

TOOLS PENDUKUNG NOTA DAN NOTAM SEBAGAI SALAH SATU KOMPONEN AIM

Dalam rangka WORKSHOP PUBLIKASI NOTAM

**Jakarta 11, 12 Nopember 2009
Hotel Lumire**



Direktorat Jenderal Perhubungan Udara
Direktorat Navigasi Penerbangan



INDOAVIS

PT. INDOAVIS NUSANTARA

Geo-informatics & Aeronautical Navigation Supports
2nd Floor Terminal Building A-02/PK
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INTEGRATED (IADS) Indonesia AIS Database Server

KONSEP AIM

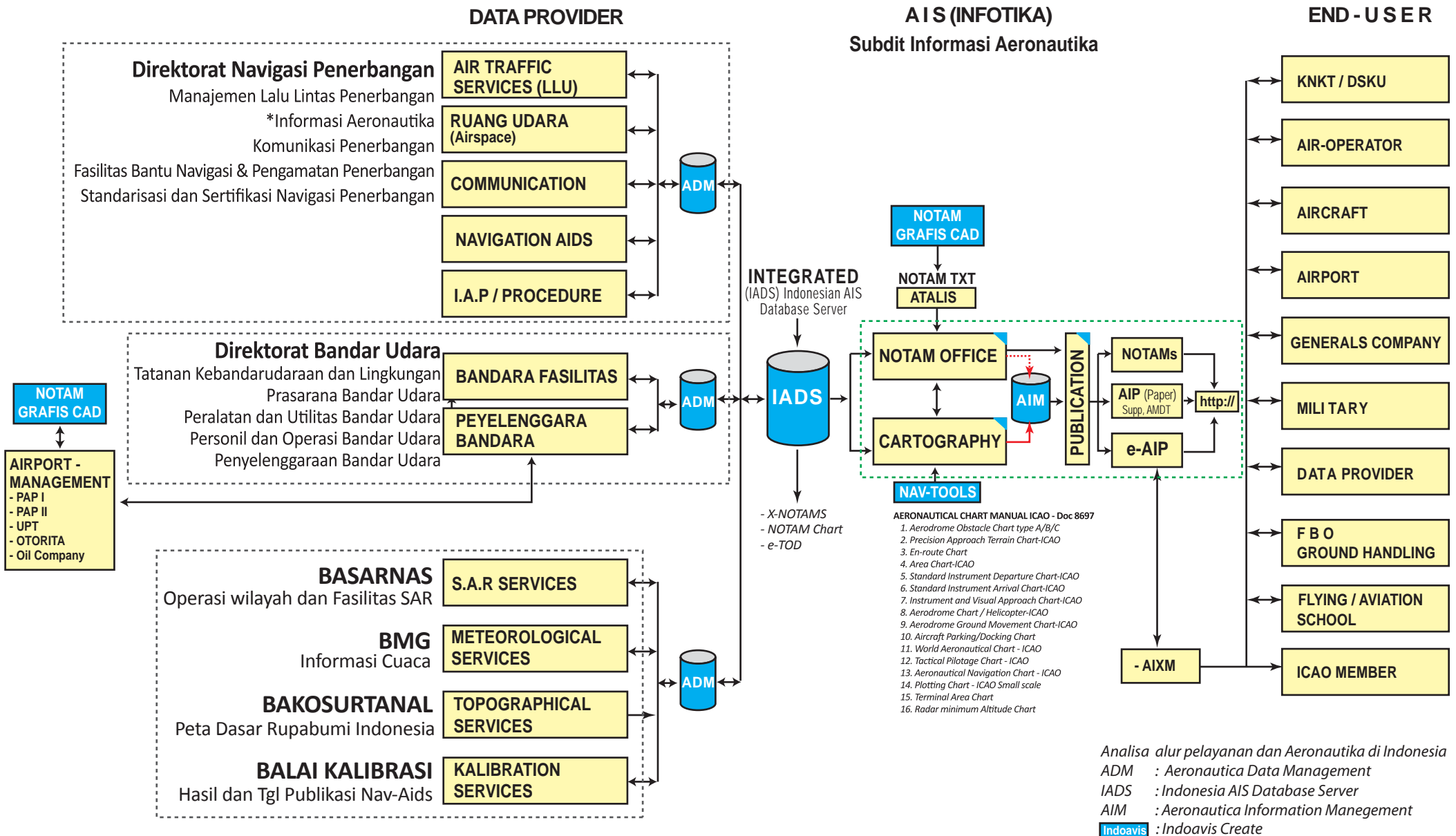
(Aeronautical Information Management)

