

Status and Issues in Building Up Maritime Defense Force (Aviation)

**Aircraft Division
Logistics Department
Maritime Staff Office
Japan Maritime Self Defense Force
Oct. 11 2012**

Self-introduction

Director of Aircraft Division
Maritime Staff Office

Shuji KITANO (From NAGOYA)



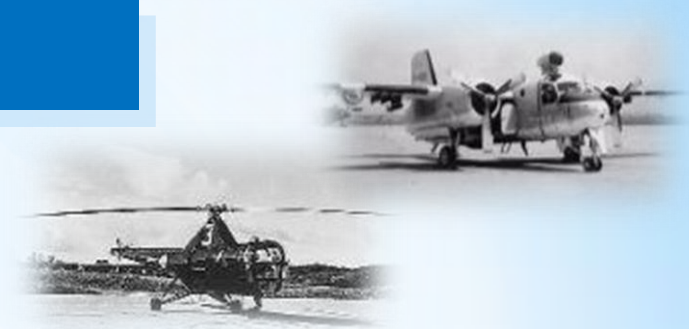
◆ Educational Background

Graduated from National Defense Academy in Mar. 1984

◆ Main Carrier in JMSDF (Japan Maritime Self Defense Force)

Aug. 1998	Commanding Officer of 312 Inspection Division
Dec. 2004	Chief of Aircraft Section, Aircraft Division, MSO
Dec. 2006	Chief of Aircraft System Planning Division, MMC
Dec. 2008	Commanding Officer of 4 Maintenance Supply SQ
Dec. 2010	Director of Aircraft Department Air Supply Depot
Mar. 2012	Present Post

Contents



○ Past Building Up of Maritime Defense Force (Aviation)

- Looking Back on Past Main Defense Force Service Plan
- Present Aircrafts in JMSDF
 - ★ Overview of P-1, C-130R, SH-60K, US-2, MCH-101

○ Current Status and Issues of JMSDF (Aviation)

- Status (Defense Budget, Achievement of Activities)
- Issues (Furthermore Efficient for Procuring Defense Equipment (ex. PBL))



Past Building Up of Maritime Defense Force

Past Building Up Of Maritime Defense Force 1 / 5

1 Era of Foundation

- 1952 Maritime Patrol Agency Founded
- 1954 Japan Self Defense Force Founded

⇒ Main vehicles were given Aircrafts
and borrowed Vessels

Open the Sea Lane + Anti Submarine
(Secure Maritime Transportation)



Past Building Up Of Maritime Defense Force 2/5

2 Era of Expansion

Times of 1st ~4th Mid-Term Defense Program (1958~1977)

- Response to Various Threats ⇒ Type of “Anti Threats”
- Initially, Focused on “Anti Submarine Capability” and “Anti Mine Capability”

Gradually, Expanded to “Anti-Air Capability” etc.

PS-1



V-107



P-2J



HSS-2B



Past Building Up Of Maritime Defense Force 3/5

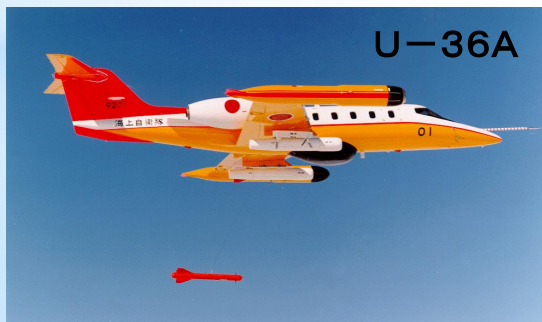
3 Era of Development

Times of “National Defense Program Guidelines” (1977～1996)

▪ “Anti Threats” ⇒ “Deterrence”

Establish the Plan of Fundamental Defense Force

with About **220** Operational Aircraft



Past Building Up Of Maritime Defense Force 4/5

4 Era of Reformation

Times of “1995 National Defense Program Guidelines” (1996～2005)

- Basically, Follow the “Plan of Fundamental Defense Force”
- The Expansion of the Role of Defense Force ⇒
“Reasonable, Efficient, Compact”+ “Flexible” with About **170 Operational Aircraft**

SH-60K



US-2



Naval Vessel and P-3C which Participate
in RIMPAC



MCH-101



UP-3D



Past Building Up Of Maritime Defense Force 5/5

5 Recent Building Up of Defense Force

“2004 National Defense Program Guidelines” (2005～2009)

