

มหาวิทยาลัยบูรพา
Burapha University

ภาคผนวก

ภาคผนวก ก

ข้อมูลตำแหน่งพิกัดอ้างอิงในการเดินอากาศของ สนามบินภูเก็ต

AIP
THAILANDVTSP AD 2-1
10 DEC 08

VTSP AD 2. AERODROMES

VTSP AD 2.1 AERODROME LOCATION INDICATOR AND NAME

VTSP - PHUKET / PHUKET INTERNATIONAL AIRPORT

VTSP AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	08 06 45 N 98 18 33 E Centre of runway 660 m from THR RWY 09
2	Direction and distance from (city)	32 km (NW)
3	Elevation/Reference temperature	25 m (82 ft) 33° C
4	Geoid undulation at AD ELEV PSN	Nil
5	MAG VAR/Annual change	0° 18' W (2001) / 3'E
6	AD Administration, address, telephone, teletax, telex, AFS	Phuket International Airport Airport of Thailand Public Company Limited Phuket 83111, Thailand Tel. 66-0-7632-7230-7 Fax. 66-0-7632-7478 AFS : VTSPYDYX
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Nil

VTSP AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and Immigration	H24
3	Health and sanitation	H24
4	ATS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	Nil
12	Remarks	Nil

AIP
THAILANDVTSP AD 2-13
10 DEC 08

VTSP AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	
1	2	3	4	5	6	
09	085° 085 MAG	3000x45	59/F/A/X/T Asphaltic Concrete	08 06 43.12 N 98 18 11.92 E	THR 5.792 m/19 ft	
27	265° 265 MAG	3000x45	59/F/A/X/T Asphaltic Concrete	08 06 52.29 N 98 19 49.48 E	THR 24.94 m/81.8 ft	
Slope of RWY-SWY		SWY dimension	CWY dimension	Strip dimension	OFZ	Remarks
7		8	9	10	11	12
+0.12% +0.01% +1.0% +0.06% (500m 1000m 2500m 3000m)		60x45	NII	3240x150	NII	NII
-0.80% -1.0% -0.01% -0.12% (1000m 2500m 2500m 3000m)		60x45	NII	3240x150	NII	NII

VTSP AD 2.13 DECLARED DISTANCES

RWY Designator	TORA* (m)	TODA* (m)	ASDA* (m)	LDA (m)	Remarks
1	2	3	4	5	6
09	3000	3000	3060	3000	NII
27	3000	3000	3060	3000	NII

AIP
THAILANDVTSP AD 2-17
30 JUL 09

VTSP AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR CAT of ILS/MLS (For VOR/ILS/ MLS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DVOR/DME	PUT	116.9 MHz CH 116X	H24	080654.83N 981822.69E (WGS-84)	16.72 m	A. ILS with non-standard localizer assignment, coverage over a sector of 35° either side of course, no back course and visual features, the antenna array is located 245 m from end of RWY 27 120 m from runway centre line. B. Front course 280° mag. width 4° C. Glide Path angle 3.2° D. Middle Marker (MME) without compass locator; distance 804 m from approach end of RWY 27 E. DME co-located with localizer F. Glide slope unusable starting at the middle marker (2.5 DME) to RWY THR. Glide slope shall not be used when DME out of service G. Altitude will be indicated due to terrain at 4 DME not below 800 ft. H. Both DVOR and DME unusable beyond 40 NM in the following areas: from 000°-130° below 5000 ft. from 130°-180° below 7000 ft. from 180°-250° below 5000 ft. from 250°-360° below 3500 ft.
ILS CAT I LOC/DME RWY 27	IPKT	109.9 MHz CH 36X	H24	080647.72N 981819.73E (WGS-84)		
GP		336.8 MHz	H24	080648.27N 981942.21E (WGS-84)		
MM		75 MHz	H24	080655.43N 982015.73E (WGS-84)		

ภาคผนวก ข
หมวดหลักฐาน ที่ใช้ในการวิจัย



แบบบันทึกข้อมูลหมุดหลักฐานทางราบ

หมายเลขหมุด GPS 3657

สถานที่ตั้ง ปลายแหลมพรหมเทพ ต.ราไวย์

งานรังวัดดาวเทียม GPS ชั้น AA

ชื่อหมุด 3657

อ.เมือง

จ.ภูเก็ต

แบบของหมุดหลักฐาน แบบ ก

โครงการ ขี้อเคซีและขี้อทีสิกส์ ปี 2548

กองสนาม กองสำรวจวงหมุดหลักฐานด้วยดาวเทียม GPS

ค่าพิกัดบนพื้นหลักฐาน WGS84

ลองจิจูด(Longitude): $98^{\circ}18'12.94083$ E.

ละติจูด(Latitude): $07^{\circ}45'32.64102$ N.

ความสูงเหนือทรวงรี(h): -1.788 ม.

ค่าตะวันออก(Easting): 423210.483 ม.

ค่าเหนือ(Northing): 857725.490 ม.

Zone 47N

การแปลงค่าพิกัดบนพื้นหลักฐาน : WGS84 เป็น Indian1975

$$(X, Y, Z)_{\text{Indian1975}} = (X, Y, Z)_{\text{WGS84}} - (\Delta X, \Delta Y, \Delta Z)$$

$$\Delta X = 204.4798 \text{ เมตร}; \Delta Y = 837.8940 \text{ เมตร}; \Delta Z = 294.7765 \text{ เมตร}$$

ค่าพิกัดบนพื้นหลักฐาน Indian1975

ลองจิจูด(Longitude): $98^{\circ}18'23.494860$ E.

ละติจูด(Latitude): $07^{\circ}45'25.051600$ N.

ความสูงเหนือทรวงรี(h): 23.4850 ม.

ค่าตะวันออก(Easting): 423543.7381 ม.

ค่าเหนือ(Northing): 857424.5272 ม.

Zone 47N

ความสูงเหนือระดับทะเลปานกลาง(H):

ม. ความสูงขี้อเคซี(N=h-H):

ม.