Doc 8126 (Aeronautical Information Services Manual)

KONSEP AIM (Aeronautical Information Management)

Doc 8126 (Aeronautical Information Services Manual)

Alur lingkup kebutuhan data dalam pemberian informasi Aeronautika disesuaikan dengan fungsi AIS yang beracuan pada ICAO Doc. di Indonesia (Hasil analisa disesuaikan dengan fungsi tugas pemerintahan)



KONSEP AIM (Aeronautical Information Management)

Doc 8126 (Aeronautical Information Services Manual)

Kekuatan dari Konsep aplikasi ini (AIM) adalah data...! Sesuai dengan Doc. 8126 yang telah mengelompokan fungsi Aeronautikal Informasi services, yang terdiri dari AD.2.01 s/d AD.2.24, seluruh komponen data telah di beri identifikasi dan memiliki turunan data sendiri-sendiri.

Diharapkan jika data tersebut telah masuk dalam kelompoknya dan sesuai dengan format ARINC, maka sangat memungkinkan untuk mendukung program keselamatan penerbangan secara Internasional.

Program ini dibuat dan telah di uji coba lebih dari 3 tahun.

Kesulitan yang paling utama adalah tidak konsistensinya jenis dan format data yang di dapat dari hasil survai lapangan.

Untuk itu dipelukan standarisasi format data sesuai dengan standar ICAO.

Doc 8126 (Aeronautical Information Services Manual)

Document | **Airspace** | EnRoute | Aerodrome | Heliport

ICAO: WAAA / IATA: UPG SHOW ...

- AD.2.01. Aerodrome Location Indicator and Name
- AD.2.02. Aerodrome Geographical and Administrative Data
- AD.2.03. Operational Hours
- AD.2.04. Handling Service and Facilities
- AD.2.05. Passenger Facilities
- AD.2.06. Rescue and Fire Fighting
- AD.2.07. Seasonal Availability Clearing
- AD.2.08.1. Aprons, Taxiways and Check Location Data
- AD.2.08.2. Taxiways Properties
- AD.2.09. Surface Movement Guidance, Control System and Marking
- AD.2.10. Aerodrome Obstacle
- AD.2.11. Meteorological Information Provided
- AD.2.12. Runway Physical Characteristics
- AD.2.13. Declared Distances
- AD.2.14. Approach and Runway Lightning
- AD.2.15. Other Lightning, Secondary Power Supply
- AD.2.16. Helicopter Landing Area
- AD.2.17. ATS Airspace
- AD.2.18. ATS Communication Facilities
- AD.2.18.FREQ. ATS Communication Frequencies
- AD.2.19. Radio Navigation and Landing Aids
- AD.2.20. Local traffic regulations
- AD.2.21. Noise abatement procedures
- AD.2.22. Flight procedures
- AD.2.23. Additional Information
- AD.2.24. Aerodrome Charts

Select all Deselect all Inverse SHOW

AIRSPACE

IFR/VFR ENROUTE

ICAO	Type	Alt	Height	Priority	Direction of Flight	Remarks
WAAA	Class G	1000	1000	1		
WAAA	Class E	1500	1500	2		
WAAA	Class D	2000	2000	3		
WAAA	Class C	3000	3000	4		
WAAA	Class B	4000	4000	5		
WAAA	Class A	5000	5000	6		



