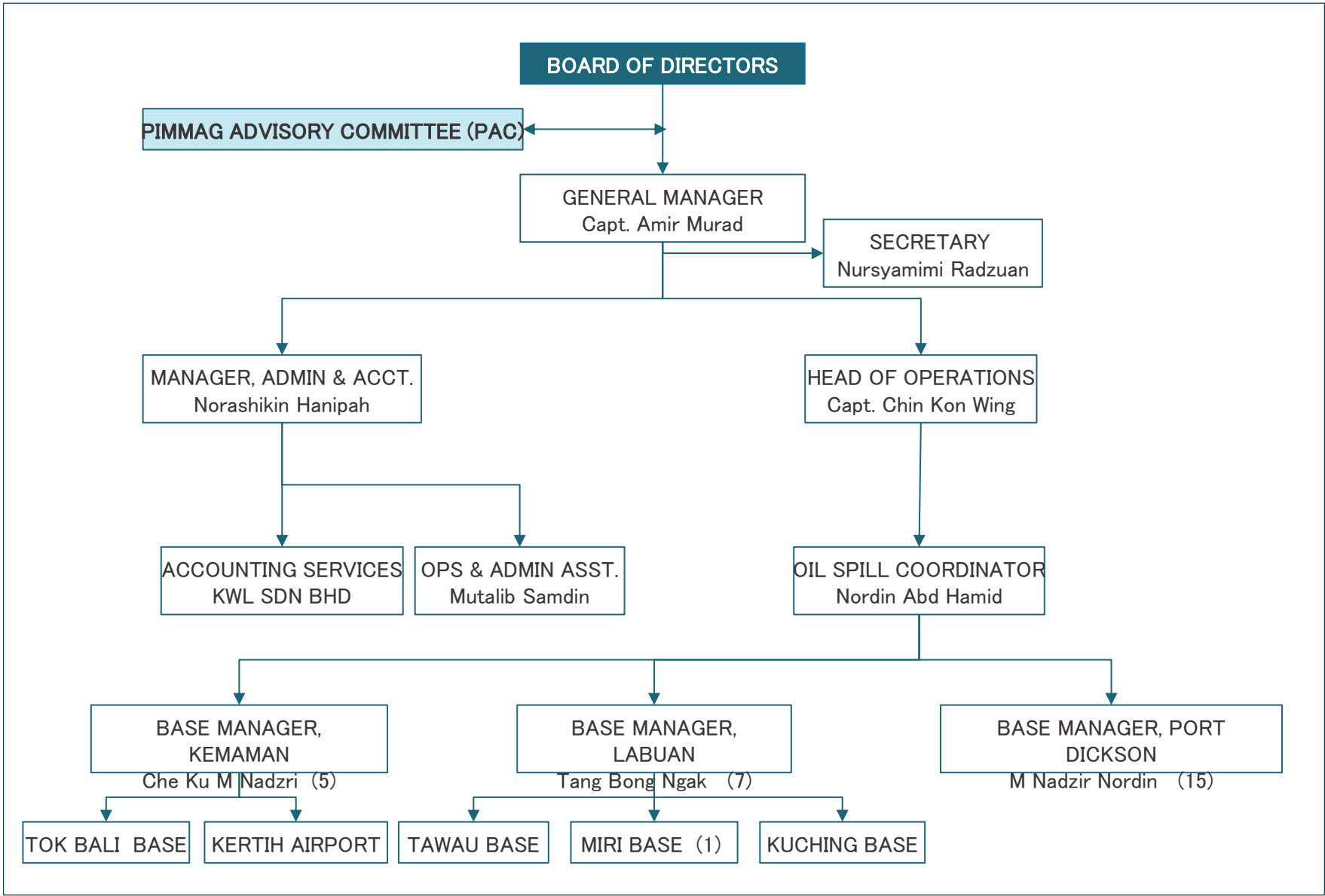
- NATIONAL SAFETY COUNCIL: INSTRUCTION 20
- EXCLUSIVE ECONOMIC ZONE ACT 1984 – SECTION 14 (1)
- ENVIRONMENTAL QUALITY ACT 1974 – SECTION 47
 - NATIONAL OIL SPILL CONTINGENCY PLAN
 - NATIONAL OIL SPILL CONTROL COMMITTEE
 - 18 AGENCIES
- GUIDELINES ON THE USE OF DISPERSANT IN MALAYSIA
- STATE GUIDELINES ON BEACH CLEAN-UP POLICY
- SHIPPING INCIDENT – MARDEP / MMEA
- OIL & GAS INDUSTRY – PIMMAG

