

KMH



SEOUL NATIONAL UNIVERSITY

1. KMH

2. KMH

/

3.

4. KMH

/

5.

6. KMH

7.



1. KMH





- , / , / , / , /
-
-



700 150 (5)

- 12
- (/)
- 가 /



2010

KMH (, '03. 9. 19)

-

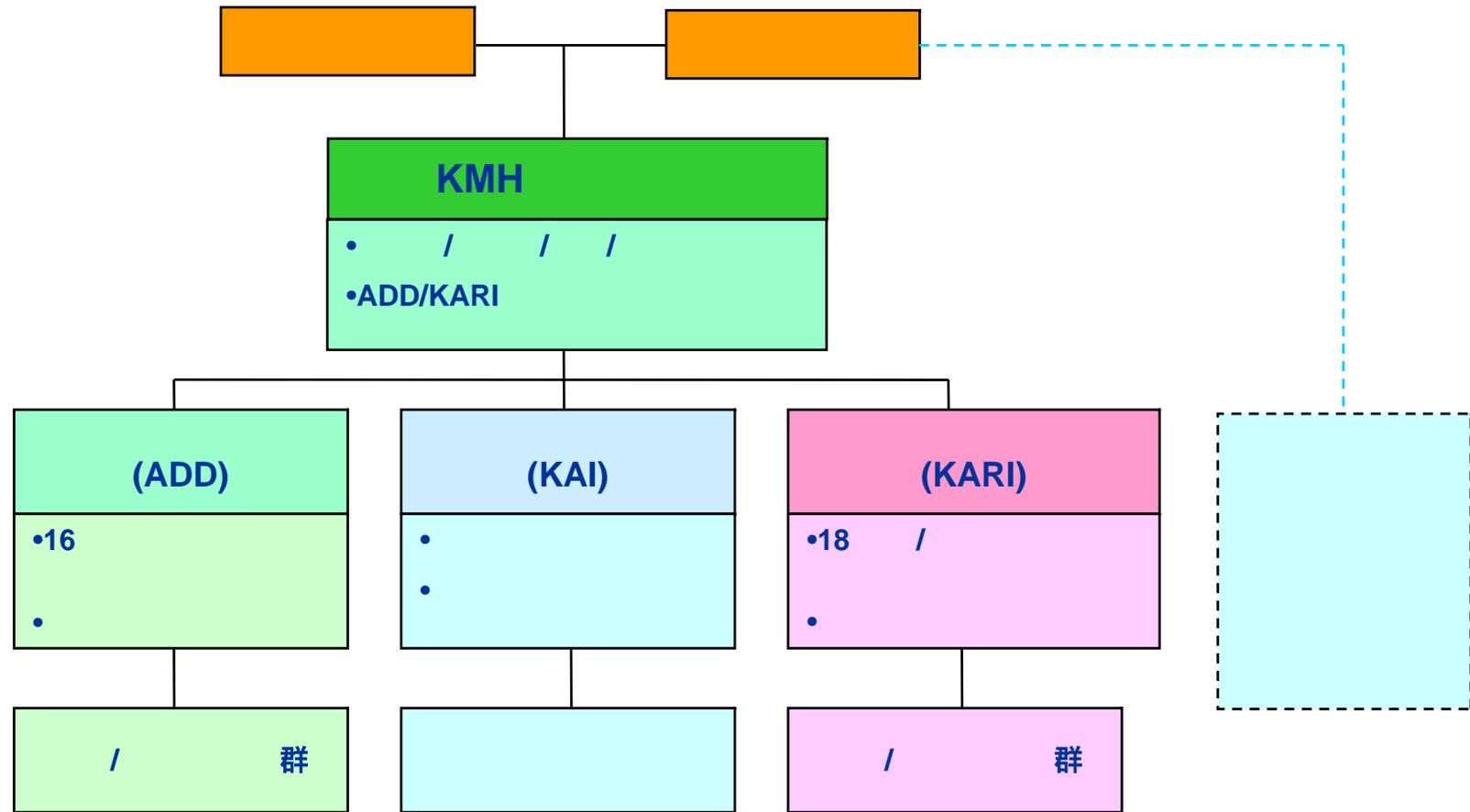
- 7



KMH

- (KMH) : ,
- KMH(Korea Multi-role Helicopter) ('04.1)
 - (500)
 - 13,000~15,000
 - 1 : KMH
 - 2 :
- : KMH ()
(ADD, KARI, KAI)
- : '04~'12 ('10)
- : 2

KMH



KMH

(

18109 , ' 03.10)