AD.2.01

AD.2.01 Aerodrome Location Indicator and Name

ICAO: WAAA / IATA: UPG

name: SOEKARNOHATTA
city: CENKARENO
country: ID - INDONESIA
management: PT. (Persero) Angkasa Pura II

source: AP AMDT 06, 23 Dec 2004
effective: 2005-12-16 (YYYY-MM-DD)
entry by: handra at: 2009-10-14 12:35:18 action: update

undo UPDATE DELETE ADD NEW

AD.2.02

AD.2.02 Aerodrome Geographical and Administrative Data

ICAO: WAAA / IATA: UPG

AD type: DOMESTIC
AD status: INTERNATIONAL
ARP lat: 6 37 25 S
ARP long: 106 39 43 E
MAG: 04
distance city: 13.45 km
elevation: 14 ft
temperature: 32 C
mag variation: 0 E
traffic type: PR FUEL
address: Soekarno-Hatta IE Airport, Dukling 001 Jakarta 13101

phone: 021 550502, 55050, 5505173, 5507477
fax: 021 5502141, 55025, 5501128, 5506823
telex: K3555 PPHIA
AFTN: MMTZDV VMMOYVV
remarks:

source: AP AMDT 06 23 DEC 04, AP AMDT 20 02 JUL 09
effective: 2009-07-02 (YYYY-MM-DD)
entry by: milan at: 2009-07-24 10:33:06 action: update

undo UPDATE DELETE

AD.2.03

AD.2.03 Operational Hours

ICAO: WAAA / IATA: UPG

JTC region: W
AD administration: 6001, 6000, 0930
customs and immigration: H-24
health and sanitation: H-24
ATS briefing office: H-24
ATS reporting office: H-24
MET briefing office: H-24
air traffic services: H-24
fueling: H-24
handling: H-24
security: H-24
remarks:

source: AP AMDT 20 02 JUL 09
effective: 2009-07-02 (YYYY-MM-DD)
entry by: milan at: 2009-07-24 10:33:30 action: update

undo UPDATE DELETE

AD.2.04

AD.2.04 Handling Service and Facilities

ICAO: WAAA

ICAO cargo handling: W
fuel and oil types: JET A 1 (FOR JET AIRCRAFT), AVTUR, OTHER TYPE FUEL OR LUBRICATING OIL ONLY, AVTUR FROM AIRLINES
fuelling facility: FUEL TANK CAPACITY, HYDRANT FIT DISPENSER, AND FUEL TRUCK / 72 MILLION LITRES
de icing facility:
hangar visit space: BY ARRANGEMENT WITH GMP AERIO ASIA (3 HANGAR), PHONE: 62-21-5509184, 5501985
repair facility: GMP AERIO ASIA FOR MAINTENANCE, REPAIR AND OVERHAUL, OXYGEN AND RELATING SERVICE OXYGEN FOR ALL CABIN AND AIRCRAFT SYSTEM CO2, OXYGEN
remarks: NIL

source: AP AMDT 06, 23 DEC 04, AP AMDT 20 02 JUL 09
effective: 2009-07-02 (YYYY-MM-DD)
entry by: milan at: 2009-07-24 10:40:49 action: update

undo UPDATE DELETE

KONSEP AIM (Aeronautical Information Management)

Doc 8126 (Aeronautical Information Services Manual)

Seperti di katantakan sebelumnya, jika data telah terkelompokkan dengan benar maka dengan mudah program akan menampilkan sesuai dengan kebutuhan. Dibawah ditampilkan beberapa contoh format baik untuk digunakan dalam lingkungan sendiri (Subdirektorat, Direktorat atau hanya dalam lingkungan Bandara) dengan hanya menggunakan media Internet Explorer, baik secara Intranet maupun secara Internet

Karena Program ini dibuat dengan software PHP dan berbasis pada Database MySql.