- Review of “Plan of Fundamental Defense Force”
 - Defense against Full-Scale Invasion ⇒ Drastic Reformation & Reduction
 - Defense Force : “Multi-Functional, Flexible and Practical”
- 【Further Reduction in Scale, Cutback in Volume】

with About 150 Operational Aircraft

“2010 National Defense Program Guidelines” (2011～)

- “Plan of Fundamental Defense Force” ⇒ Focus on “Operating Defense Force”
 - The Role of Defense Force : Efficient
Various Activity : Timely and Proper
 - Future Defense Force :
Establish “Dynamic Defense Force” Sustained
by High for Technology and Information
- ... About 150 Operational Aircraft

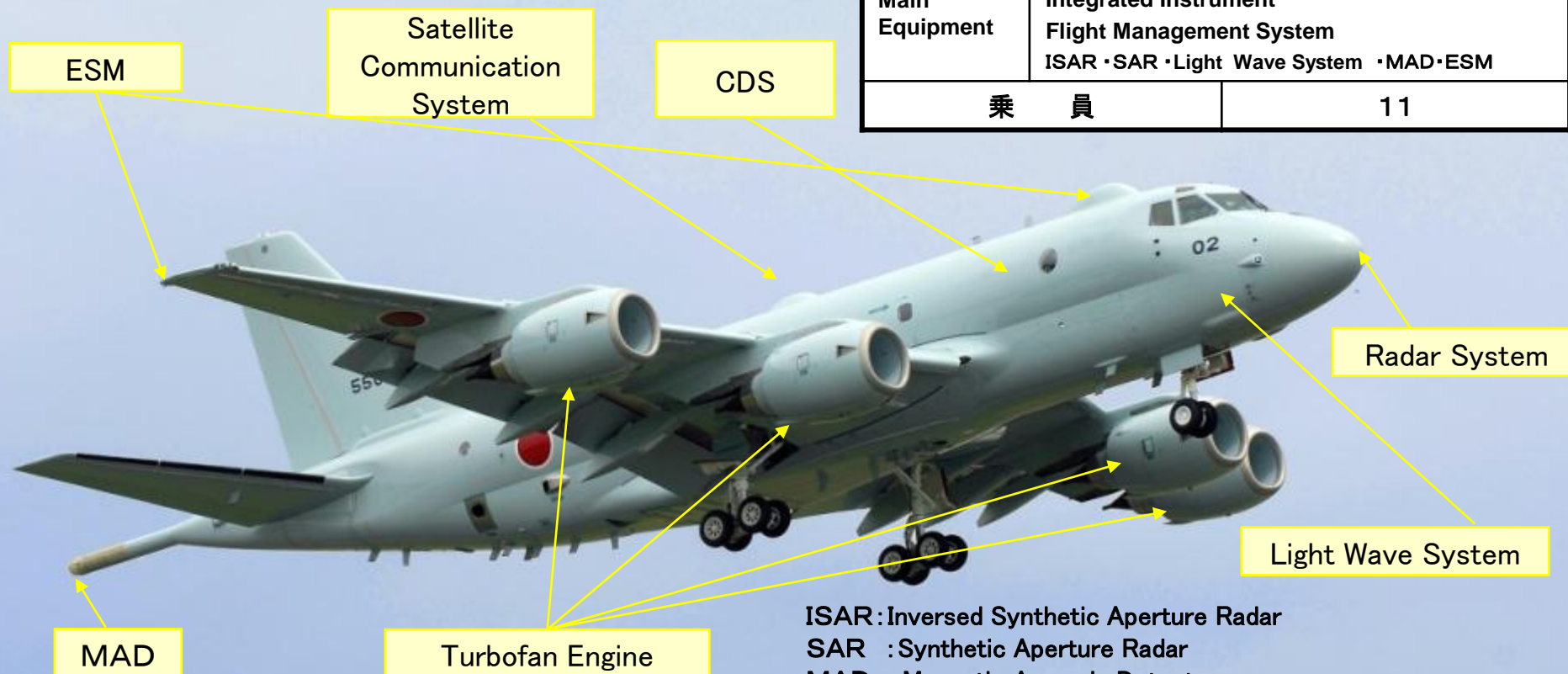


Present JMSDF Aircrafts

Overview of Fixed Wing Patrol Aircraft (P-1)

Main specifications etc.

