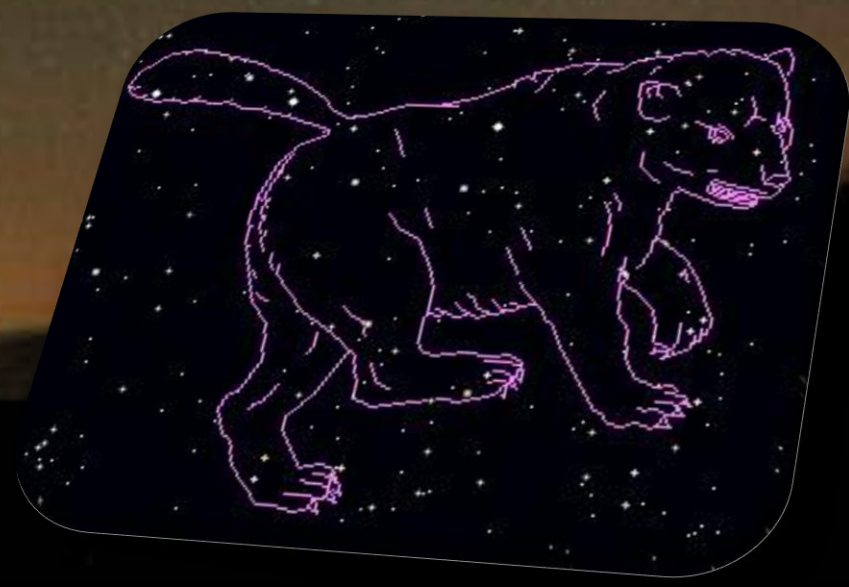




**Navigationsübung  
„Ursa Major“**



# BENCHMARK SIMS

Version 4.33



23.02.2016

## 2 Basic Advanced

### 2.1 HSD

2.1.1 HSD

2.1.2 Situation Awareness

### 2.2 Air Navigation **Schwerpunkt**

2.2.1 Basic-T

2.2.2 INS/GPS

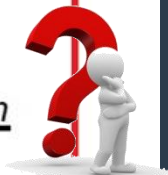
2.2.3 An- Abflugverfahren

2.2.4 TACAN

2.2.5 ILS

2.2.6 Bullseye

2.2.7 Special Approaches



# BMS 4.33 – 6. Training

## Roster



Zum Einsatz kommen.

**Package 1031** RECCE-Mission, F-16CM-52

**TO:** KUNSAN AB, Taxi Times: 6 min.

**ARR:** KUNSAN AB

-Rocket1: 17:25LT

-Scout1: 17:26LT

-Tracker1: 17:27LT

-Venus1: 17:28LT

-Wildcat1: 17:29LT

*- Folgt nach Anmeldeschluss -*

**Package 1433**, Training-Mission, F-16CM-52

**-Python1, KUNSAN AB: 17:30LT**      **Reaper (Technic-Flight)**

**-ATC:**                      - KUNSAN AB durch 2nd Lt Ziri (U: 359.300 MHz)  
                                  - KIMPO AB durch 2nd Lt Ziri (U: Towerfrequenz KIMPO)

**Bemerkung:**            - Die Flights agieren als 2-ship!

**Stand: 191800Afeb16**

Es haben sich 14 Mitglieder angemeldet

Alle Mitglieder benachrichtigen

<input type="radio"/> BadCrow	<input checked="" type="radio"/> Bluebird
<input checked="" type="radio"/> Dro16	<input type="radio"/> Fatality
<input checked="" type="radio"/> Keule	<input checked="" type="radio"/> Paladin
<input type="radio"/> Para	<input checked="" type="radio"/> Reaper
<input type="radio"/> Sledge	<input type="radio"/> Slick
<input type="radio"/> Sneakpeek	<input type="radio"/> Sparrow
<input type="radio"/> TheWitch	<input type="radio"/> Ziri