Internal komputer program NAIS

Home - Microsoft Internet Explorer
Address: http://192.168.1.3/indoavis/nais/index.php

NAIS
eAIP-web

You are logged in as VIP member of Management and allowed to: [logout](#) [Hendra Andi Ledy](#)

Home • eAIP • edit data • chart monitoring • data monitoring • data validation • change password • manage users • list users • session records • manage rights • manage session »

Search for ICAO: / IATA:

WIII/CGK - CENGKARENG, INDONESIA
Effective Date: 2005-12-16
Updated: 2009-11-02 16:03:23

PT. (Persero) Angkasa Pura II
SOEKARNO-HATTA
INTERNATIONAL/CIVIL
Soekarno-Hatta Intl. Airport, Building 601 Jakarta 19101

Phone: (021) 5505002, 55050, 5505173, 5507477
Fax: (021) 5502141, 55025, 5501129, 5506823
Telex: 43585 P85H JA
AFTN: WIIIITZW, WIIIIYOYW

REMARKS: -

ARP coordinate: S 6 7.42 E 106 39.67
(6°7'25"S 106°39'40"E)
Elevation: 34 ft (10.4 m)
Temperature: 32°C (89.6°F)
Magnetic Var.: 0°
Traffic type: IFR / VFR
Dist. from city: 19.45 km
Time region: UTC +7
Operation hours: MON - FRI : 0030 - 0930

RWY	RUNWAY PHYSICAL CHARACTERISTICS				DECLARED DIST			
	Dimension of RWY	Surface Strength	Coordinates	Threshold Elevation	Slope	SWY	Dimension CWY	RWY Strip
07L (068.38)	3600x60m (11811x196.85ft)	Rigid	S 6 7.25 E 106 38.33	29ft	3°	60x60m	400x150m	3720x300m
25R (248.38)		PCN 120 R/D/W/T	S 6 6.54 E 106 40.15	21ft	3°	60x60m	120x150m	
07R (068.38)	3660x60m (12007.85x196.85ft)	Rigid	S 6 8.55 E 106 38.62	34ft	3°	60x60m	400x150m	3780x300m
25L (248.38)		PCN 120 R/D/W/T	S 6 7.82 E 106 40.46	27ft	3°	60x60m	400x150m	

RADIO NAVIGATION & LANDING AIDS

VOR/DME	CKG	113.6	MHZ / CH-83X	H-24	S 6 11 16.4 E 106 31 47.82	*CKG* VOR UNUSAI RAD 270 CCW TO: RAD 220 CCW TO:
VOR/DME	DKI	114.6	MHZ	H-24	S 5 57 40.3 E 107 2 7.88	*CKG* VOR UNUSAI RAD 270 CCW TO: RAD 220 CCW TO:
VOR/DME	IMU	116.4	MHZ	H-24	S 6 18 15.3 E 108 20 20.38	*IMU* VOR UNUSAI 390 BELOW 12000 FT
NDB	CL	258		H-24	S 6 6 20.75 E 106 44 8.61	FOR RWY 25 L

External Internet (http://www.indoavis.co.id)

Indoavis Nusantara - Microsoft Internet Explorer
Address: http://www.indoavis.co.id/nais/index.php

WAAA/UPG - MAKASSAR, INDONESIA
Effective Date: 2009-04-09
Updated: 2009-10-07 13:40:00

PT. (Persero) Angkasa Pura I
SULTAN HASANUDDIN
INTERNATIONAL/CIVIL/MILITARY
SULTAN HASANUDDIN AIRPORT MAKASSAR PO. BOX 90552

Phone: (0411) 4813210
Fax: (0411) 4813222
Telex: 73438 SRA I MD DA
AFTN: WAAAQOYE

ARP coordinate: S 5 3.65 E 119 33.27
(5°37'5" 119°33'35"E)
Elevation: 47 ft (14.3 m)
Temperature: 33.5°C (92.3°F)
Magnetic Var.: 2°
Traffic type: IFR / VFR
Dist. from city: 8.7 NM
Time region: UTC +8
Operation hours: MON-THU : 0000-0800, FRI : 0000-0800

REMARKS: -

RWY	RUNWAY PHYSICAL CHARACTERISTICS				DECLARED DISTANCE			
	Dimension of RWY	Surface Strength	Coordinates	Threshold Elevation	Slope	SWY	Dimension CWY	RWY Strip
13 (L03)	2500x45m (8202x147.64ft)	ASPHALT PCN 63 F/C/A/D	S 5 3.26 E 119 32.23	55.43m (181.95ft)	36R	0°	60x75m (200x246ft)	2620x300m
31 (R03)			S 5 4.34 E 119 30.24	36R	0°	60x45m (200x148ft)	2500m	2500m