Main Dimension	Extreme Width	38.0 m
	Extreme Length	35.4 m
	Extreme Height	12.1 m
	Extreme Weight	79.7 ton
Flight specifications	Max Speed	1.3 times faster than P-3C
	Max Height Flying Range	1.2 times faster than P-3C
Main Equipment	Fly By Light Control System Integrated Instrument Flight Management System ISAR・SAR・Light Wave System・MAD・ESM	
乗 員		11



ISAR: Inversed Synthetic Aperture Radar
 SAR : Synthetic Aperture Radar
 MAD : Magnetic Anomaly Detector
 ESM : Electronic Support Measure
 CDS : Combat Direction System

Overview of Cargo Aircraft(C-130R)

Main specifications etc.

Main Dimension	Extreme Width	40.4 m
	Extreme Length	29.8 m
	Extreme Height	11.7 m
	Extreme Weight	70.3 ton
Flight specifications	Maximum Speed	More than 318 knot
	Cruising Speed	300 knot
Main Equipment	Navigation Display Equipment, Collision Prevention System, Global Navigation System	
Crew		6

Navigation Display Equipment
Collision Prevention System
Global Navigation System



Comparison of Transport Capability

	YS-11	C-130R
Loading Weight	About 5 ton	About 20 ton
Cruising Range	About 2,200 km (Loaded with 1.5ton)	About 4,000 km (Loaded with 5.0ton)

U.S. KC-130R

Overview of Patrol Helicopter(SH-60K)

Main specifications etc.

Main Dimension	Extreme Width	16.4 m
	Extreme Length	19.8 m
	Extreme Height	5.4 m
	Extreme Weight	10.9 ton
Flight specifications	Maximum Speed	More than 140 knot
	Cruising Speed	120 knot
Main Equipment	Low Frequency Sonar, Radar (ISAR) ESM, MAD, Sonobuoy Self Defense Equipment, FLIR	
Crew		4



FLIR : Forward Looking Infrared

Overview of Rescue Flying Boat(US-2)

Main specifications etc.

Main Dimension	Extreme Width	33. 2 m
	Extreme Length	33. 3 m
	Extreme Height	9. 8 m
	Extreme Weight	47. 7 ton
Flight specifications	Maximum Speed	More than 315 Knot
	Cruising Speed	260 Knot
Main Equipment	Fly By Wire Control System Integrated Instrument	
Crew		11



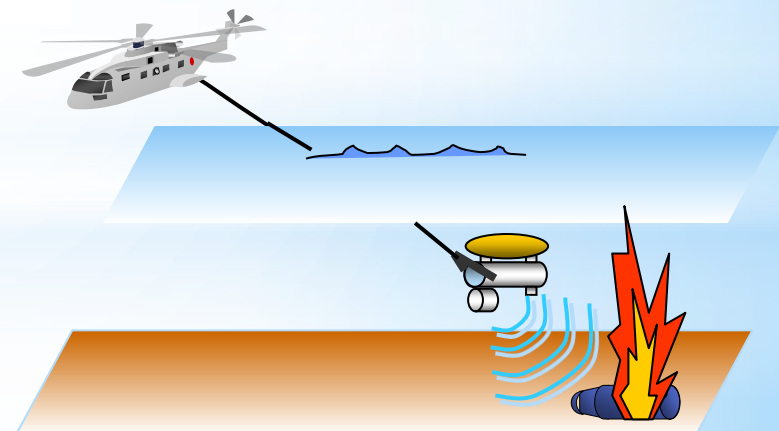
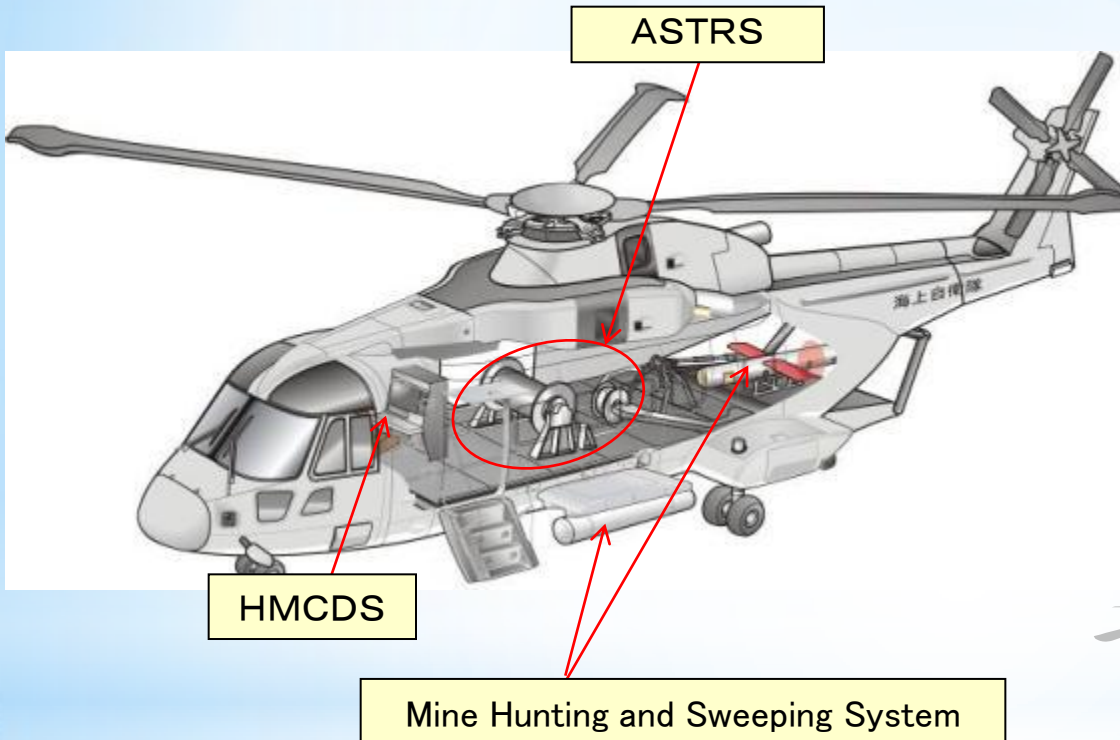
Overview of Mine Sweep and Cargo Helicopter (MCH-101)