Es ist ein Mitglied unentschlossen

Ghostrider

**KI-Flight: Stonecat1, C-130H, KADENA AB, 17:24LT**



Wegpunkt	Aufgabe	Bemerkung
1	KUNSAN	Take-off
-ohne-	PATRO	At or above 7000ft
-ohne-	VORTAC ANYANG (SEL)	Navigation
-ohne-	ENKAS	Navigation
WP2 - WP3 (IP)	LowLevel (NOE)	„Folgen Sie dem Flusslauf!“
N 38° 30.505` E 128° 51.627`	Aufklärungsziel	5th Infantry Corps Base, Einsatz Recce-pod
-ohne-	„HUD AUS“, Einsatz Basic-T Bullseye 065°, 28 nm	Objekttyp? Zustand?
-ohne-	VORTAC YANGJU (YJU)	Navigation
-ohne-	ILS-Approach KIMPO AB for T&G	Rwy. 14R, Anmeldung bei Human-ATC auf Tower-Channel KIMPO
-ohne-	VORTAC ANYANG (SEL)	„Folgen Sie der Luftstraße 576 bis RINBO auf FL160“
-ohne-	Bullseye 185°, 140 nm „HUD EIN“	Objekttyp? Anzahl?
-ohne-	VORTAC MUAN (MUN)	Navigation
<u>dann</u>	Kurs WEST bis „Inflight“ abgeschlossen, anschl. RTB mit Backup-Funkgerät	(Ausfall NavAnlage,= <b>Inflight Alignment</b> , Ausfall Stromversorgung= <b>Backup</b> )
WP4	Anflug Alternate Rwy. 24	KUNSAN AB (IAF: WOLF)
WP5	Alternate	SEOSAN AB



Airbase	DEP	Kunsan	75 X	292.30	126.50	10	36	110.30
	ARR	Kunsan	75 X	292.30	126.50	10	18	110.30
	ALTN	Seosan	52 X	353.10	136.75	26	02R	111.50

TO / Loadout	Config				TO Spec	137 Mil	int Fuel	7162
	A-A	4x A-9X 2x A120B	Gross Wgt	35414	Rotation	145	TO Fuel	11994
	A-G		Drag ind	125	Refusal	178	Set Fuel	
	ECM		ALOW	300	Mil Power	97 %	JOKER	
	Tanks	2x TK370	MSL	10000	Mil Climb	400/0.84	BINGO	1500

Package	Callsign Pack	1031	Aircraft Type		UHF	VHF	IDM	TCN	Task
	<input checked="" type="radio"/>	Rocket 1	4 F-16CM-52	6	#1	XMT 10	12Y		RECCE
	<input type="radio"/>	Scout 1	4 F-16CM-52	6	#2	XMT 20	13Y		RECCE
	<input type="radio"/>	Tracker 1	4 F-16CM-52	6	#3	XMT 30	14Y		RECCE
	<input type="radio"/>	Venus 1	4 F-16CM-52	6	#4	XMT 40	15Y		RECCE
	<input type="radio"/>	Wildcat 1	4 F-16CM-52	6	#5	XMT 50	16Y		RECCE

Flight	Rocket1 (TIMBER)	Scout1	Tracker1	Venus1	Wildcat1
<b>UHF/VHF</b>	V1+2	V3+4	V5+6	V7+8	V9+10
<b>U-BACKUP</b>	U6	U7	U8	U9	U10
<b>REMOVE CHOCKS</b>	U15	U15	U15	U15	U15
<b>READY FOR TAXI</b>	U17	U17	U17	U17	U17
<b>HOLDING LINE</b>	U17	U17	U17	U17	U17
<b>Exit-Point</b>	U6	U6	U6	U6	U6
<b>Emergency-Area</b>	-	-	-	-	-
<b>50 nm out IAF</b>	U17	U17	U17	U17	U17
<b>Set Chocks</b>	U15	U15	U15	U15	U15
<b>After „Shutdown“ (Backup)</b>	U17	U17	U17	U17	U17