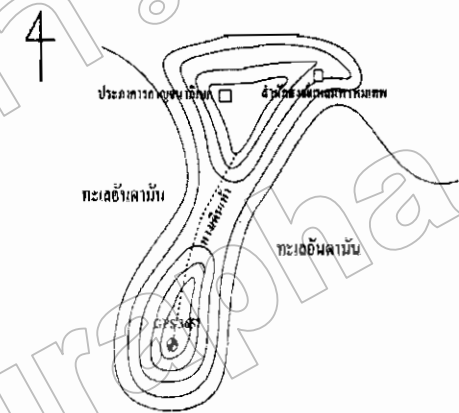
ความสูงพิภพ:

งานระดับชั้นที่

แผนที่ชุด L7018

หมายเลขระวาง 4624-I

แผนภาพหมุดหลักฐาน



ทางไปหมุด:

ใช้ ทล.หมายเลข 402 อ.เมือง จ.ภูเก็ต ไป แหลมพรหมเทพ ประมาณ 27 กม.จะมีทางขึ้นเนินไปลานจอดรถ จะพบประกาศการกวดขันภาษีของกรมอุตสาหกรรมอาหารเรือ จากนั้นเดินลงเขาไปตามทางคนเดินสู่ปลายแหลมประมาณ 800 ม. ห่างจากหมุดนี้ 3.47 ม. ที่ Az.325

จะพบหมุดกรมเจ้าท่า

แผนภาพนี้ไม่ตรงตามมาตราส่วน



ลักษณะหมุด: หมุดหลักฐานโครงการ GEODYSEA เสมอพื้นดิน

หน่วยเหตุ:

สำรวจโดย

()

ผู้ตรวจสอบโดย

()

จัดทำโดย กองขี้อเคซีและขี้อทีสิกส์ กรมแผนที่ทหาร

โทร. 0 2222 3045 E-mail: geodesytsd@yahoo.com



แบบบันทึกข้อมูลหมุดหลักฐานทางราบ

หมายเลขหมุด GPS 3356

สถานที่ตั้ง วิทยาลัยเกษตรกรรมพังงา

งานรังวัดดาวเทียม GPS ชั้น A

ชื่อหมุด TAKUATHUNG

อ. ตะกั่วทุ่ง

จ. พังงา

แบบของหมุดหลักฐาน แบบ ก

โครงการ ขี้อเคซีและขี้อฟิสิกส์ ปี 2548

กองสถาน กองสำรวจวงหมุดหลักฐานด้วยดาวเทียม GPS

ค่าพิกัดบนพื้นหลักฐาน WGS84

ลองจิจูด(Longitude): $98^{\circ}26'53.66426$ E.ละติจูด(Latitude): $08^{\circ}25'33.49761$ N.

ความสูงเหนือทรวงรี(h): 23.813 ม.

ค่าตะวันออก(Easting): 439260.384 ม.

ค่าเหนือ(Northing): 931433.015 ม.

Zone 47P

การแปลงค่าพิกัดบนพื้นหลักฐาน : WGS84 เป็น Indian1975

$$(X, Y, Z)_{\text{Indian1975}} = (X, Y, Z)_{\text{WGS84}} - (\Delta X, \Delta Y, \Delta Z)$$

$$\Delta X = 204.4798 \text{ เมตร}; \Delta Y = 837.8940 \text{ เมตร}; \Delta Z = 294.7765 \text{ เมตร}$$

ค่าพิกัดบนพื้นหลักฐาน Indian1975

ลองจิจูด(Longitude): $98^{\circ}27'04.301377$ E.ละติจูด(Latitude): $08^{\circ}25'26.086884$ N.

ความสูงเหนือทรวงรี(h): 47.2148 ม.

ค่าตะวันออก(Easting): 439593.5384 ม.

ค่าเหนือ(Northing): 931131.7356 ม.

Zone 47P

ความสูงเหนือระดับทะเลปานกลาง(H): 49.12120 ม. ความสูงขี้อยต์(N=h-H):

ม.

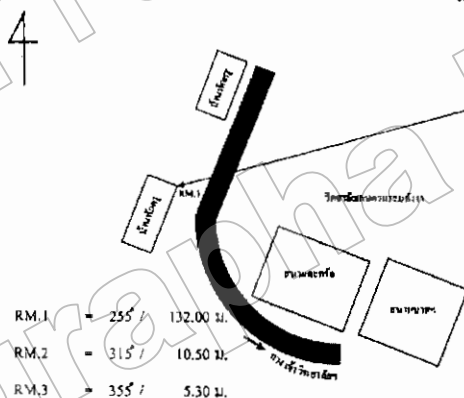
ความฉังพิภพ:

งานระดับชั้นที่ 3

แผนที่ชุด L7018

หมายเลขระวาง 4625-I

แผนภาพหมุดหลักฐาน



ทางไปหมุด:

ออกจากที่ว่าการ อ.ตะกั่วทุ่ง เลี้ยวขวาไป ทาง
จ.พังงา ตาม ทล.หมายเลข 4 ประมาณ 3 กม.
จะพบทางเข้าวิทยาลัยเกษตรกรรมพังงาอยู่ทาง
ซ้ายมือ เลี้ยวขวาไปอีกประมาณ 2 กม.จะพบ
วิทยาลัยเกษตรกรรมพังงา หมุดอยู่ในสนาม
ฟุตบอลด้านทิศใต้

แผนภาพนี้ไม่ตรงตามมาตราส่วน



ลักษณะหมุด: หมุดหัวทองเหลืองของกรมแผนที่ทหาร หมุดอยู่สูงจากพื้นดิน 20 ซม.

หมายเหตุ:

สำรวจโดย _____
(_____)

ผู้ตรวจสอบโดย _____
(_____)

จัดทำโดย กองขี้อเคซีและขี้อฟิสิกส์ กรมแผนที่ทหาร

โทร. 0 2222 3045 E-mail: geodesytsd@yahoo.com

รายละเอียดประกอบแปลร่าง

หมายเลขแผนที่ฐาน 26133427

แผนที่วัดอุลตรวศุมาศพื้นดิน

ค่าพิกัดแผนที่ฐาน WGS-84

(UTM Zone 47)

ละติจูด (Latitude) : $8^{\circ} 05' 43.84440'' \text{ N}$

ค่าเหนือ (Northing) : 804915.621 m

ลองจิจูด (Longitude) : $98^{\circ} 29' 29.67462'' \text{ E}$

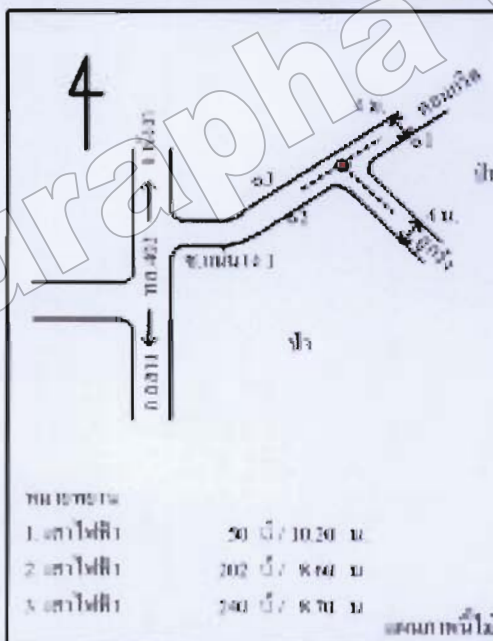
ค่าตะวันออก (Easting) : 627051.564 m

ความสูงเหนือหิรริ (h) : -15.199 m

ความสูงเหนือทะเลปานกลาง : 10.846 m

ภาพถ่ายดาวเทียม spot

แผ่นแผนที่ฐาน (Sheet 4625-II)



ลักษณะภูมิประเทศ :

เป็นพื้นที่โล่ง ขนาด 1 ไร่ 1 งาน 10 ตารางวา

พรมแดนเส้นหลัก สดกั้น การถนนเส้นตรง

4 น.