【Mine Sweep Spec.】

Main specifications etc.

Main Dimension	Extreme Width	18.6 m
	Extreme Length	22.8 m
	Extreme Height	6.6 m
	Extreme Weight	14.6 ton
Flight specifications	Maximum Speed	149 knot
	Cruising Speed	130 knot
Main Equipment	Mine Hunting and Sweeping System AMCM Stream Tow and Recovery System HMCDS	
Crew		Cargo Mission : 4 Mine Sweep Mission : 6

Image of Mine Sweep Spec.

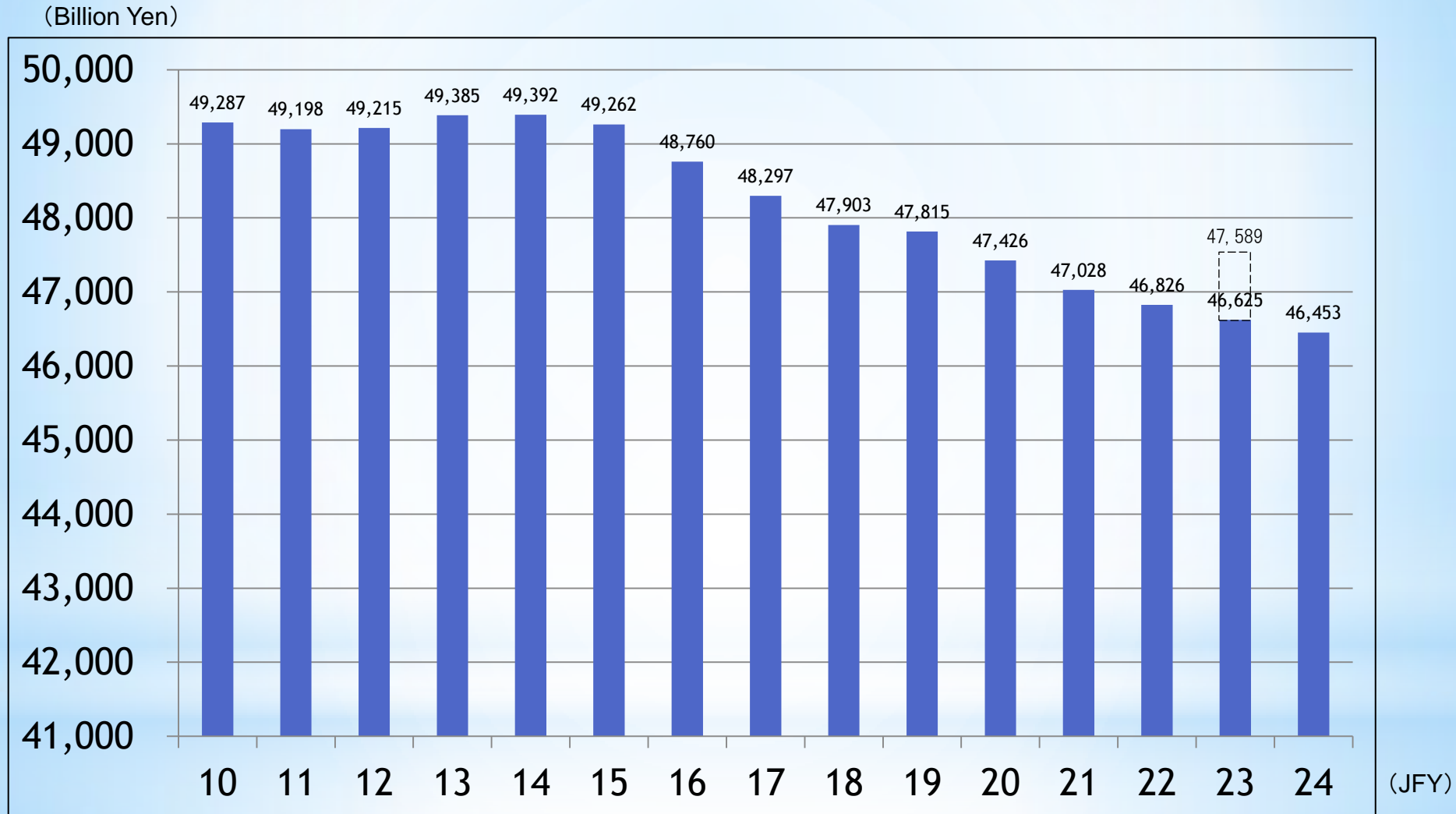


HMCDS : Helicopter Mine Counter-measure Data Processing System
 ASTRS : AMCM Stream Tow and Recovery System