**BMS 4.33 – 6. Training**

**Wetter/Funk**

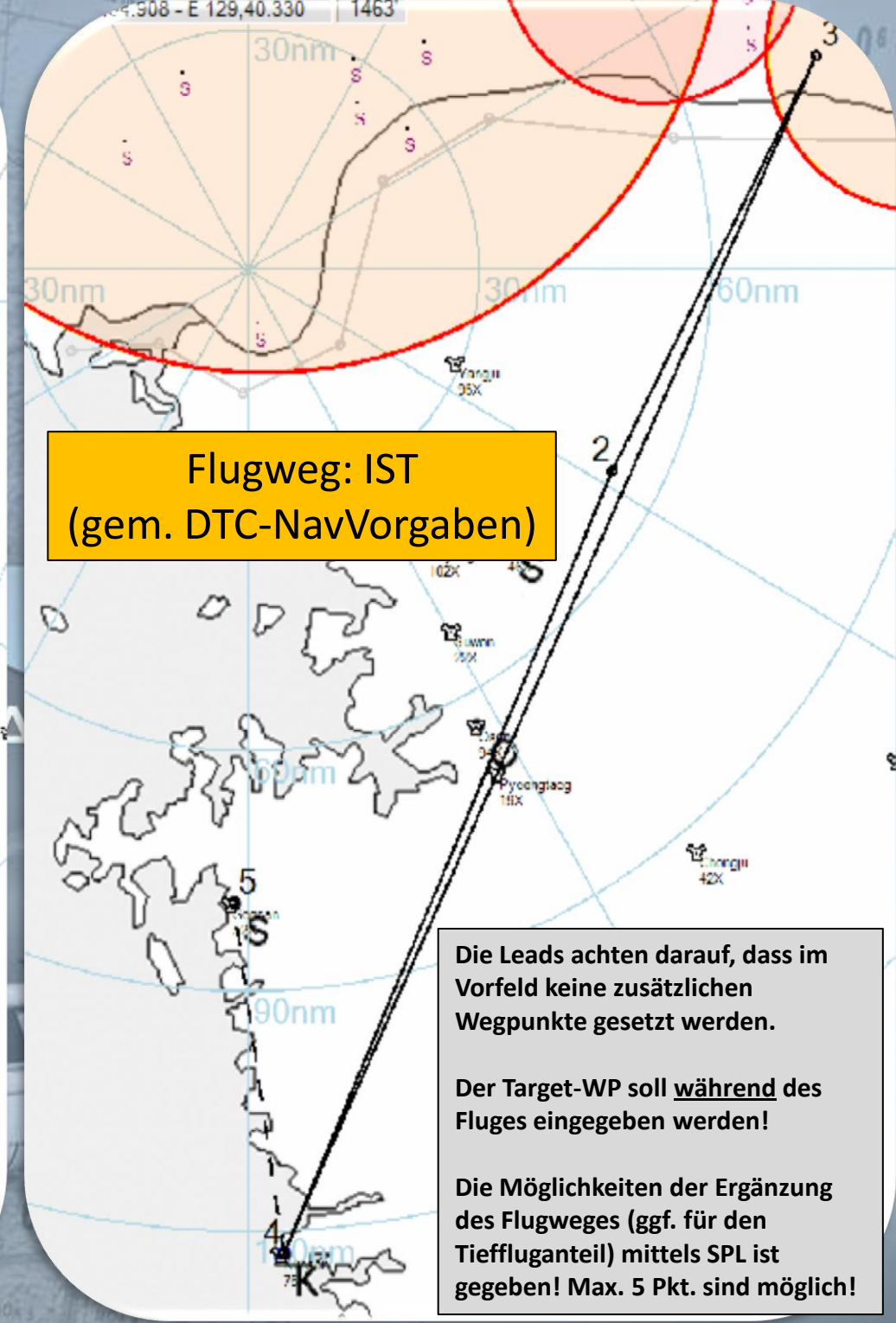