SHIPPING PREPAREDNESS: MARDEP / MMEA

- BASES:
 - LANGKAWI ISLAND
 - PENANG
 - PORT KLANG
 - JOHOR BAHRU
 - KUCHING
 - LABUAN
 - KOTA KINABALU
 - MEMBERS OF NOSCC
- OIL SPILL RESPONSE VESSELS
- OIL MAP TRAJECTORY
- NATIONAL EXERCISE



OIL & GAS PREPAREDNESS: PIMMAG



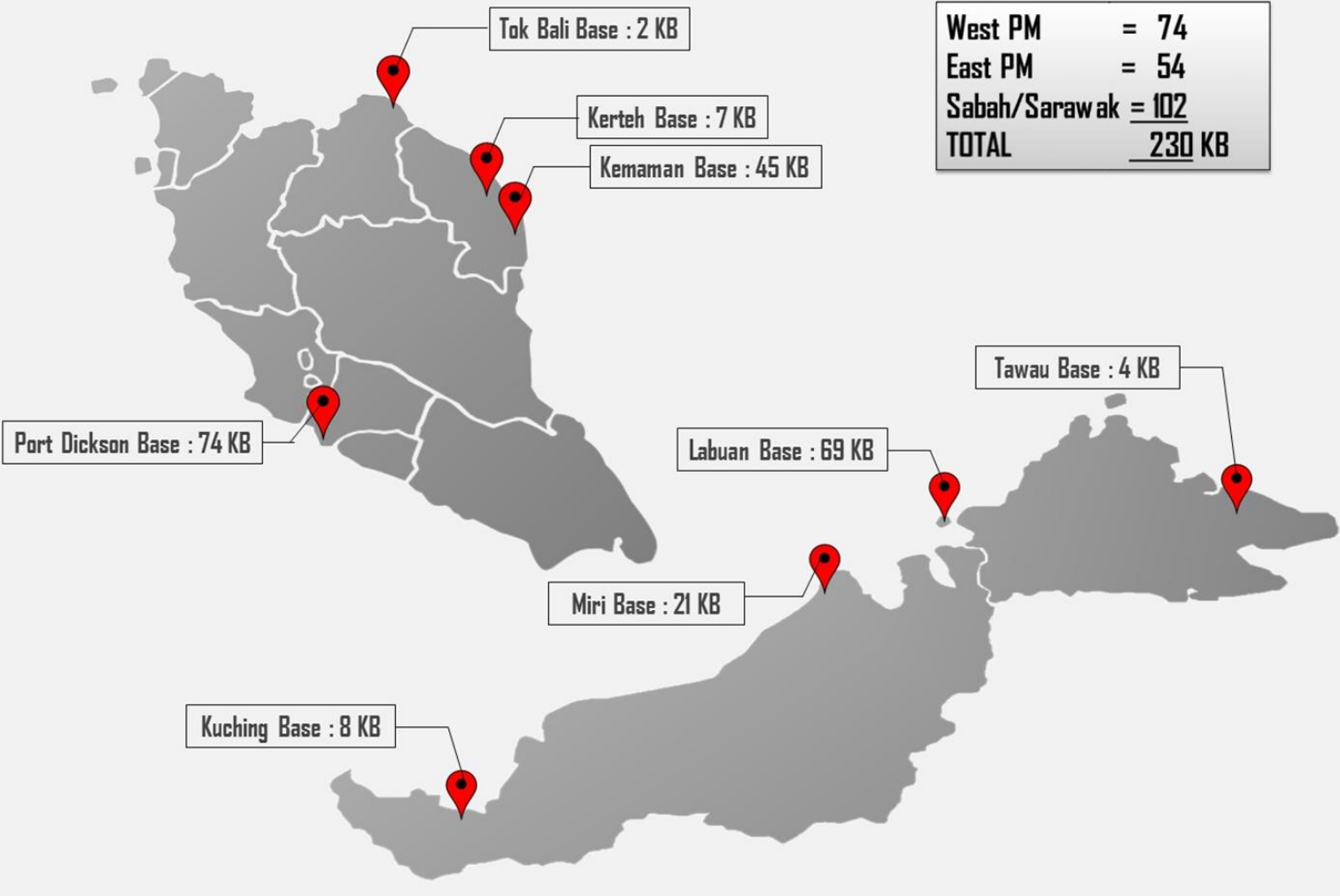
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TRANSFORMATION OF PIMMAG