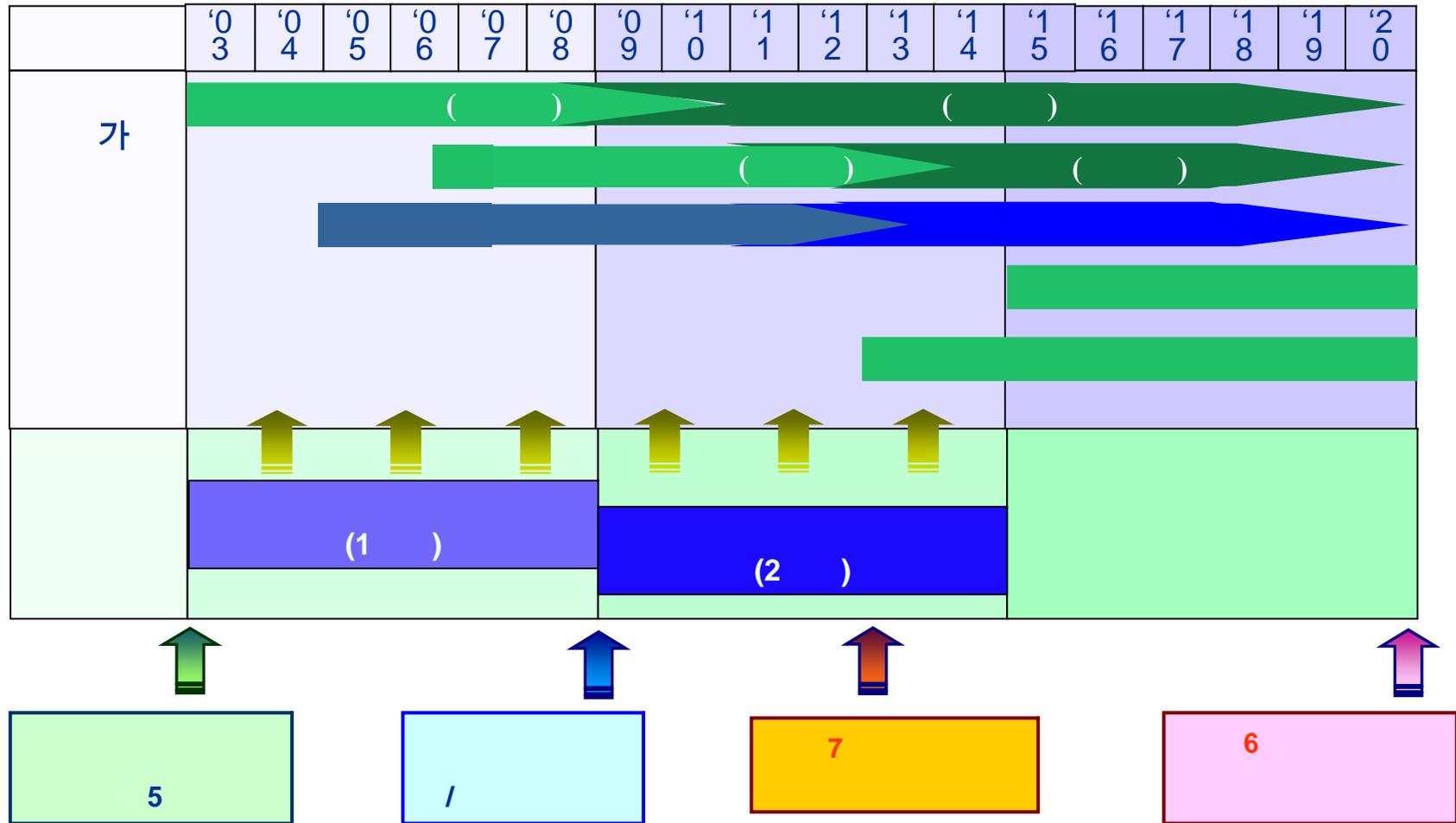
KMH 가

□ 2015

7

6

: , , , , ,



2. KMH

/



□ _____ , _____
_____ .
▪ : **500** , **400** (20~30)

□ KMH/
▪ (,)
▪
EL(Export License)

□ _____ /
▪
▪ KMH

()





,



('Made in Korea' 가)



.



가 (NTRM)

5'

,

, 가



(/ KMH)



가

□ 가 , 가
가 가 가

□ 가 (KMH)
가 가
30 가 2~3 가

□ 가 ST(6T)
가



3.





- :
- :
- :



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-

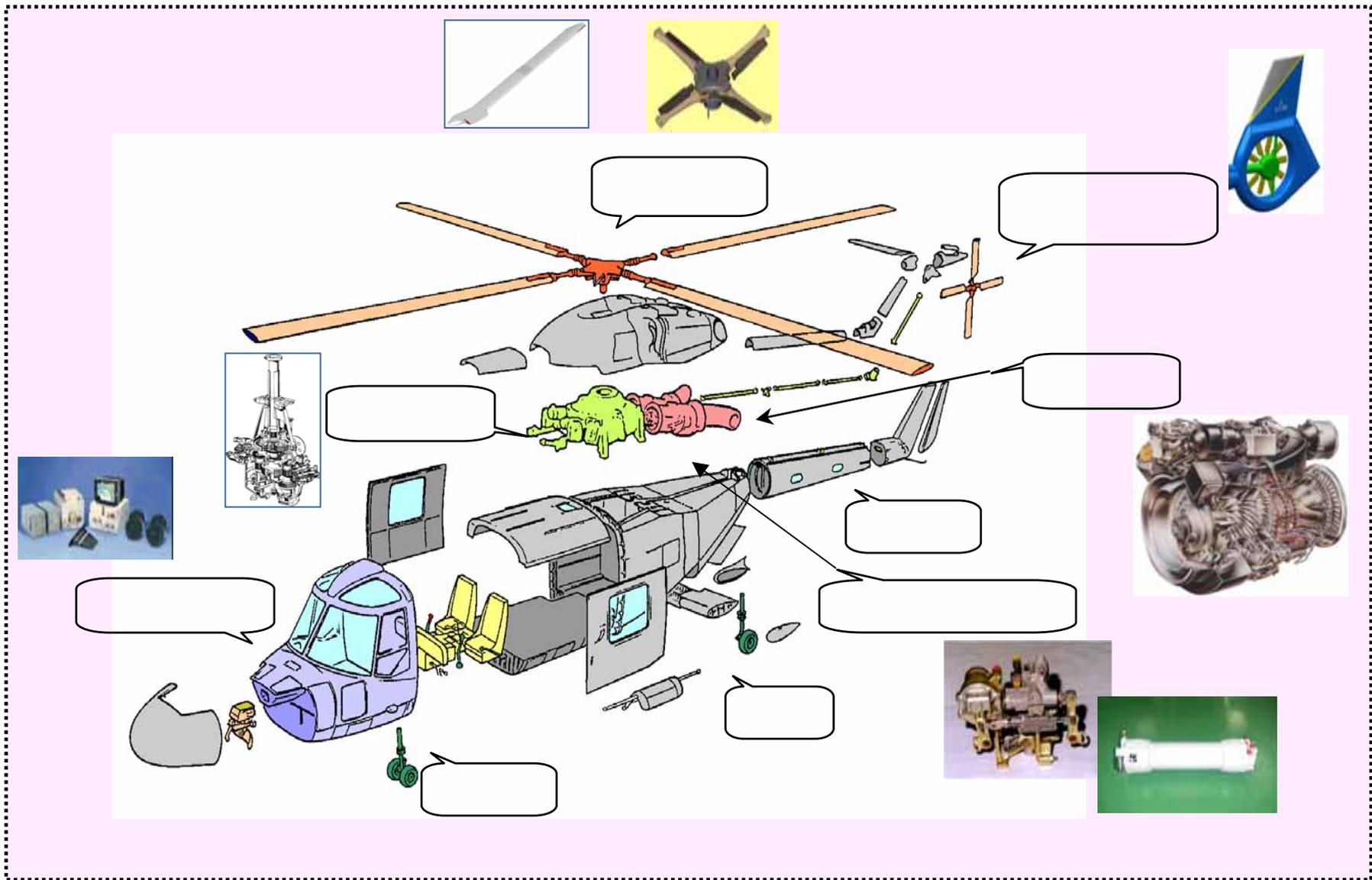
infra
(Empty Weight)