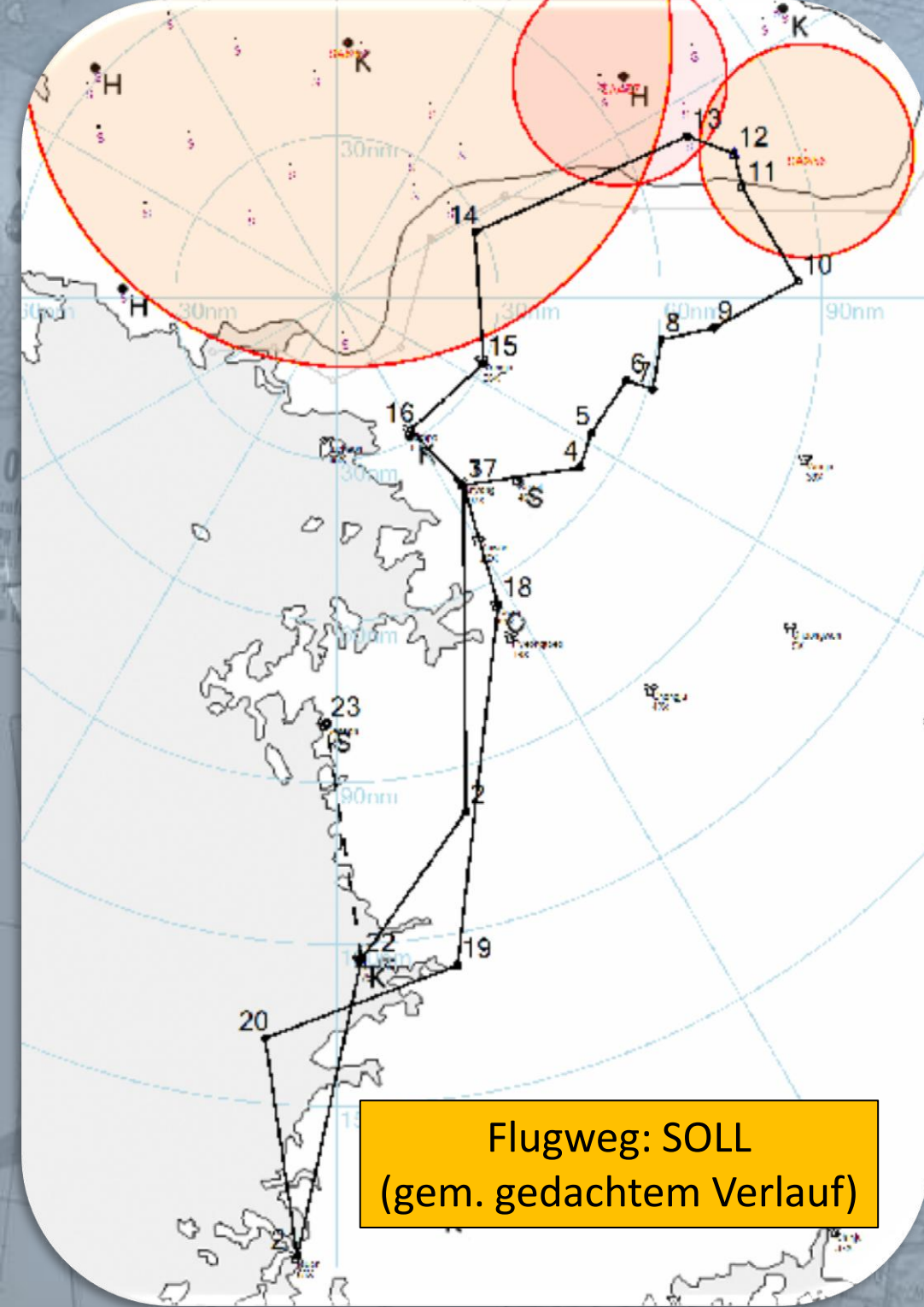
**IMS**