RADIO NAVIGATION & LANDING AIDS

VOR/DME	MSS	114.7	CH-94X	H-24	RACAR
NDB	GP	375		H-24	
ILS/LLZ	JRP	111.3		2300 - 1500	
GPS/DSS	GP	302.3		2300 - 1500	
DME	QD50X			2300 - 1500	
		75 MHz		2300 - 1500	

PROCEDURES: Arrival Chart STAR

Internal local host Intranet

Nav. Data - Microsoft Internet Explorer
Address: http://192.168.1.3/DG2AN/2009/nais/nais/index.php

AVIATION SAFETY e-AIP

Route of B470: ANTO, PKP pers, BOSLO, BUND, DKL pers.

SEARCH DATA:
Aerodrome (ICAO/IATA/home/city/country):
Navigation Aids (ID):
Airways (Route Name):
NOTAMS (ICAO/ICAO...):
Terminal Weather (ICAO):

Route designator	Distance (NM)	Upper Limit	Lower Limit	Min. Flight Alt. Airspace Class	Initial Limit (NM)	Direction of Cruising Limit	Remarks
B470	136.01	FL 450 (16450 FT)	FL 100 (3658 FT)	B	50	↓	ATIS TOWER 118.24MHz, 118.75MHz.

Program secara otomatis menampilkan gambar (Chart) sesuai dengan data yang dimilikinya. Jika data dirubah secara otomatis pula gambar akan berubah.

Hingga diharapkan setiap kelompok yang berfungsi pemilik data (Bandara, Hasil Survei atau Otoritas pemilik data) dapat mengontrol dan tidak overlapping dengan data-data sebelumnya.

Hingga pihak Pusat (Subdit Infotika) dengan sangat mudah dapat mempalidasi dan mempublis informasi tersebut dalam NOTAM.

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2nd Floor Terminal Building A-02/PK Halim Perdana Kusuma International Airport Jakarta 13610, Indonesia Ph. 62-21 808 80028 - 62-21 912 60023 Fax. 62-21 809 7242

KONSEP NOTAM GRAFIS

(Tools Grafis NOTAM)

INTEGRATED (IADS) Indonesia AIS Database Server

KONSEP NOTAM GRAFIS (Tools Grafis NOTAM)

The screenshot shows a software window titled "NOTAM - Notice To Airmen". The interface includes a menu bar (File, Edit, View) and a main form area. The form contains several sections: "Originator" with a dropdown menu set to "EDKAYFYT"; "Priority" with radio buttons for SS, DD, FF, GG, and KK; "Filing Time" and "Transmission ID" input fields; a "Bell" checkbox; a grid of input fields for alphanumeric characters; "Series Nr" and "N/R/C" dropdowns; "Repl. or Canceled" checkboxes; "FIR" and "Code" dropdowns; "Tfc" and "Purpose" dropdowns; "Scope" dropdown; "Lower" and "Upper" input fields; "Coordinates" input fields; "Radius" input field; "Aerodromes or FIR" section with "From" and "To" dropdowns; a text area for the NOTAM message; "Lower Limit" and "Upper Limit" input fields; and a "Filed by" field with the value "GENERAL JEWS". At the bottom right, there are "Send" and "Close" buttons.



KONSEP NOTAM GRAFIS

(Tools Grafis NOTAM)

TXT_NOTAM_CHART_AD

Txt_NOTAM_Chart adalah kode berjenjis Txt, jika dijalankan akan secara otomatis akan membuat gambar, sesuai dengan isi txt tersebut.