การเดินทางไปจุด :

เดินจากจุด 0.000 ไปจุด 1.000 ระยะทาง 402.00 เมตร

ถนนที่ 26-250 แล้วจากจุด 1.000 ไปจุด 2.000 ระยะทาง 450

เมตร จะพบถนนแยกขวามือ มุม 26.133427 สดกั้น

จุดเริ่มต้นของถนนพหลโยธินที่ถนนที่ 26-250

พื้นที่รวม

1. แปลงที่ 1 50 ไร่ / 10.20 น.

2. แปลงที่ 2 202 ไร่ / 9.60 น.

3. แปลงที่ 3 240 ไร่ / 9.70 น.

แสดงแนวถนนไปจุด 0.000 และ 1.000

ผู้สำรวจ ๑๙๙๐

(โดยชื่อ กุณ)

ตรวจสอบโดย ๑๙๙๐

1. นายวิชาญ 2. นายวิชาญ

รายละเอียดประกอบแบบแปลน

หมายเลขหนังสือ 26133461

งานวังวัดอุบลครบครันภาคพื้นดิน

ค่าที่ใช้คำนวณเก็บภาษีฐาน ๖๖๔.๘-๙๔

UTM Zone 49)

站址经纬度 (UTM 坐标) 8° 07' 06.91438" N

ความลึก (Depth): 897477.864 m

สถานที่ตั้ง (Longitude) : ๑๕° 18' 19.88๑8" E

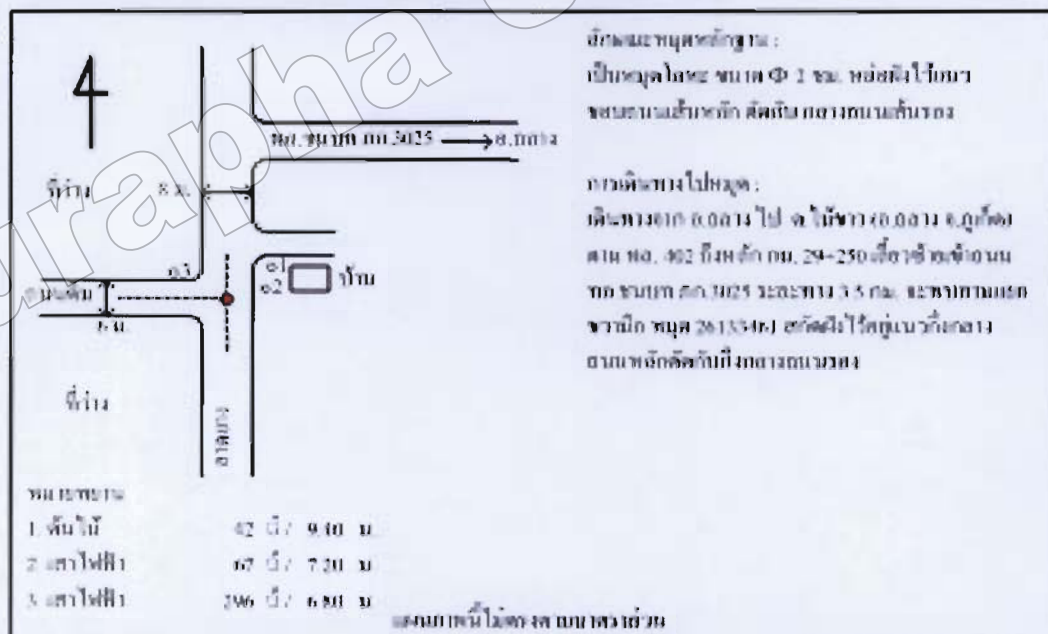
ค่าเฉลี่ย (Mean) 23.95801 m

ความสูงเหนือปีศตวรรษ (b): -15.815 m

ความสูงหน้าสะพานคอนกรีต 10.575 m

ภาพจำลองการฝึกซ้อม Spmcs

หน้า 4623-11



รายละเอียดประกอบหลักฐาน

หมายเลขหลักฐาน 26133485

งานรังวัดจุดควบคุมการแผ้วถาง

ค่าพิกัดแผนที่หลักฐาน WGS-84

ละติจูด (Latitude) : $8^{\circ} 05' 18.85728''$ N

ลองจิจูด (Longitude) : $98^{\circ} 18' 13.60128''$ E

ความสูงเหนือทรี (h) : -21.668 m

(UTM Zone 47)

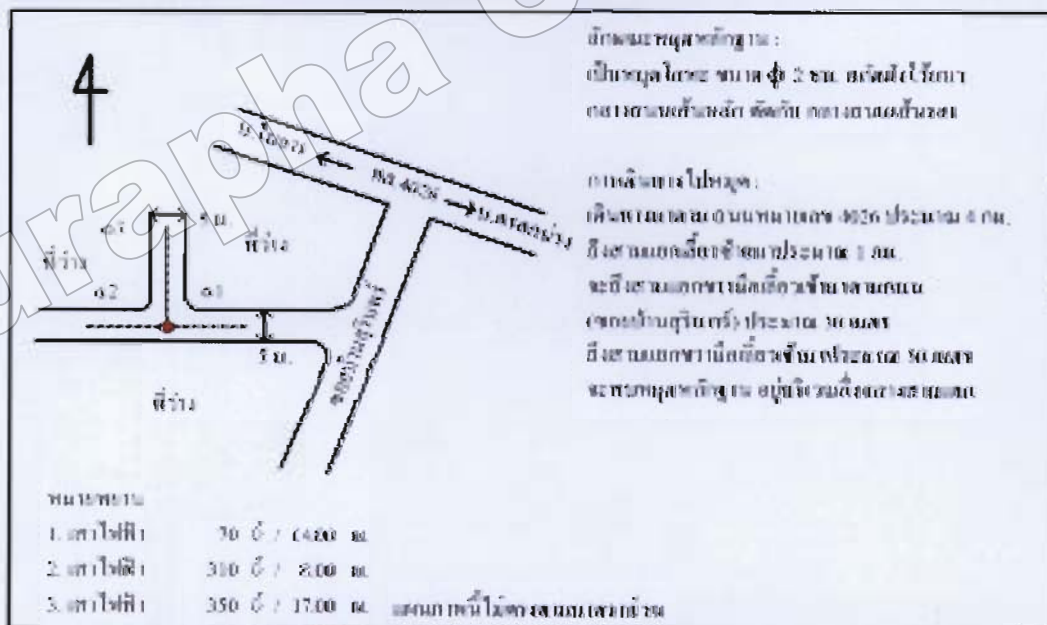
ค่าเหนือ (Northing) : 8941591.61 m

ค่าตะวันออก (Easting) : 623243.261 m

ความสูงเหนือทะเลปานกลาง : 4.758 m

ภาพถ่ายดาวเทียม spot

แผนที่ 1:25,000 (Sheet 4624-I)



ผู้รังวัด : ร.ร.