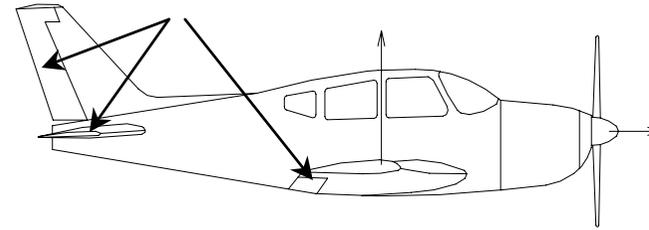
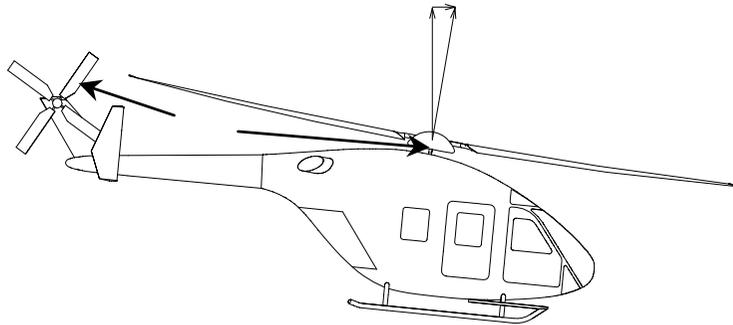


가

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가,

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가

■

가

75%

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■

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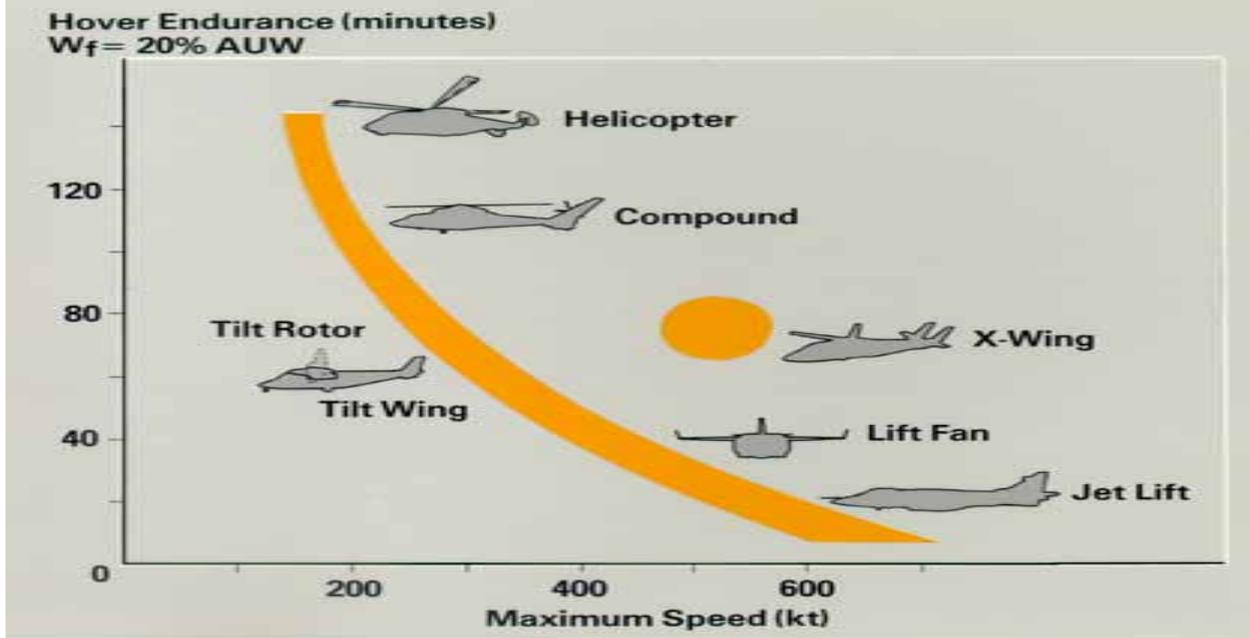
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가 .