ATIS: RKJK INFO: B 011625LT ILS RWY36 TRL140 300/5KT BLU  
 Military: 15/5 Q1013 NOSIG

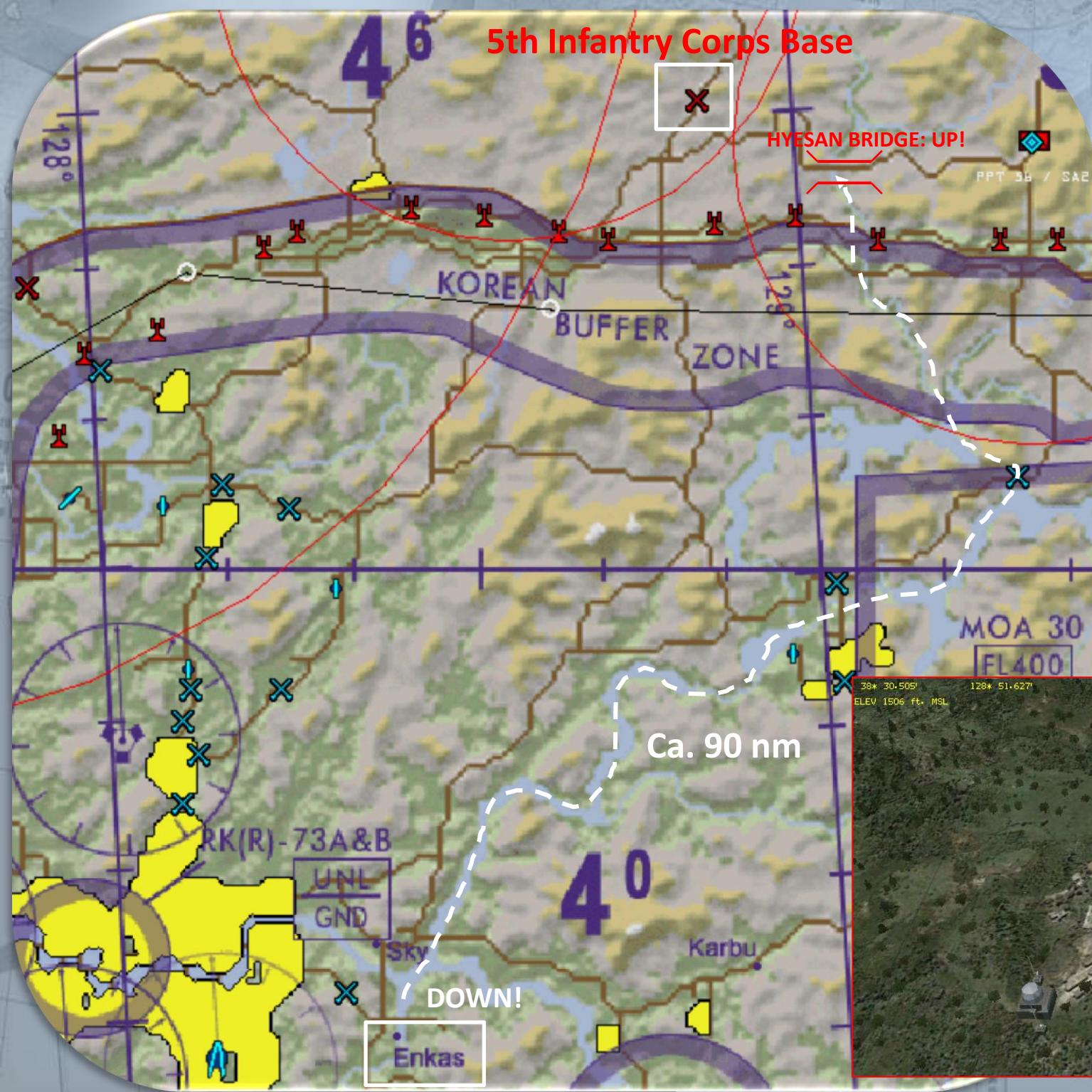
**KUNSAN heiter und trocken.**

**Zielgebiet frei von Wolken!**

**Sunset: 19:00LT**







BMS 4.33 – 6. Training

Tieffluganteil und  
Aufklärungsziel







## BMS 4.33 – 6. Training

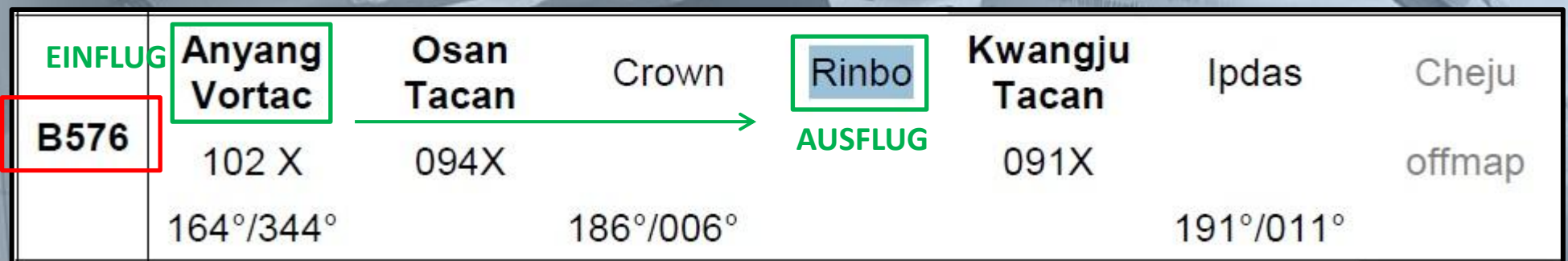
### Nav-Appendix

Station Name	ID	Channel/band	Type	Range (Nm)
<b>1.2.2.1 South Korea</b>				
Anyang	SEL	102X	E	100
Gangwon	KAE	103X	E	140
Incheon	NCN	085X	E	100
Mokpo	MKP	049X	A	70
Muan	MUN	065X	A	40
Talsung	TGU	059X	E	140
Uljin	UJN	100X	A	40
Ulsan	USN	062X	A	40
Wonju	HGS	039X	A	40
Yangju	YJU	096X	E	140
YangYang	YAG	043X	A	40
Yeosu	YSU	104X	A	40

2.5.2. Cruising level in KTO

2.5.2.1: IFR

2.5.2.2: VFR







# BMS 4.33 – 6. Training

## Loadout u. Performance

- COL DRD16
- LT. TIKIN
- LT. BLACKWOLF
- LT. SPARTAN



Loadout	INV	QTY	LOAD TGP	LOAD HTS
AIN-120B	HGH	2	● ● ●	● ● ●
AIN-9X	HGH	4	● ● ● ●	● ● ● ●
370 Gal Tank	HGH	2	● ●	● ●
Low Alt Camera	HGH	1	●	

Clean Wt : 19500  
 Munitions : 3920  
 Fuel : 12194  
 Gross Wt : 35614  
 Max Wt : 48000  
 Drag Factor : 125.0  
 Max G Limit : 7.0 (8.5)  
 Min G Limit : -2.0 (-3.0)  
 MAX KIAS : 600  
 MAX Mach : 1.60  
 Load CAT : I  
 LGB Laser Code 1688

### Performance

**Airport**

**Select APT** **Charts**

**Kunsan**

RWY: 36 RKJK  