ผู้ตรวจสอบ : ร.ร.

ผู้รังวัด : ร.ร.

ผู้ตรวจสอบ : ร.ร.

ข้อมูลพิกัดพื้นฐาน			
หมายเลขจุด 3657 ชื่อ 3657	สถานที่ตั้งปลายแหลมพรหมเทพ อ.เมือง จ.ภูเก็ต บ. ท. รวไว้	งาน ดาวเทียม GPS แผนที่พื้นฐาน ก	ชั้นที่ 1
กองสนาม กองวางพิกัดพื้นฐานด้วยดาวเทียม GPS	หน่วยงาน กองโยธาและโยธาธิการ กรมแผนที่ทหาร	โครงการ ขี้อเคมีและขี้อพิสัย ปีงบประมาณ 2542	
ค่าพิกัดที่ได้จากการรังวัดดาวเทียม			
ละติจูด (Latitude) 07 45 32.648241 N 64824	ลองจิจูด (Longitude) 98 18 12.943076 E 94307	ระดับสูงเหนือพื้นน้ำ h = 1.7841 ม. - 1.7840	พื้นพิกัด WGS-84 สเฟียออยด์ WGS-84
ค่าพิกัดบนพื้นพิกัดอ้างอิงอินเดียน 1975			
ละติจูด (Latitude) 07 45 25.096306 N	ลองจิจูด (Longitude) 98 18 23.541990 E	ระดับสูงเหนือพื้นน้ำ h = 24.5526 ม.	สเฟียออยด์ เอเวอเรสต์
พารามิเตอร์	$\Delta X =$ ม.	$\Delta Y =$ ม.	$\Delta Z =$ ม.
ค่าเหนือ (Northing) N = 857425.8901 ม.	ค่าตะวันออก (Easting) E = 423545.2078 ม.	ระดับสูงเหนือระดับปานกลาง H = ม.	UTM โซน 47N
แผนที่ชุด L7017 หมายเลขระหว่าง 624 - 1	Geoid-Spheroid Separation (N = h - H) N = ม.		
คำอธิบายประกอบพิกัดพื้นฐาน (Description)			
ทางไปพิกัด: จาก อ.เมือง ไปตาม ท.ก.402 ทางไปแหลมพรหมเทพ ประมาณ 27 กม. จะมีทางขึ้นเนินไปตามจอครก จะพบประกาศการกั้นกั้นของกรมโยธาธิการและผังเมือง จากนั้นเดินลงเขาไปตามทางคนเดินสู่ปลายแหลมประมาณ 800 ม. ห่างจากพิกัดนี้ 3.47 ม. ที่ Az.325 จะพบหมุดกรมเจ้าท่า			
ลักษณะพิกัด พิกัดพื้นฐานโครงการ GEODYSSSEA			
ผู้จัดทำพิกัด : เจ้าหน้าที่ประจำโครงการ			
หมายเหตุ : 1. อนุกรมชั้นที่ 1 อนุกรม 51. H = 22.6951 ม.			
ผู้จัดทำ ร.ก. สังคม พ.ศ. ๒๕๔๓ ผู้ตรวจสอบ พ.ศ. ๒๕๔๓ วันที่ 4 ก.ค. ๔๒			

ข้อมูลพิกัดหลักฐาน			
หมายเลขพิกัด 3356 ชื่อ TAKUATHUNG	สถานที่ตั้ง วิทยาลัยเกษตรกรรมพังงา 8. ตะกั่วทอง 9. พังงา	งาน ดาวเทียม GPS ชั้นที่ 1 แบบของพิกัดหลักฐาน ก	
กองพัฒนาม กอ.วางแนว- หลักฐานด้วยดาวเทียม GPS	หน่วยงาน กองโยธาและโยธาโยธาโยธา กรมแผนที่ทหาร	โครงการ นีโอเดอนและโยธาโยธาโยธา ปีงบประมาณ 2537	
ค่าพิกัดที่ได้จากการรังวัดดาวเทียม			
ละติจูด (Latitude) 8 25 33.529999 N	ลองจิจูด (Longitude) 98 26 53.640000 E	ระดับสูงเหนือพื้นผิวยุโรป h = 22.6296 37.7000 M	พื้นหลักฐาน WGS-84 สเฟียรอยด์ WGS-84
ค่าพิกัดบนพื้นหลักฐานอ้างอิงปีค.ศ. 1975			
ละติจูด (Latitude) 8 25 26.10640 N	ลองจิจูด (Longitude) 98 27 04.33018 E	ระดับสูงเหนือพื้นผิวยุโรป h = 52.2631 M	สเฟียรอยด์ เอเวอเรสต์
พิกัดเดิมน้อย	$\Delta X =$ M. $\Delta Y =$ M. $\Delta Z =$ M.		
ค่าเหนือ (Northing) N = 931,132.334 M.	ค่าตะวันออก (Easting) E = 439,594.404 M.	ระดับสูงเหนือระดับทะเลปานกลาง H = M.	UTM โซน 47P
แผนที่ชุด L7017 หมายเลขตรวจ	Geoid-Spheroid Separation (N = h - H) M = M.		
คำอธิบายประกอบพิกัดหลักฐาน (Description)			
ทางไปพิกัด : ออกจากที่ว่าการอำเภอตะกั่วทอง เลี้ยวขวาวางทางจังหวัดพังงาตามทางหลวงหมายเลข 5 ประมาณ 3 กม. จะพบทางเข้าวิทยาลัยเกษตรกรรมพังงาอยู่ทางซ้ายมือ เลี้ยวเข้าบ่อประมาณ 2 กม. จะพบวิทยาลัยเกษตรกรรมพังงา อยู่ภายในสนามฟุตบอลด้านทิศใต้หลังประตูฟุตบอล ลักษณะพิกัด : พิกัดหลักฐานแบบ ก อยู่เหนือพื้นดินประมาณ 20 ซม. ผู้รับพิกัด : อ.สมหมาย ภาพากจัน หมายเหตุ : $h = 49.1212$ (ระดับพื้นที่ 3 ปี 48) 1 พ.ค. 20			
ผู้จัดทำ ๑๑.	ผู้ตรวจสอบ พ.ท.	วันที่ 1 ก.พ. ๖๘	

ภาคผนวก ค
การวิเคราะห์ประมวลผลพื้นฐาน



Network Adjustment

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Created: 06/03/2010 08:42:01