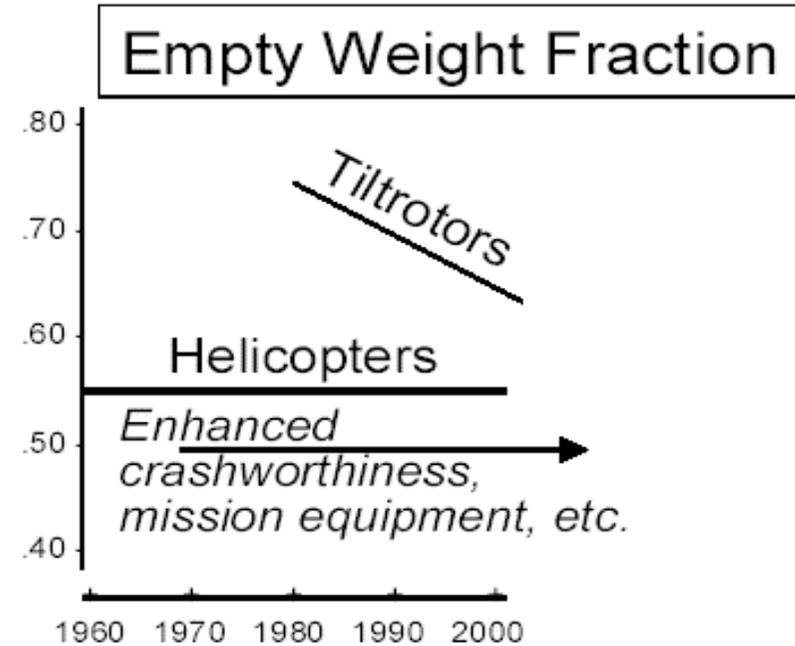
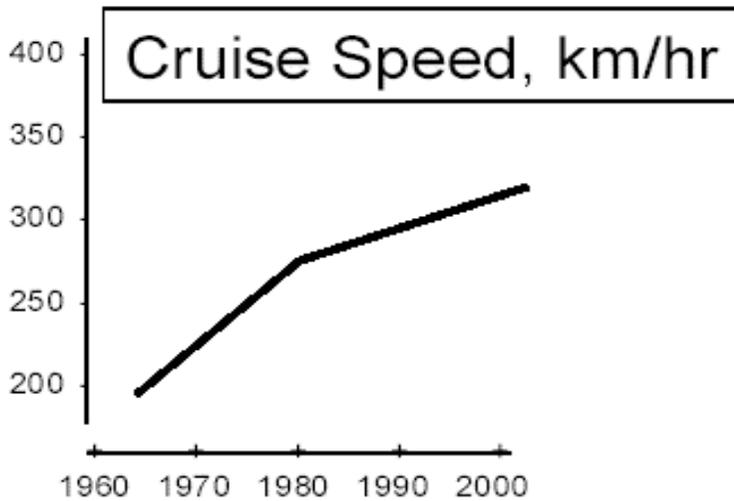
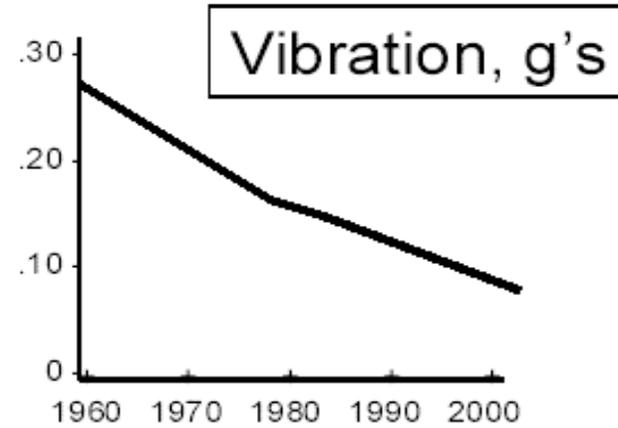
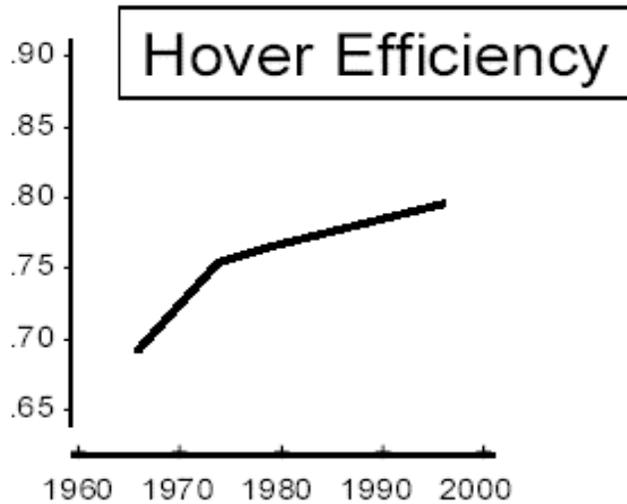


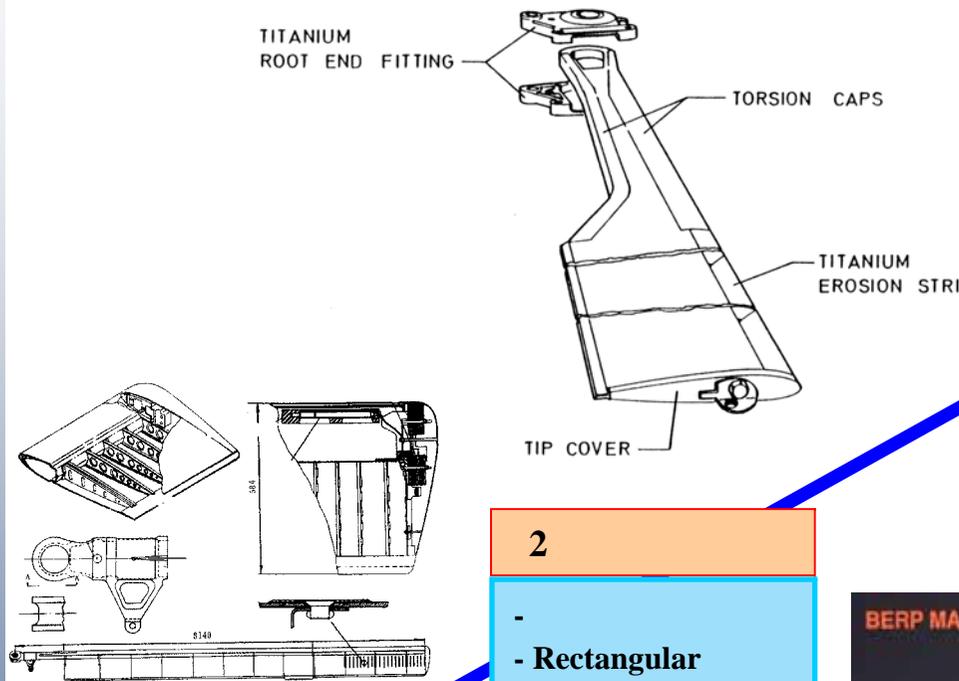


(Vertical Take-off/landing)	가	가 (Harrier Jet lift 가)
(Hover)	가	가
	가	가
(100kts)		
(200kts)	가	가



(Price, 26th ERF, 2000)