Diharapkan pihak pembuat usulan NOTAM dapat dengan mudah memberikan hasil txt_Notam tersebut kepada pihak Publikasi (Pusat)

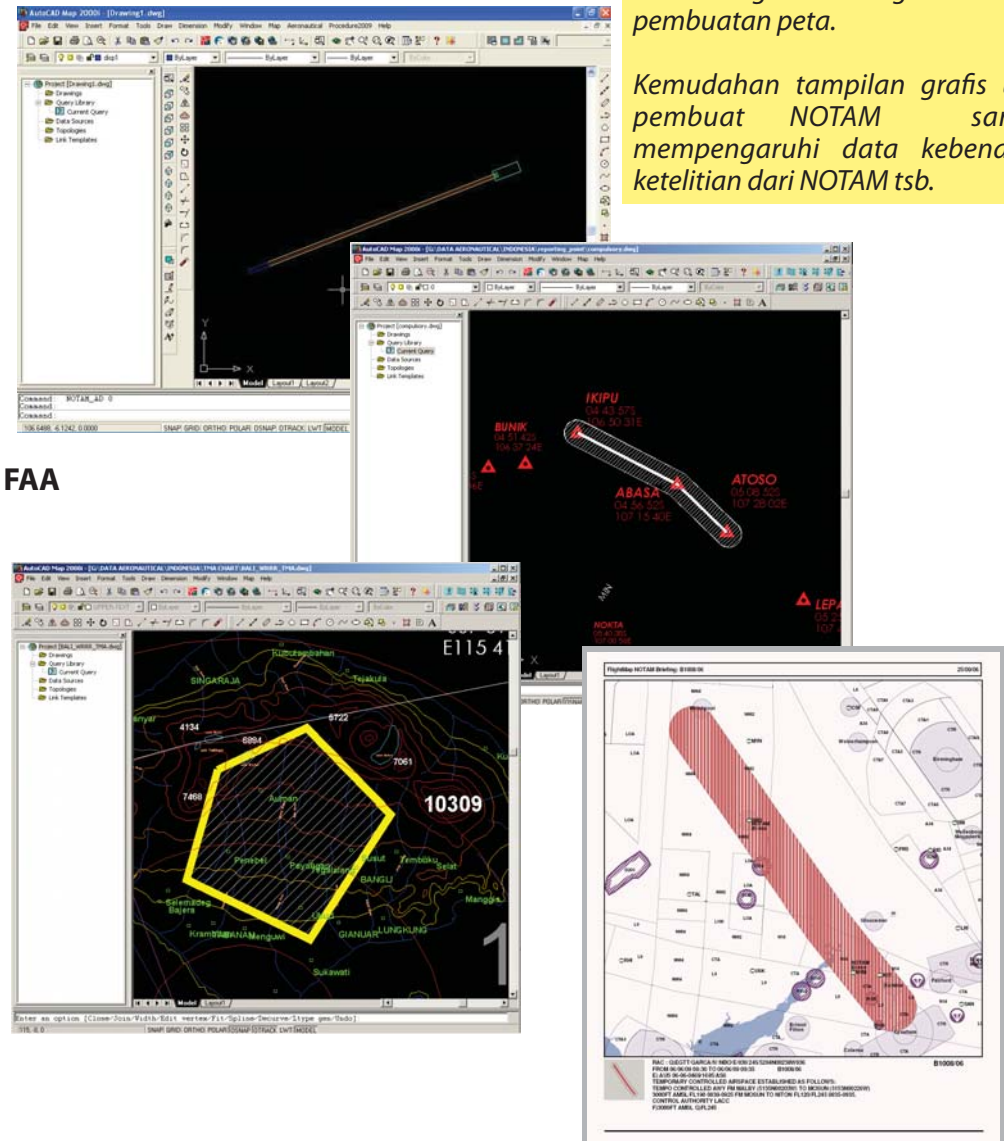
```

ad_title_1 CHECK_RWY
ad_icao_1 WIII
ad_thr_u_10
ad_thr_name_1 07L
thr_lat_d_16
thr_lat_m_17
thr_lat_s_115
thr_lat_u_10
thr_lon_d_1106
thr_lon_m_138
thr_lon_s_119.8
thr_lon_u_10
ad_thr_elev_129
ad_thr_elev_u_11
declare_u_10
rwy_l_13600
rwy_w_160
rwy_u_10
swy_l_160
swy_u_160
cwy_l_1400
cwy_w_1150
disp_10
ad_tora_10
ad_toda_10
ad_asda_10
ad_lda_10
tog_toda_10
tog_tora_10
tog_asda_10
tog_lda_10
tog_disp_10
tog_cwy_10
tog_rwy_10
tog_swy_10
ad_title_2 xxxx
ad_icao_2 WIII
ad_thr_u_21
ad_thr_name_2 25R
thr_lat_d_26
thr_lat_m_26
thr_lat_s_232.4
thr_lat_u_20
thr_lon_d_2106
thr_lon_m_240
thr_lon_s_29
thr_lon_u_20
ad_thr_elev_221
ad_thr_elev_u_21
declare_u_20
rwy_l_23600
rwy_w_260
rwy_u_20
swy_l_260
swy_w_260
cwy_l_2120
cwy_w_2250
disp_20
ad_tora_20
ad_toda_20
ad_asda_20
ad_lda_20
tog_toda_20
tog_tora_20
tog_asda_20
tog_lda_20
tog_disp_20
tog_cwy_20
tog_rwy_20
tog_swy_20
    
```