Project Information

Project name: Network Phuket
 Date created: 04/25/2010 23:34:51
 Time zone: 7h 00'
 Coordinate system name: WGS 1984
 Application software: LEICA Geo Office 4.0
 Processing kernel: MOVE3 3.3.1

General Information

Adjustment

Type: Constrained
 Dimension: 3D
 Coordinate system: WGS 1984
 Height mode: Ellipsoidal

Number of iterations: 1
 Maximum coord correction in last iteration: 0.0000 m (tolerance is met)

Stations

Number of (partly) known stations: 2
 Number of unknown stations: 1
 Total: 3

Observations

GPS coordinate differences: 9 (3 baselines)
 Known coordinates: 6
 Total: 15

Unknowns

Coordinates: 9
 Total: 9

Degrees of freedom: 6

Testing

Alfa (multi dimensional): 0.2222
 Alfa 0 (one dimensional): 5.0 %
 Beta: 80.0 %
 Sigma a-priori (GPS): 10.0

Critical value W-test: 1.96
 Critical value T-test (2-dimensional): 2.42
 Critical value T-test (3-dimensional): 1.89
 Critical value F-test: 1.37

file://C:\Users\Pongson\AppData\Local\Temp\~Rpt\0.html

03/06/10

F-test: 0.46 ✓ (accepted)

Results based on a-posteriori variance factor

Adjustment Results

Coordinates

Station	Coordinate	Corr	Sd	
3356	Latitude	8° 25' 33.49761" N	0.0000 m	- fixed
	Longitude	98° 26' 53.66426" E	0.0000 m	- fixed
	Height	23.8130 m	0.0000 m	- fixed
3657	Latitude	7° 45' 32.64102" N	0.0000 m	- fixed
	Longitude	98° 18' 12.94083" E	0.0000 m	- fixed
	Height	-1.7880 m	0.0000 m	- fixed
BUU01	Latitude	8° 06' 09.92246" N	0.0000 m	0.0017 m
	Longitude	98° 18' 05.29214" E	0.0000 m	0.0020 m
	Height	-21.4539 m	0.0000 m	0.0043 m

Observations and Residuals

	Station	Target	Adj obs	Resid	Resid (ENH)	Sd
DX	3657	3356	-14263.5285 m	0.0010 m	-0.0001 m	0.0028 m
DY		3356	-12569.2946 m	-0.0062 m	-0.0033 m	0.0050 m
DZ		3356	73026.0371 m	-0.0042 m	-0.0068 m	0.0025 m
DX	3356	BUU01	15255.4676 m	-0.0003 m	0.0010 m	0.0024 m
DY		BUU01	7394.2208 m	-0.0050 m	-0.0018 m	0.0046 m
DZ		BUU01	-35381.9718 m	-0.0025 m	-0.0052 m	0.0021 m
DX	3657	BUU01	991.9411 m	-0.0011 m	0.0001 m	0.0028 m
DY		BUU01	-5175.0739 m	0.0067 m	0.0033 m	0.0051 m
DZ		BUU01	37644.0653 m	0.0043 m	0.0073 m	0.0025 m

GPS Baseline Vector Residuals

	Station	Target	Adj vector [m]	Resid [m]	Resid [ppm]
DV	3657	3356	75460.1713	0.0076	0.1
DV	3356	BUU01	39233.7574	0.0066	0.1
DV	3657	BUU01	38011.0640	0.0080	0.2

Absolute Error Ellipses (2D - 39.4% 1D - 68.3%)

Station	A [m]	B [m]	A/B	Phi	Sd Hgt [m]
3356	0.0000	0.0000	1.0	60°	0.0000
3657	0.0000	0.0000	1.0	59°	0.0000
BUU01	0.0020	0.0017	1.2	-90°	0.0043

Testing and Estimated Errors

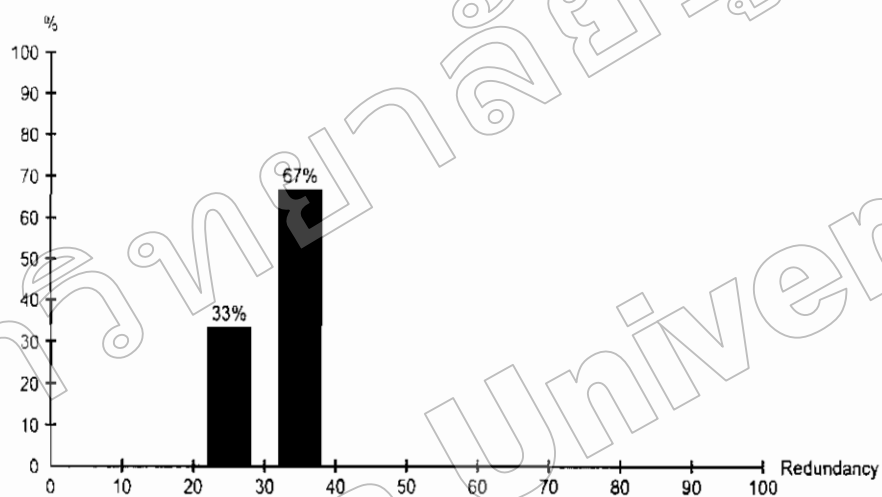
Coordinate Tests

Station		MDB	BNR	W-Test	T-Test
3356	Latitude	0.8720 m	390.3	-0.01	0.00
	Longitude	1.2099 m	493.0	0.00	
	Height	2.5760 m	513.5	-0.06	
3657	Latitude	0.8720 m	0.0	0.01	0.00
	Longitude	1.2099 m	0.0	0.00	
	Height	2.5774 m	0.0	0.06	