Image of Mine Hunting

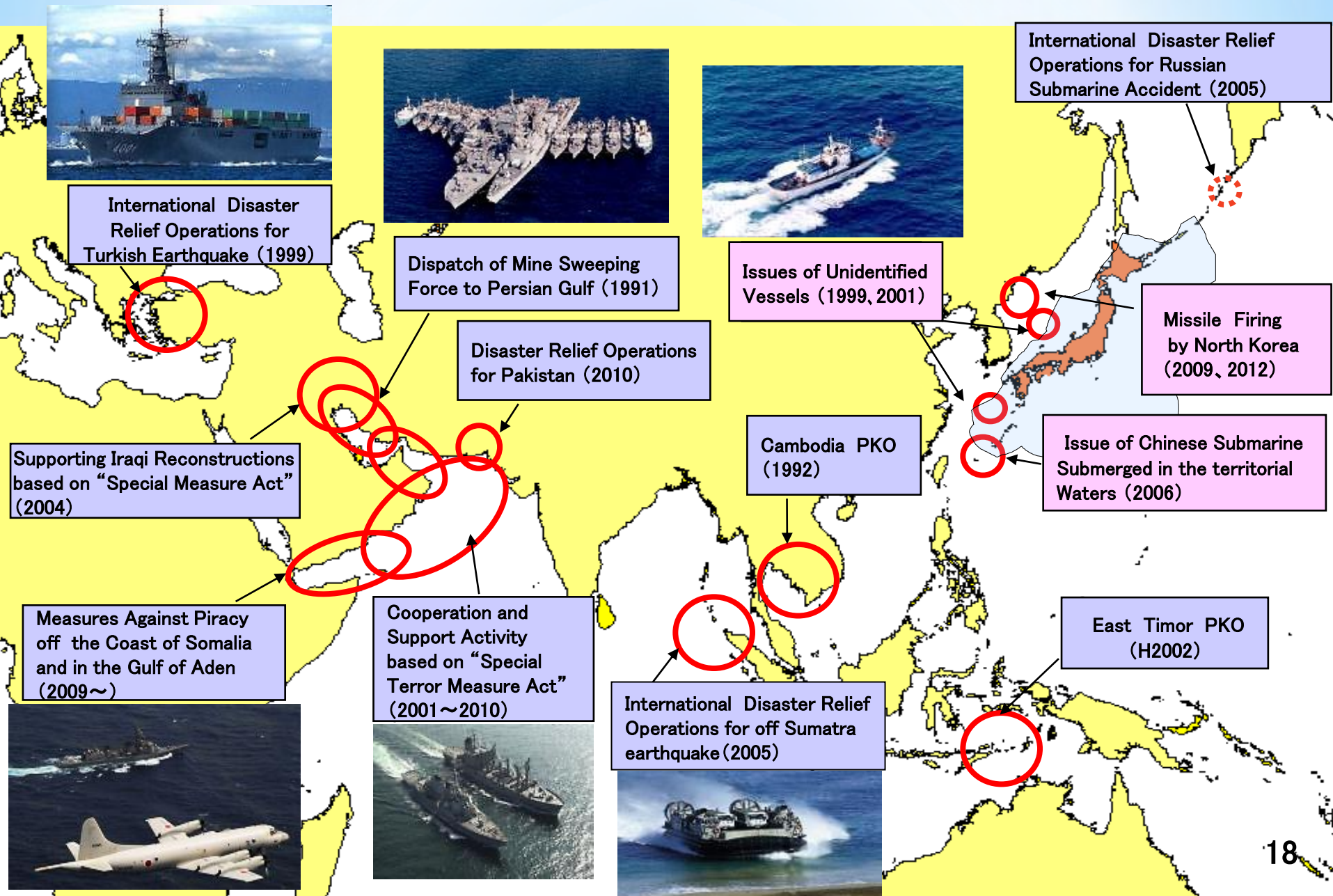
Current Status of JMSDF Aviation

Trend of Defense Budget



**It shows the severe Governmental Budget Environment.
JMSDF needs more reasonable and efficient efforts.**

JMSDF Activities in International Society

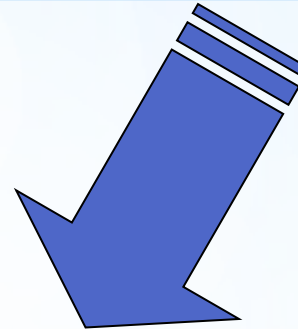
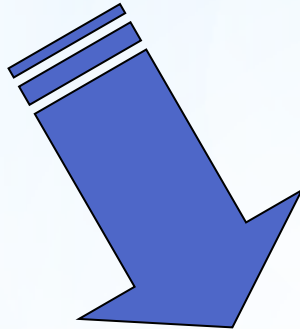


Issues for JMSDF Aviation

Issue for JMSDF Aviation

Reduction of
Defense Budget

Expansion for the Range
of Activities (Supply Support
for Overseas Activities)



JMSDF have to Build Up
Defense Force more efficiency.

- More Efficient Procurement for Equipment
([Applying PBL Method](#), Life Cycle Cost
Management,
Investigation by IPT Method)

PBL : Performance Based Logistics (Incentive Contracts System)



Taken Actions for PBL by MoD

Report of Comprehensive Acquisition Reform Project Team
(Mar. 2008) (Study for possibility of applying PBL Method)

Report of Comprehensive Acquisition Reform Project Team
(Sep. 2010) (Study for Necessity of applying PBL Method)

Mid-Term Defense Program (2011~2016) (Dec. 2010)
(Applying PBL Method to Fulfill Operational Fundamentals
for Defense Equipment)

Guidelines for applying PBL in MoD (Jun.2011)
(Readjustment of Definition of PBL Method, Approaching
Method etc.)

Investigation by Integrated PT(IPT) including MoD and
companies

MOD has a plan to conclude comprehensive contract for JGSDF special cargo
helicopter "EC-225LP"(JFY2012~) as the pilot model of PBL Method.