1

- Rectangular
- 500MD

2

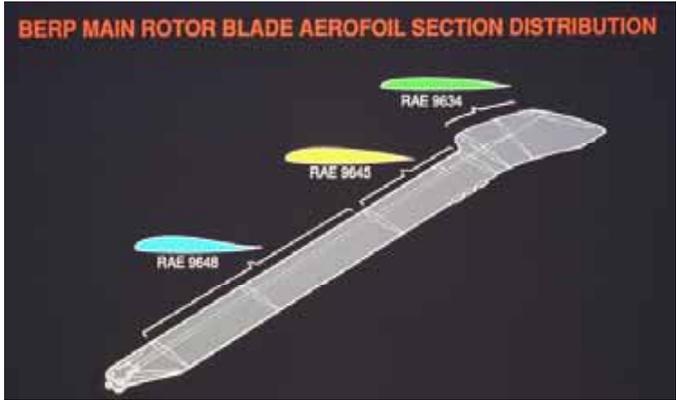
- Rectangular
- BK-117

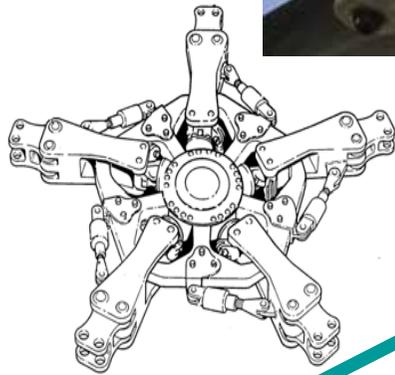
3

- Tip
- Super Lynx

4

- Advanced Tip
- New



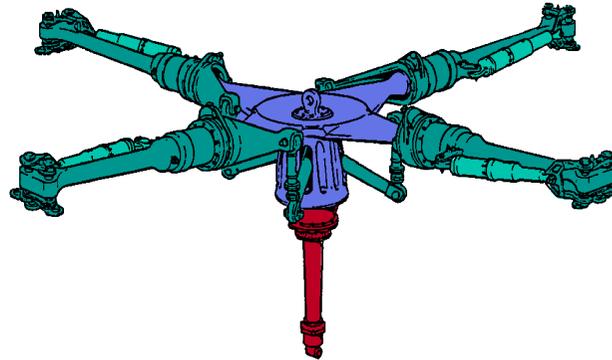
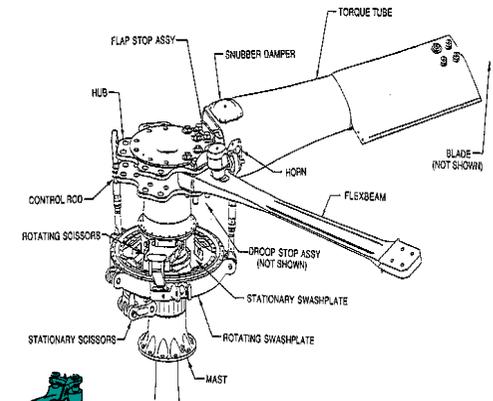


- / /
- 500MD

- 2-
- Bell-206, R-44

- 1
- Lynx, BO-105

-
- EC-135, RAH-66



		1995 – 1998	- / - 9
	(Super Lynx)	1998 – 2000	- / / - ACSR/HUMS/Transmission/Landing Gear
		2000 – 2002	- /
		2000 – 2003	- / / / 가 -
		2001 – 2006	- / / 가 - 가
		2001 – 2006	- , , , 가 - 가
	()	Lynx	1989 – 1995
Bell 212/412		1989 – 1995	- AH-1S - 가
(ARCH-50)		1992 – 1997	- Kamov - -



()

()	Bell 212/412	1987 - 1996	- Bell 212/412 250
	AS-365N2	1993 - 1994	- AS-365N2 5
	CH-47D	1990	- Boeing CH-47D 가
	SB-427	1996 -	- Bell Bell-427 20% - 2.5 30 .
()	BK-117	1992 -	- BK-117 . 5
		1997 -	- BK-117 - /
		1991 - 1995	- / /가 - 가 - R-22



- : ()
- :
- : , FAG
- 150 , payload 200 kg



4. KMH /





- **가가**
- 가가 () : () 38.1%, 가 (TV)
36.0%, (35.5%), (25.5%)
- - 가
- (Economics of Scale) (Learning Effect)가
-



- Infra
- /





5

가

- '70~80 500MD
- '90 UH-60



가(5 가)

- : 가
(: OH-1, MH2000, ALH)
- - : (500 MD, UH-60)
 - : SB427
 - : KT-1, T-50



- : 145
- 70%(101) :
- :
- 10 : 5 60%

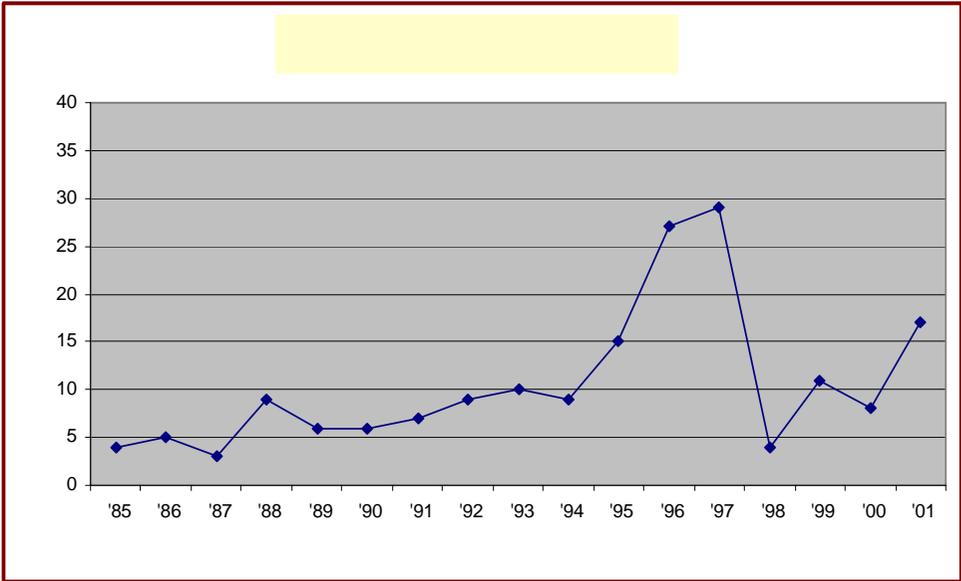
< >			S58	18	1	< >		
Bell212	15	1	S64	5	1	R-22	2	1
Bell214 B	16	5	A109	8	2	Bell205	15	1
Bell222	10	1	BK117	10	12	Bell206	7	18
Bell230	10	2	MD900	8	1	AS350	7	6
Bell412	15	8	PZL SOKOL	14	9	MD500	5	7
AS365	13	11	KA32T	17	35	H-500D	5	11
AS332	20	1	MI26TC	90	1			
S76	12	8	SB427	9	1			
Mi172	30	1			101			44