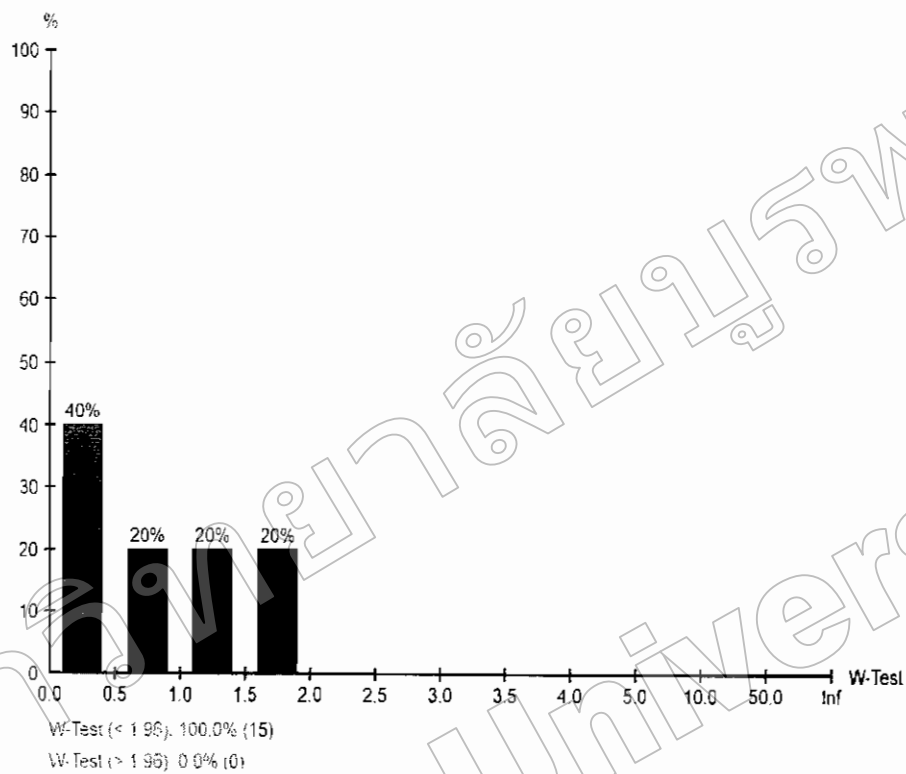
Observation Tests

	Station	Target	MDB	Red	BNR	W-Test	T-Test
DX	3657	3356	0.0148 m	37	3.7	-0.62	2.00 
DY			0.0261 m	35	3.8	-1.18	
DZ			0.0134 m	39	3.5	-1.72	
DX	3356	BUU01	0.0148 m	24	4.8	-0.62	2.00 
DY			0.0261 m	28	4.6	-1.18	
DZ			0.0134 m	20	5.8	-1.72	
DX	3657	BUU01	0.0148 m	37	3.7	0.62	2.00 
DY			0.0261 m	38	3.7	1.18	
DZ			0.0134 m	39	3.5	1.72	

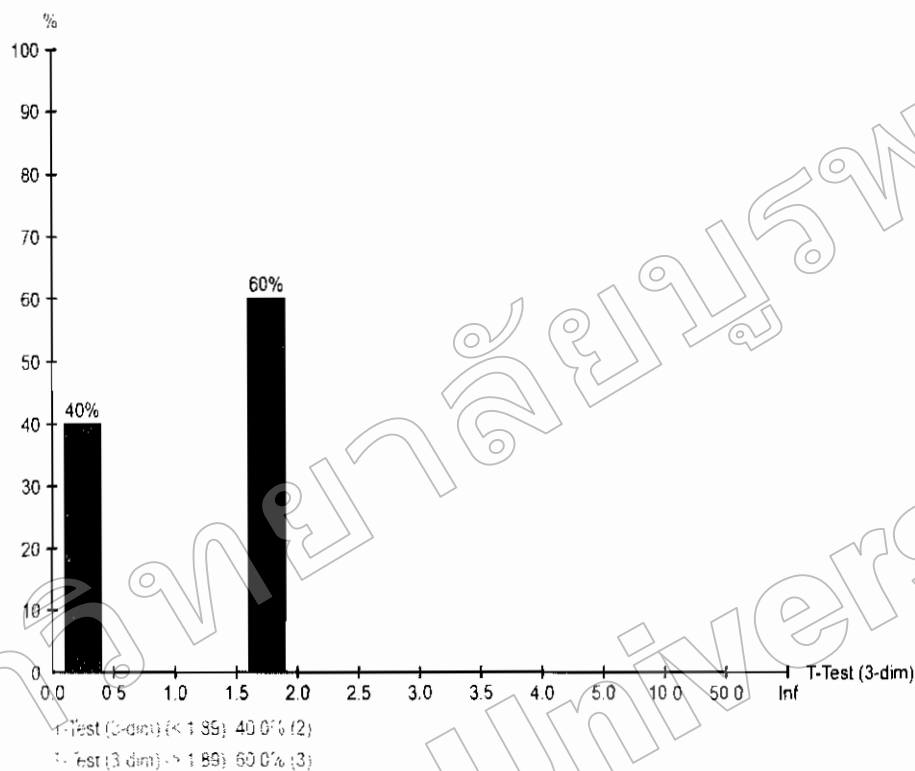
Redundancy:



W-Test:



T-Test (3-dimensional):



Estimated Errors For Observations With Rejected T-Tests (max 10)

	Station	Target	T-Test	Fact	Est err
DX	3356	BUU01	2.00	1.0	0.0018 m
DY					-0.0179 m
DZ					-0.0110 m
DX	3657	BUU01	2.00	1.0	-0.0018 m
DY					0.0179 m
DZ					0.0110 m
DX	3657	3356	2.00	1.0	0.0018 m
DY					-0.0179 m
DZ					-0.0110 m



Network Adjustment

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Created: 06/03/2010 10:42:39

Project Information

Project name: all network_phuket
 Date created: 06/03/2010 09:17:24
 Time zone: 7h 00'
 Coordinate system name: WGS 1984
 Application software: LEICA Geo Office 4.0
 Processing kernel: MOVE3 3.3.1

General Information

Adjustment

Type: Constrained
 Dimension: 3D
 Coordinate system: WGS 1984
 Height mode: Ellipsoidal

Number of iterations: 1
 Maximum coord. correction in last iteration: 0.0000 m (tolerance is met)

Stations

Number of (partly) known stations: 2
 Number of unknown stations: 7
 Total: 9

Observations

GPS coordinate differences: 33 (11 baselines)
 Known coordinates: 6
 Total: 39

Unknowns

Coordinates: 27
 Total: 27

Degrees of freedom: 12

Testing

Alfa (multi dimensional): 0.3362
 Alfa 0 (one dimensional): 5.0 %
 Beta: 80.0 %
 Sigma a-priori (GPS): 10.0

Critical value W-test: 1.96
 Critical value T-test (2-dimensional): 2.42
 Critical value T-test (3-dimensional): 1.89
 Critical value F-test: 1.12

F-test: 0.73 ✓ (accepted)