 ELV: 10 KUV  
 TODA: 9000 f / 2744 m  
 LDA: 9000 f / 2744 m  
 Width: 195 f / 59 m  
 Temp C: 15 F: 59 ISA dev: 0  
 Wind: 300 / 5 HWC: 3 CWC: 4  
 QNH: 1013 Hpa 29.91 In

**Aircraft**

Type: F-16CM-52

Empty Weight: 19500  
 Loadout: 3920 **Set**  
 Block Fuel: 12194  
 Taxi Fuel: 200  
 Takeoff Fuel: 11994  
 Gross weight: 35414  
 Max weight: 48000  
 Drag Factor: 125

**TakeOff**

Pitch: 13  
 Power: ML  
 Rotate: 145  
 Lift Off: 155  
 Refusal: 178  
 Factor: 2.412

**Engine Info**

Power Plant: F100-PW-229  
 Dry: 17000 lbs  
 Max: 28500 lbs  
 Mil Power: 97 %

**MAX AB Climb**

Climb Schedule 545/0.90  
 Distance 2.9 nm  
 Fuel Burned 426 lbs  
 Time 0 min 23 sec

**Cruise**

Opt Mach: 0.83  
 Cruise Alt: 12000  
 Opt Cruise Alt: 33000  
 Cruise Ceiling: 36288  
 Service Ceiling: 36958

**MIL Climb**

Climb Schedule 400/0.84  
 Distance 9.9 nm  
 Fuel Burned 327 lbs  
 Time 1 min 21 sec

**Climb Explanation**

A constant throttle position (MIL or MAX AB) from brake release to MIL or MAX AB climb speed is used. After takeoff, a constant pitch attitude of 12 degrees is held until 2500 feet AGL. A level acceleration to climb speed is then made. In some cases, climb airspeed will be reached prior to gaining 2500 feet AGL. This technique was developed for performance calculations only and not as an operational procedure.