- : 500
- 5 11

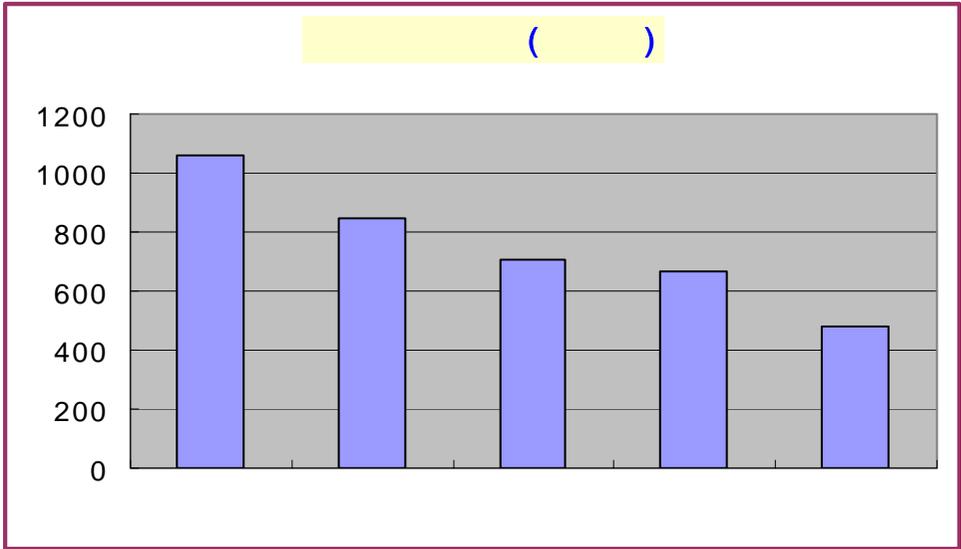
	/ /		
Aerospatial Alouette 3		5	
Bell AH-1			
Bell 206		,5	
Bell212		15	
Bell412		15	
Bell UH-1		,11	
Boeing CH-47		44	
Eurocopter AS332L		20-27	
MD500		5	
UH-60		11	
Westland Lynx99			
BO105 CBS-5			
	507		



- IMF : 가
- IMF : 가
- 가 /
-
-



- MD 500 UH-1, 10



: , '99.6 (1994)



5.



□ 가

- , , ,
- , , ,

□

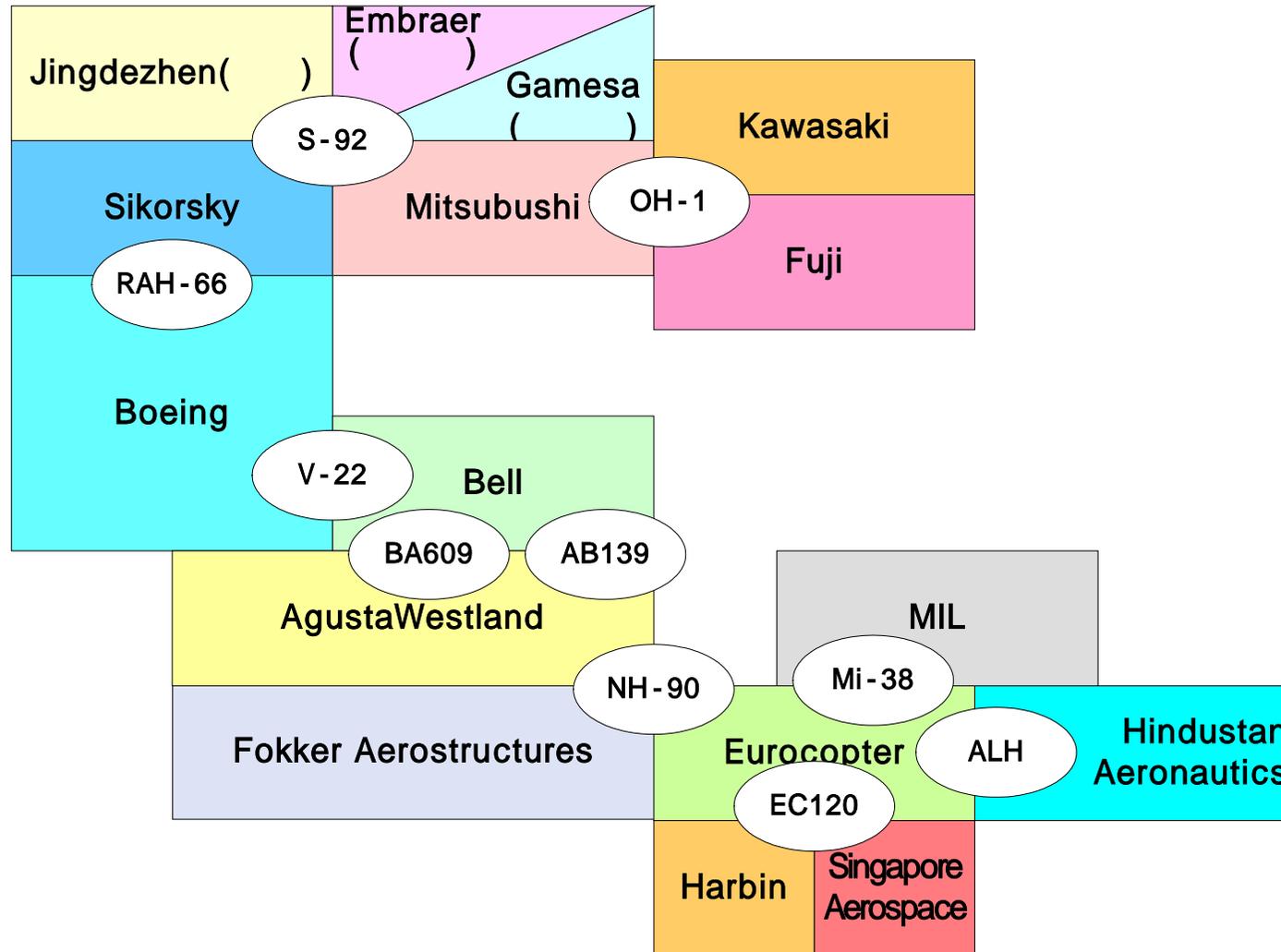
- S-92 : , , 5
- NH-90 : , 4
- EC-120 : , 3

□

- RAH-66 : ,
- V-22 : ,
- Mi-38 : ,

가		
	OH-1	<ul style="list-style-type: none"> • : 8 • 3
	MH2000	<ul style="list-style-type: none"> • : 4 • OH-1
	Z-9	<ul style="list-style-type: none"> • : 6 • '80 Eurocopter AS365N

()



□ /

- 1966
- 1980 가
- 1997 1,053

□

- 30~40
- 1992 가 , OH-X
- , 10 MH-2000
- 20 S-92
- , -Bell 305B

□

- ,
- (TRDI), R&D
- 1,193 , 1998 1,430 ,
- 1958 , ,



OH-1(KHI)