History:

Under the circumstances of decreasing defense budget, the portion maintenance cost was increasing, MoD began to study PBL method for restrain maintenance cost



EC-225LP

Taken Actions for PBL by MoD

◆ Mod Definition of PBL

To conclude the long-term contract within the range of comprehensive activities focused on the results provided by contracting services (achievement of performance such as to maintain and improve the operating time, shorten the turn around time, and accomplish the stable stock, etc.)

◆ Applied Level of PBL

Main work for Out-Sourcing to Company	Mission	Activities to accomplish the mission(**)		
	Maintenance	Line Maintenance(*)		
	Supply	Maintenance Plan, Maintenance in base		
		Demand Forecasting, Component Procurement •Repairing Plan, Stock Management		
		Parts Procurement for Repairing, Component (R)(***) , Estimation for Repairing, Component (NR)(****) Supply & Transportation		
Performance	Lead Time for Supply	Stock Rate	Operating time Rate	Mission Achievement Rate
Parts or Component	A part of Component or All Components		System or Major Components	System
Level 1 Assurance for Lead Time		Level 2 Assurance for Stock	Level 3 Assurance for Operation	Level 4 Assurance for Mission

(*) The case that a company needs to line maintenance

(***) Repairable Item

(**)Assistant activities to accomplish the mission in the case that MoD has the mission (****) Non-Repairable



Thank you so much for Listening !