FORM CHARTING RWY

FORM COMBAIN WITH COMPSYS FAA

GRAFIK VIEW WITH AUTOCAD



NOTAM GRAFIS

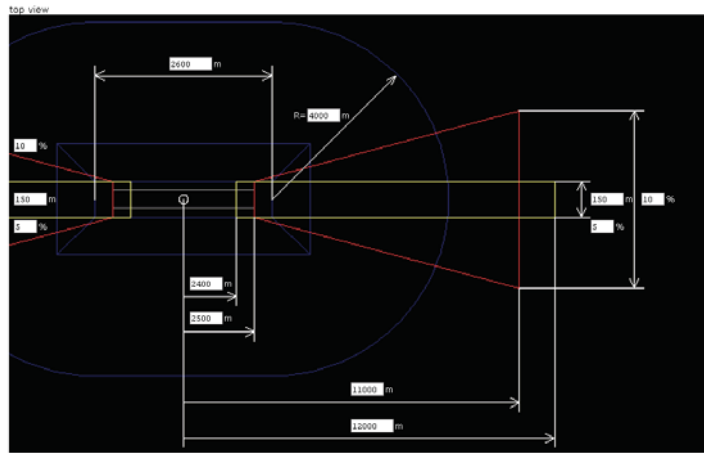
Tool ini didesain untuk memberikan kemudahan dan pengecekan pembuatan NOTAM yang berhubungan dengan unsur pembuatan peta.

Kemudahan tampilan grafis bagi pembuat NOTAM sangat mempengaruhi data kebenaran, ketelitian dari NOTAM tsb.

KONSEP NOTAM GRAFIS

(Tools Grafis NOTAM)

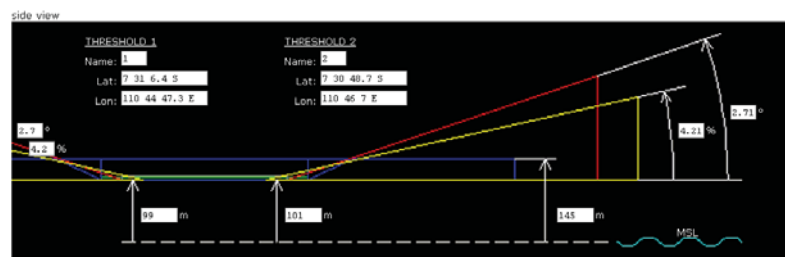
ENTRY TOP VIEW



CHECK OBSTACLE

Program ini didesain untuk keperluan pengecekan Obstacle (Buatan Manusia) pada areal bandara, ketentuan-ketentuan yang berdasarkan KKOP (Kawasan Keselamatan Operasi Penerbangan) ditentukan oleh bandara berdasarkan kaidah standarisasi operasi bandara. Program ini menyediakan isian dengan tampilan grafis, yang mana dapat memberikan kecepatan dan kemudahan bagi pemakai, dan dengan mudah mendapatkan hasilnya.