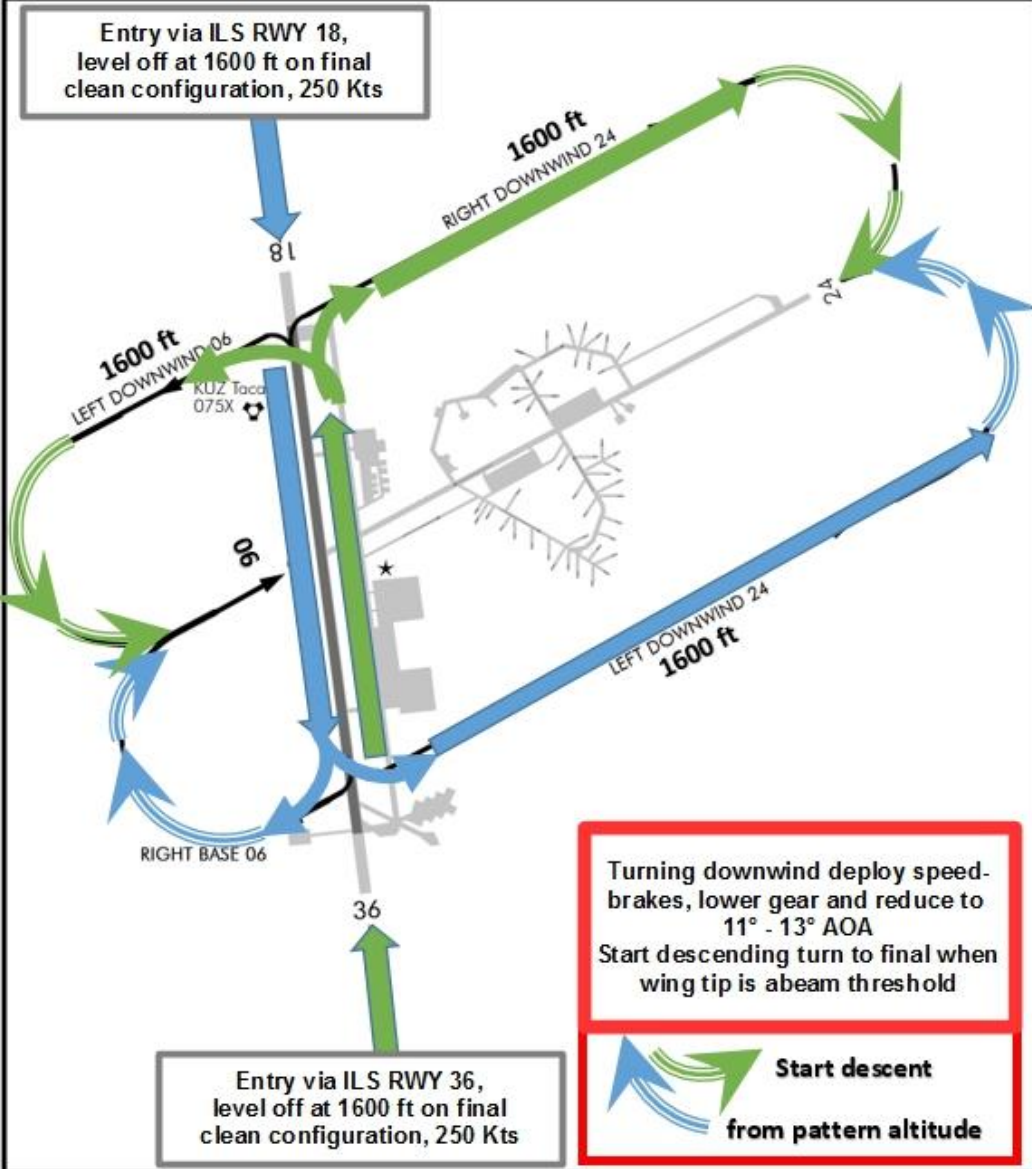
ALTERNATE RUNWAY

Date: 06 Jan 14

TACAN: 075X	TWR: 292.3/126.5	TRANS LEVEL: FL 140	TRANS ALT: 14000 ft	GPS: N35°57.554' E127°24.492'	ELEV: 10'
----------------	---------------------	------------------------	------------------------	-------------------------------------	--------------



LOCAL Channelization (non AI):  
GND: 273.525 - DEPARTURE: 293.525  
APPROACH: 292.650 - SCRAMBLE: 277.2



BMS 4.33 – 6. Training

**Approach Alternate Rwy. 06 KUNSAN (new)**

ARK SIMS