- COST EFFECTIVNESS
- OPERATIONAL EFFICIENCY
- HEAD OFFICE
- NEW MODUS OPERANDI
- BASES
 - PORT DICKSON
 - KEMAMAN
 - KERTEH AIRPORT
 - TOK BALI SUPPLY BASE
 - LABUAN
 - MIRI
 - KUCHING
 - TAWAU

OIL & GAS PREPAREDNESS: PIMMAG CAPABILITY

PIMMAG's Oil Spill Response Equipment Capability in Malaysia 9 July 2015



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EQUIPMENT STOCKPILE

- DISPERSANT
 - ABOUT 1,500 DRUMS OF 209 LITERS
 - COREXIT 9527
 - SLICKGONE NS
- ROUTINE MAINTENANCE
- CAPABILITY
 - WEST PM = 74 KB
 - EAST PM = 54 KB
 - EAST MALAYSIA = 102 KB
 - TOTAL = 230 KB

CAPABILITY STUDY

- CAPABILITY & PREPAREDNESS
- DEEPWATER OPERATIONS

- SCOPE:
 - SURFACE LEVEL CLEAN-UP
 - AERIAL DISPERSANT SPRAYING
 - WELL CAPPING DEVICE
 - SUB-SURFACE DISPERSANT SPRAYING
 - TRAINING
 - CONSULTANCY SERVICES

CAPABILITY STUDY: GAPS

- SURFACE LEVEL CLEAN-UP
 - NO GAP
- AERIAL DISPERSANT SPRAYING
 - OSRL CHARTERED AIRCRAFT
 - MEMBERS OF OSRL
 - 50 SETS OF AFEDO SPRAYER
- WELL CAPPING DEVICE
 - MEMBERS TO SUBSCRIBE TO OSRL
 - WILD WELL CONTROL WITH OPERATOR
 - AVAILABILITY OF VESSEL
- TRAINING
 - NO GAP
- SUB-SURFACE SPRAYING
 - MEMBERS TO SUBSCRIBE TO OSRL
 - WILD WELL CONTROL WITH OPERATOR
- CONSULTANCY SERVICES
 - IN-HOUSE
 - WORK WITH UNIVERSITY
 - COLLABORATION

TRAINING

- OSR COURSES
 - INLAND
 - OPERATOR
 - SUPERVISORY
 - MANAGEMENT
 - SHORELINE / RIVERINE CLEAN-UP ASSESSMENT TECHNIQUE
 - CUSTOMISED
- PUBLISHED COURSES 7 PER YEAR
- AVERAGE PER YEAR 25–30 COURSES
- 20,000 ATTENDEES (1995 – 2016)
- ASEAN COE FOR OSR COURSES
- ITCP