Results based on a-posteriori variance factor

Adjustment Results

Coordinates

Station	Coordinate	Corr	Sd
26133418	Latitude 8° 07' 58.95153" N	-0.0011 m	0.0049 m
	Longitude 98° 18' 26.06914" E	0.0039 m	0.0053 m
	Height -18.5153 m	0.0026 m	0.0135 m
26133427	Latitude 8° 05' 43.84404" N	-0.0049 m	0.0053 m
	Longitude 98° 20' 29.47531" E	0.0224 m	0.0057 m
	Height -16.5762 m	0.0181 m	0.0137 m
26133432	Latitude 8° 08' 15.83026" N	-0.0012 m	0.0056 m
	Longitude 98° 20' 33.76629" E	0.0048 m	0.0066 m
	Height -21.4503 m	0.0038 m	0.0152 m
26133461	Latitude 8° 07' 06.91399" N	-0.0003 m	0.0047 m
	Longitude 98° 18' 29.88908" E	0.0025 m	0.0049 m
	Height -17.0235 m	0.0033 m	0.0128 m
26133485	Latitude 8° 05' 18.85720" N	0.0018 m	0.0045 m
	Longitude 98° 18' 13.60159" E	-0.0024 m	0.0046 m
	Height -22.8311 m	-0.0050 m	0.0119 m
26133495	Latitude 8° 06' 49.49411" N	-0.0019 m	0.0052 m
	Longitude 98° 20' 08.42619" E	0.0069 m	0.0056 m
	Height -15.3141 m	0.0072 m	0.0141 m
3356	Latitude 8° 25' 33.49761" N	0.0000 m	- fixed
	Longitude 98° 26' 53.56426" E	0.0000 m	- fixed
	Height 23.8130 m	0.0000 m	- fixed
3657	Latitude 7° 45' 32.64102" N	0.0000 m	- fixed
	Longitude 98° 18' 12.94083" E	0.0000 m	- fixed
	Height -1.7880 m	0.0000 m	- fixed
BUU01	Latitude 8° 06' 09.92250" N	0.0000 m	0.0028 m
	Longitude 98° 18' 05.29219" E	0.0000 m	0.0033 m
	Height -21.4676 m	0.0000 m	0.0089 m

Observations and Residuals

	Station	Target	Adj obs	Resid	Resid (ENH)	Sd
DX	BUU01	3657	-991.9445 m	0.0000 m	0.0000 m	0.0079 m
DY			5175.0380 m	-0.0001 m	0.0000 m	0.0390 m
DZ			-37644.0789 m	0.0000 m	-0.0001 m	0.0093 m
DX	26133485	BUU01	283.4401 m	0.0028 m	-0.0022 m	0.0037 m
DY			-180.5388 m	-0.0041 m	0.0012 m	0.0080 m
DZ			1553.3396 m	0.0006 m	-0.0044 m	0.0031 m
DX	26133485	26133495	-3422.7093 m	-0.0135 m	0.0124 m	0.0049 m
DY			-889.5657 m	0.0067 m	-0.0063 m	0.0102 m
DZ			2757.7390 m	-0.0052 m	0.0078 m	0.0038 m
DX	26133461	BUU01	710.0862 m	-0.0032 m	0.0026 m	0.0041 m
DY			348.8425 m	0.0038 m	0.0005 m	0.0088 m
DZ			-1733.9566 m	0.0011 m	0.0043 m	0.0043 m
DX	26133461	26133418	148.5782 m	0.0011 m	-0.0011 m	0.0026 m
DY			-208.1584 m	-0.0001 m	0.0003 m	0.0075 m
DZ			1582.3922 m	0.0003 m	-0.0003 m	0.0032 m
DX	26133432	26133495	712.2957 m	-0.0028 m	0.0028 m	0.0055 m
DY			489.4545 m	0.0002 m	-0.0002 m	0.0106 m
DZ			-2624.8497 m	-0.0001 m	0.0006 m	0.0042 m

DX	26133432	26133418	3856.9370 m	0.0011 m	-0.0011 m	0.0047 m
DY			641.4805 m	-0.0002 m	0.0000 m	0.0080 m
DZ			-512.9004 m	0.0000 m	-0.0004 m	0.0032 m
DX	26133427	26133495	678.6645 m	0.0023 m	-0.0039 m	0.0052 m
DY			-186.6390 m	0.0110 m	0.0030 m	0.0098 m
DZ			1996.8786 m	0.0045 m	0.0110 m	0.0037 m
DX	26133427	26133485	4101.3738 m	-0.0011 m	0.0018 m	0.0041 m
DY			702.9268 m	-0.0052 m	-0.0018 m	0.0079 m
DZ			-760.8604 m	-0.0026 m	-0.0053 m	0.0032 m
DX	26133418	26133495	-3144.6413 m	0.0058 m	-0.0050 m	0.0043 m
DY			-152.0260 m	-0.0046 m	-0.0004 m	0.0096 m
DZ			-2111.9493 m	-0.0012 m	-0.0055 m	0.0036 m
DX	3356	BUU01	15255.4672 m	0.0000 m	0.0000 m	0.0042 m
DY			7394.2272 m	0.0000 m	0.0000 m	0.0091 m
DZ			-35381.9704 m	0.0000 m	0.0000 m	0.0035 m

GPS Baseline Vector Residuals

	Station	Target	Adj. vector [m]	Resid [m]	Resid [ppm]
DV	BUU01	3657	38011.0727	0.0001	0.0
DV	26133485	BUU01	1589.2754	0.0050	3.2
DV	26133485	26133495	4484.5725	0.0159	3.6
DV	26133461	BUU01	1905.9168	0.0051	2.7
DV	26133461	26133418	1602.9258	0.0012	0.7
DV	26133432	26133495	2763.4700	0.0028	1.0
DV	26133432	26133418	3943.4156	0.0012	0.3
DV	26133427	26133495	2117.2963	0.0121	5.7
DV	26133427	26133485	4230.1633	0.0059	1.4
DV	26133418	26133495	3791.0698	0.0075	2.0
DV	3356	BUU01	39233.7572	0.0000	0.0

Absolute Error Ellipses (2D - 39.4% 1D - 68.3%)

Station	A [m]	B [m]	A/B	Phi	Sd Hgt [m]
26133418	0.0056	0.0046	1.2	58°	0.0135
26133427	0.0059	0.0052	1.1	65°	0.0137
26133432	0.0067	0.0054	1.2	68°	0.0152
26133461	0.0052	0.0043	1.2	49°	0.0128
26133485	0.0046	0.0044	1.0	64°	0.0119
26133495	0.0059	0.0049	1.2	57°	0.0141
3356	0.0000	0.0000	1.0	-87°	0.0000
3657	0.0000	0.0000	1.0	-87°	0.0000
BUU01	0.0033	0.0028	1.2	-88°	0.0089