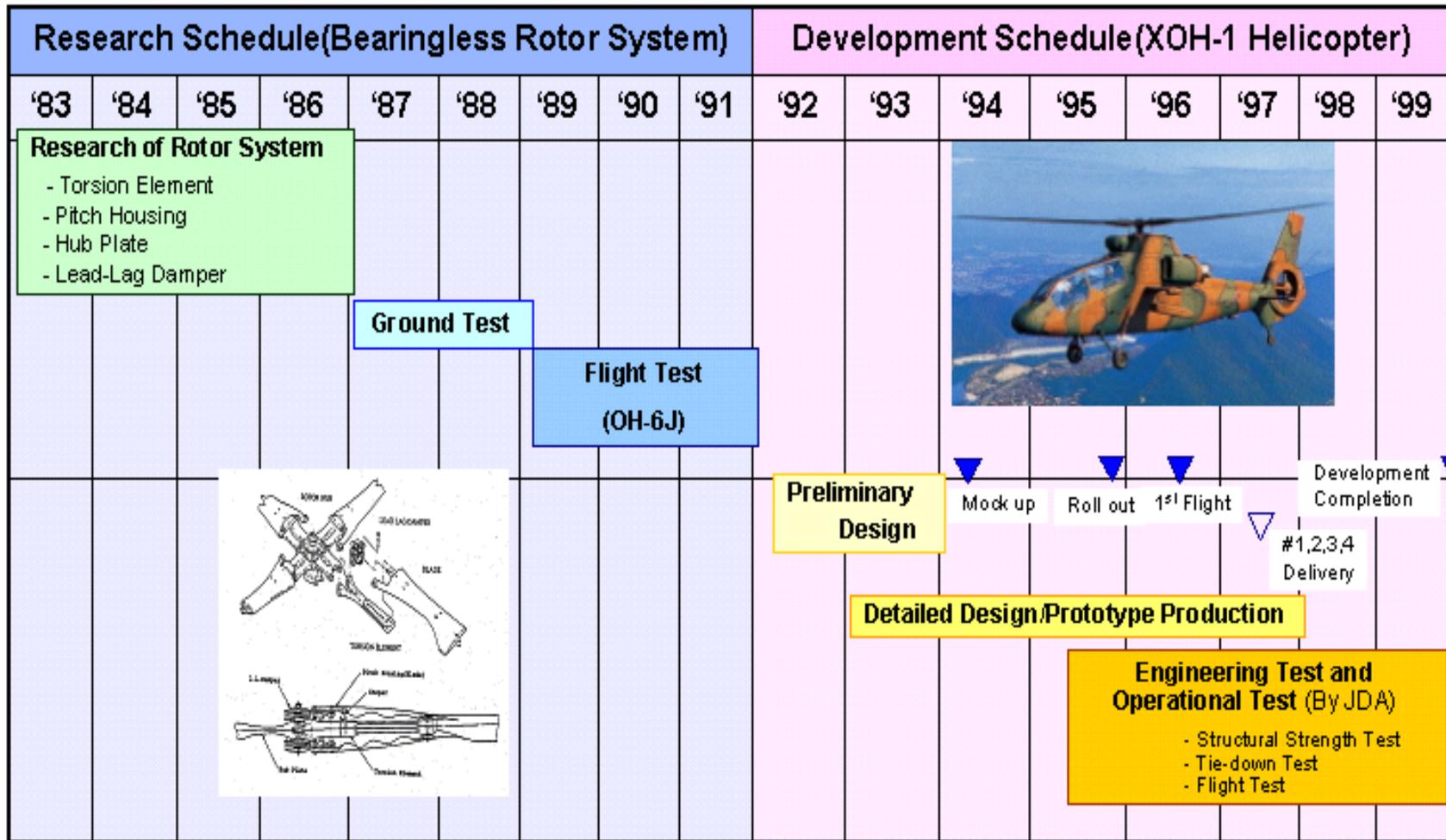


MH2000(MHI)

- ()

OH-

1 (9)





/



,

KT-1/T-50



, 가



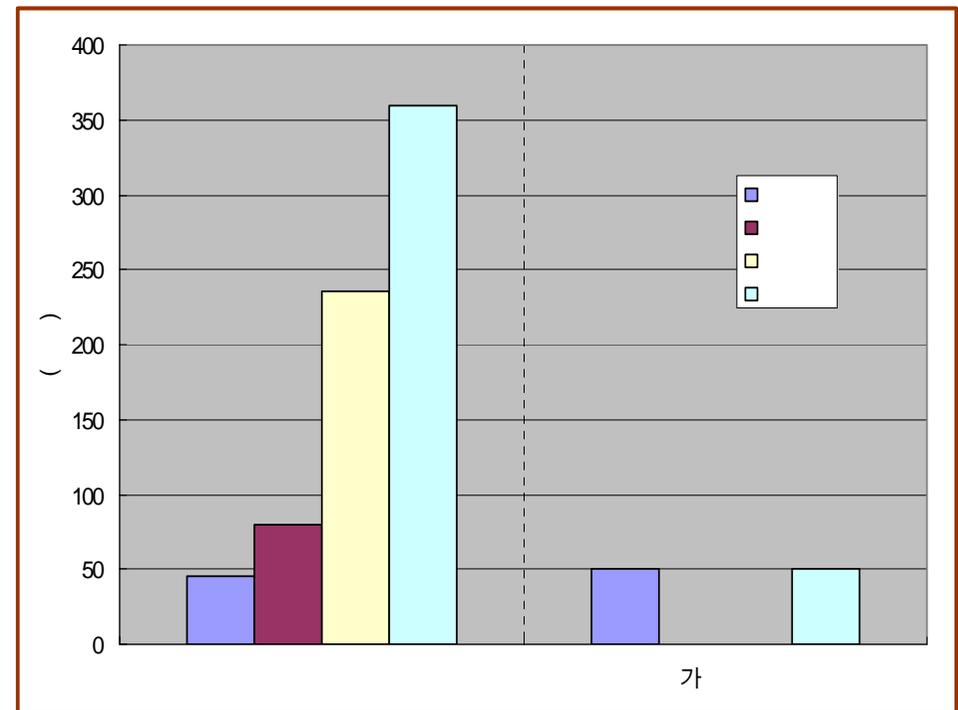
가



가



가



<

>



-1(가 NTRM)