RESEARCH & DEVELOPMENT

- PROTOCOL FOR DISPERSANT EFFECTIVENESS TESTING
- NETTOW
- PIMMAG DISPERSANT SPRAYER

UNMANNED AERIAL VEHICLE

- PIONEER AMONG OSROs TO USE UAV
 - 2007
- “BE THERE WITHOUT BEING THERE”
- SAFETY – NO LIFE AT RISK
- APPLICATION STAGE
 - PRE-RESPONSE
 - DURING RESPONSE
 - AERIAL SURVEILLANCE
 - POST RESPONSE

MUTUAL AID

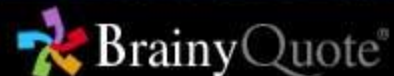
- SHELL “EXERCISE GOLDEN SHIELD” IN 2013
- 200 PEOPLE TO MANAGE
- SOME MEMBERS < 200 STAFF
- MEMBERS PSCs & RSCs
- 3 CLASSES:
 - CLASS 1 READY ON ITS OWN
 - CLASS 2 SUPPORT FROM AFFILIATES
 - CLASS 3 NEED HELP

MOU

- OSRL & OSCT
- ASSISTANCE DURING OIL SPILL
- OPERATIONAL INTEGRATION PLAN
- JOINT OPERATING COMMITTEE
- EXCHANGE OF INFORMATION
- TABLE-TOP / FIELD EXERCISES
- ON THE JOB TRAINING
- PARTICIPATION IN CALL-OUT
- BASE VISITS
- SHARING OSRE & DISPERSANT

**Alone we can do so little; together we
can do so much.**

Helen Keller



RITAG

- POST MACONDO 2010
- OSROs IN ASIA
- PIMMAG 2014
- PHILOSOPHY OF RITAG:
 - PROMOTE KNOWLEDGE & EXPERIENCE SHARING
 - TECHNICAL KNOWLEDGE
 - RESPONSE EXPERIENCE
 - BEST PRACTICES
 - PROMOTE “TIERED RESPONSE CONCEPT”
 - FACILITATE COOPERATION

MEMBERS

- OIL SPILL RESPONSE LIMITED (SINGAPORE)
- CHINA OFFSHORE ENVIRONMENTAL SERVICES (CHINA)
- KOREA MARINE ENVIRONMENT MANAGEMENT CORPORATION (KOREA)
- MARITIME DISASTER PREVENTION CENTER (JAPAN)
- OIL INDUSTRY ENVIRONMENTAL SAFETY GROUP ASSOCIATION (THAILAND)
- PETROLEUM INDUSTRY OF MALAYSIA MUTUAL AID GROUP (MALAYSIA)
- OIL SPILL COMBAT TEAM (INDONESIA)

CHALLENGES

1. NATIONAL OIL SPILL CONTINGENCY PLAN
 - i. ENGLISH VERSION
 - ii. INCORPORATE ICS
 - iii. POLICING THE PLAN
 - iv. ENFORCE THE PLAN
 - v. PERMANENT MEMBER OF NOSCC
2. MAINTENANCE OF ASSETS
3. FIRM UP THE LEAD AGENCY
4. SHARING OF DISPERSANT

RECOMMENDATIONS

1. PROMOTE AWARENESS OF PAJ STOCKPILE
 - i. MOBILISE DURING NATIONAL EXERCISE

2. COMMON DISPERSANT TESTING PROTOCOL
 - i. ASEAN MEMBERS

 - ii. IPIECA

 - iii. IMO

3. COMMON APPROVED DISPERSANT
 - i. ACROSS COUNTRIES

 - ii. REGION

CONCLUSION

1. PREVENTIVE MEASURES
2. POLICY & PLAN IN PLACE
3. MARDEP / MMEA
4. PIMMAG TRANSFORMATION
5. 20,000 TRAINED FOR OIL SPILL RESPONSE
6. NATIONAL EXERCISE & TABLE TOP
7. CONTINUOUSLY ENHANCING CAPABILITY & PREPAREDNESS

REMEMBER!

**“TRAINING & EXPERIENCE CANNOT
PREPARE A MAN FOR EVERY
EVENTUALITY, THEREFORE WE
TRAIN & EXPERIENCE UNTIL OUR
LAST BREATH”**

THANK YOU