ENTRY SIDE VIEW



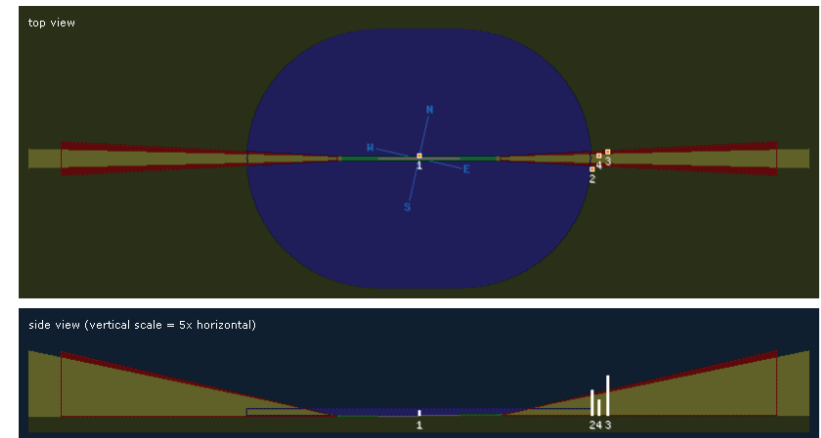
Hasil survai atau pengamatan dapat langsung di masukkan dalam kolom isian (Nama Obstacle, Posisi Koordinat dalam geografis dan Elevasi dalam meter dari permukaan laut)

Hasil dari pengamatan dapat langsung di dikeluarkan dalam bentuk Txt laporan, sehingga memudahkan dalam pembuatan NOTAM, karena dilampiri dengan Peta Obstacle nya.

ENTRY OBSTACLE DATA

<input type="checkbox"/>	Name	Latitude dd mm ss.ff N/S	Longitude dd mm ss.ff E/W	Elev m MSL
<input checked="" type="checkbox"/>	1. Tower	07 30 54.55 S	110 45 27.15 E	130
<input checked="" type="checkbox"/>	2. Building 1	07 29 30.00 S	110 48 20.15 E	260
<input checked="" type="checkbox"/>	3. Building 2	07 29 30.10 S	110 48 21.15 E	350
<input checked="" type="checkbox"/>	4. Menara TNI-AU	07 29 30.17 S	110 48 23.15 E	100
<input type="checkbox"/>	5.			
<input type="checkbox"/>	6.			
<input type="checkbox"/>	7.			
<input type="checkbox"/>	8.			
<input type="checkbox"/>	9.			
<input type="checkbox"/>	10.			
<input type="checkbox"/>	11.			
<input type="checkbox"/>	12.			
<input type="checkbox"/>	13.			
<input type="checkbox"/>	14.			
<input type="checkbox"/>	15.			
<input type="checkbox"/>	16.			
<input type="checkbox"/>	17.			
<input type="checkbox"/>	18.			
<input type="checkbox"/>	19.			
<input type="checkbox"/>	20.			

Obstacles Check Results:



Obstacles Settings:

#	Obstacle Name	Latitude dd mm ss.ff N/S	Longitude dd mm ss.ff E/W	Elev m MSL	THR 1		Outer surface		THR 2	
					IAP In Over (m)	SID In Over (m)	In Over (m)	Over (m)	IAP In Over (m)	SID In Over (m)
1.	Tower	07 30 54.55 S	110 45 27.15 E	130	-	-	-	-	-	-
2.	Building 1	07 30 30.00 S	110 48 20.15 E	260	-	-	-	-	-	-
3.	Building 2	07 30 10.10 S	110 48 31.15 E	350	-	-	-	Y	92.6679	-
4.	Menara TNI-AU	07 30 15.17 S	110 48 23.15 E	200	-	-	-	Y	-	Y

STANDAR REFERENSI

AIP (Aeronautical Information Publication) Indonesia, Malaysia, Singapore
NOTAM Perm
SRTM (Shuttle Radar Topography Mission)
Annex 4 (Aeronautical Chart)
Annex 15 (Aeronautical Information Services)
Doc 8126 (Aeronautical Information Services Manual)
Doc 8400 (Procedure for Air Navigation Services)
Doc 8168 (Air Navigation Services Aircraft Operation Flight Procedure Vol.I and II)
Doc 9674 (World Geodetic System 1984 (WGS 84) Manual)

CONTACT :

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Terima Kasih

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Direktur Utama PT. INDOAVIS NUSANTARA