			()
- , / ,	- (KT-1, T-50)	-	60%
- 4 - NOTAR/	- 4 , ,	-	50%
- JTAGG () : - , ,	-	-	65%
-	- TGB - MGB	-	40%
- /	- (Lynx, UH-60m KT-1, T-50)	-	60%
-	- 가	-	60%

(25%< <50%< <75%<)



-1(가 NTRM)

			()
	-	- OFF - T-50	50%
	- FBW - FBL	- 3 - T-50 FBW	30% ()
/ 가	- ' 가	- 가	50%
/ S/W	- 3 - , S/W	- /	60%
	- HIMS - ACSR	- /	20%
	- CRW	- '02	20%
	-	- (T-50) ('05)	60%

(25%< <50%< <75%<)



-2(2004)

/	- / - (,)	59%
가	- 가 (GSRTS, ,)	51%
가 / /	- SB427 , BO105 , Lynx Upgrade - 500MD, UH-60 ,	77%
	- (), - SB427 , UH-60	48%
	- KT-1, T-50 -	58%
	- /	86%

(25%< <50%< <75%<)

가 ,
가



6. KMH



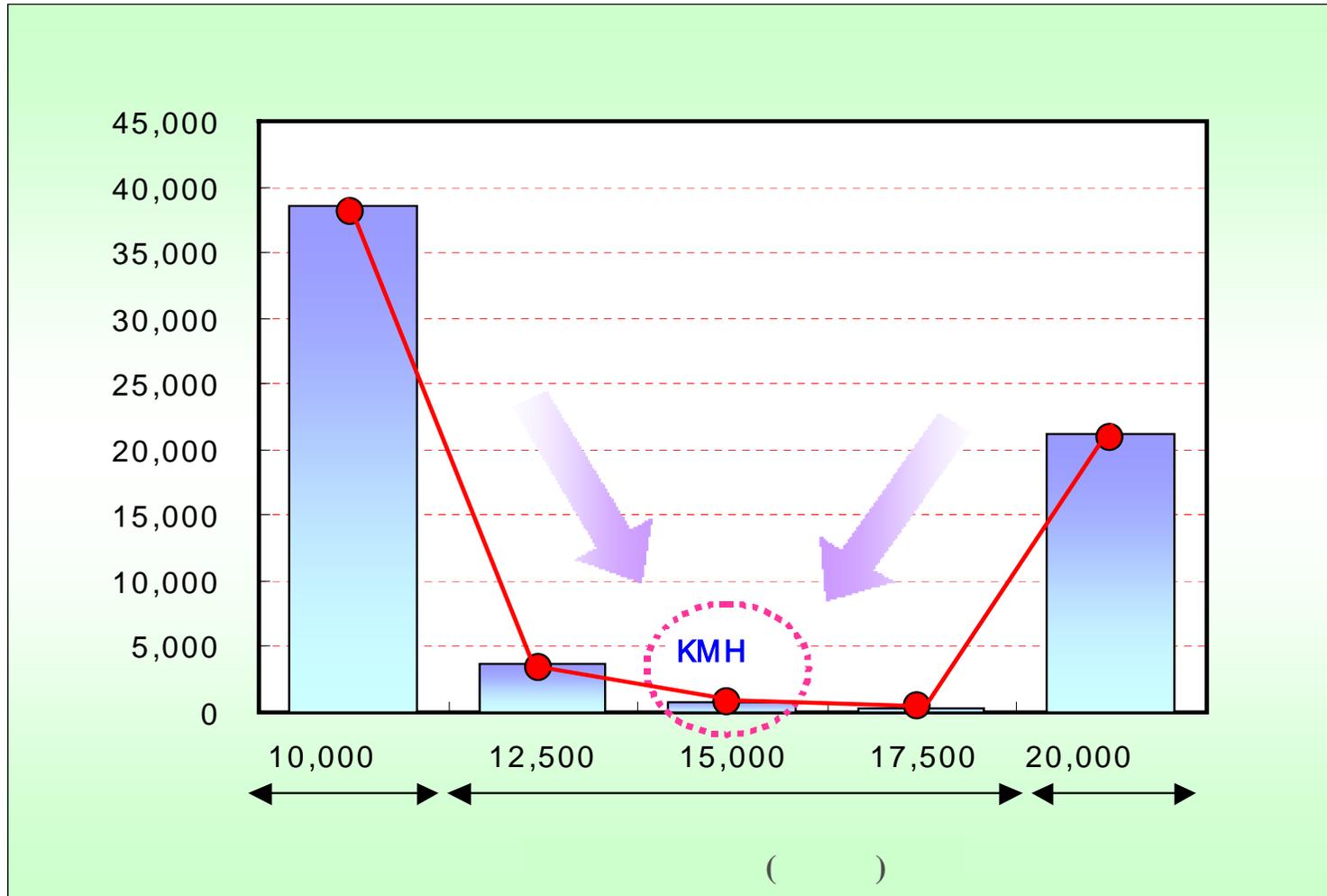
- ()
 - , ,
 - 'Korea' 가

	50%	95%	-
	40%	95%	- ,
	65%	92%	- 가
	60%	98%	-
	50%	95%	-
	60%	95%	- /



KMH

가



30 KMH 500 , 500 , 400 , 400

2.9

(500 , 30 가 , KMH)

(:)

		-	910	
		8,250	7,500	* 가 : 16.5 * 가 : 15.0
		12,375	9,000	
		-	627	
		7,475	5,750	* 가 : 15.0 * 가 : 11.5
		523	403	
		-	2,754	
		14,458	9,872	* 가 : 16.8 * 가 : 11.2
()		36,145	17,769	

		-	315	
		1,250	1,000	* 가 : 2.5 * 가 : 2.0
		2,750	2,200	
		-	387	
		6,655	6,050	* 가 : 13.3 * 가 : 12.1
		9,317	7,260	
		-	1,432	
		8,450	7,050	* 가 : 16.9 * 가 : 14.1
		8,450	7,050	
		116,098	87,329	28,769

<2004.4. , >



- 20 가가 4.4
 - 500 (KMH)
 - : 380 / , 44 \$
- ('00 Forecast International)
(:)

		가		가가
	7,500	15.0	12.0	3.0
	5,750	11.5	8.9	2.6
()	16,100	16.1	8.0	8.1
	1,150	2.3	1.6	0.7
	6,050	12.1	10.9	1.2
	7,050	14.1	4.3	9.8
	43,600			

KMH

- 가

- 가

/

- /



가 KMH !!