Testing and Estimated Errors

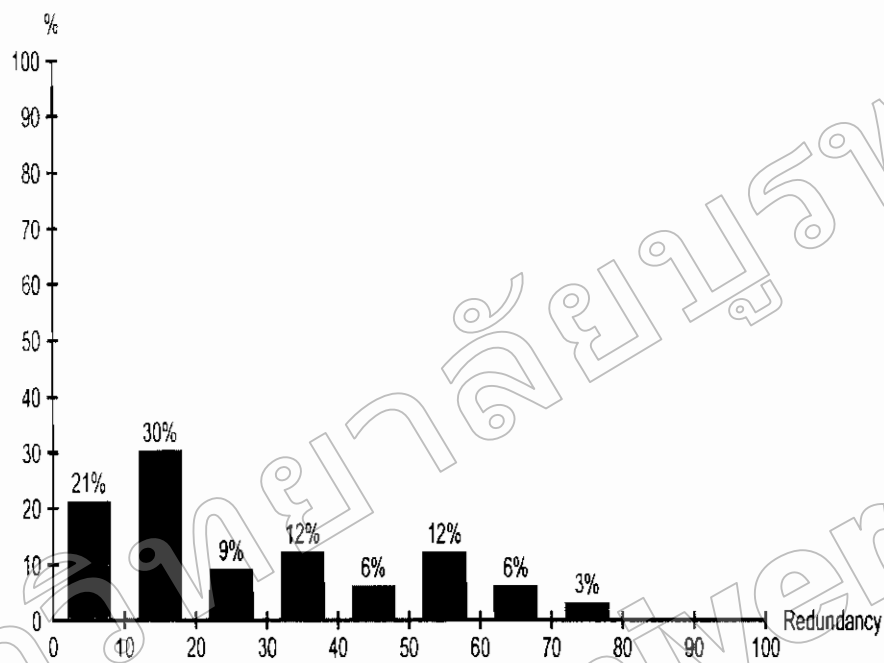
Coordinate Tests

Station		MDB	BNR	W-Test	T-Test
3356	Latitude	1.5417 m	2.9	-0.02	0.00
	Longitude	2.1233 m	2.9	0.01	
	Height	4.5278 m	2.9	-0.05	
3657	Latitude	1.5417 m	2.7	0.02	0.00
	Longitude	2.1233 m	2.7	-0.01	
	Height	4.5279 m	2.7	0.05	

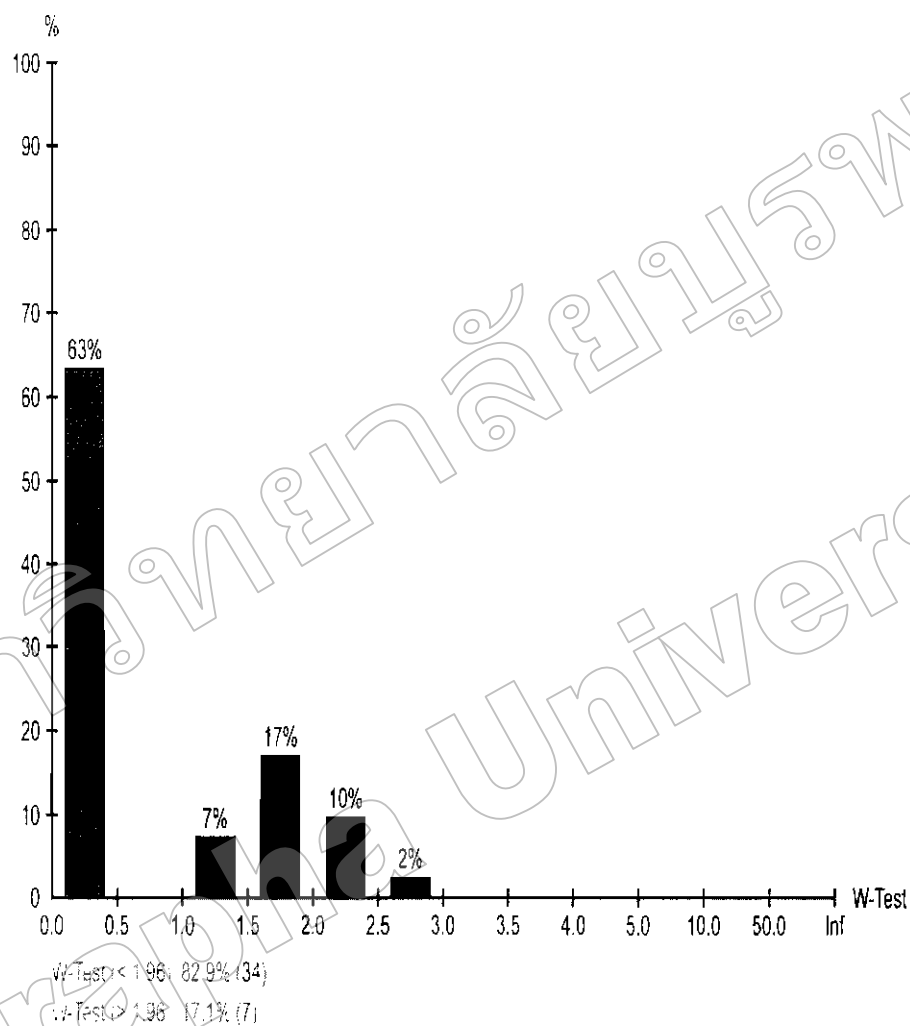
Observation Tests

	Station	Target	MDB	Red	BNR	W-Test	T-Test
DX	BUU01	3657	2.1403 m	0	274.8	-0.01	0.00
DY			4.0953 m	0	196.7	-0.04	
DZ			1.5553 m	0	313.8	-0.02	
DX	26133485	BUU01	0.0249 m	16	6.8	1.45	0.95
DY			0.0578 m	13	7.8	-0.17	
DZ			0.0249 m	14	7.4	0.46	
DX	26133485	26133495	0.0235 m	65	2.3	-2.83	3.21
DY			0.0556 m	74	2.3	-2.03	
DZ			0.0207 m	59	2.6	-2.17	
DX	26133461	BUU01	0.0249 m	16	6.3	-1.45	0.95
DY			0.0578 m	18	6.7	0.17	
DZ			0.0249 m	30	5.4	-0.46	
DX	26133461	26133418	0.0249 m	7	8.9	1.45	0.95
DY			0.0578 m	16	8.3	-0.17	
DZ			0.0249 m	15	8.6	0.46	
DX	26133432	26133495	0.0275 m	59	2.3	-0.48	0.08
DY			0.0546 m	53	2.6	-0.19	
DZ			0.0235 m	62	2.1	-0.12	
DX	26133432	26133418	0.0275 m	23	5.2	0.48	0.08
DY			0.0546 m	15	6.5	0.19	
DZ			0.0235 m	15	6.5	0.12	
DX	26133427	26133495	0.0249 m	49	2.9	1.55	2.09
DY			0.0504 m	34	3.7	1.99	
DZ			0.0206 m	38	3.5	1.78	
DX	26133427	26133485	0.0249 m	20	5.4	-1.55	2.09
DY			0.0504 m	18	5.8	-1.99	
DZ			0.0206 m	22	5.1	-1.78	
DX	26133418	26133495	0.0213 m	39	3.7	1.61	1.00
DY			0.0506 m	54	2.7	0.03	
DZ			0.0196 m	40	3.8	0.46	
DX	3356	BUU01	2.1403 m	0	597.3	-0.01	0.00
DY			4.0953 m	0	540.0	-0.04	
DZ			1.5553 m	0	462.4	-0.02	

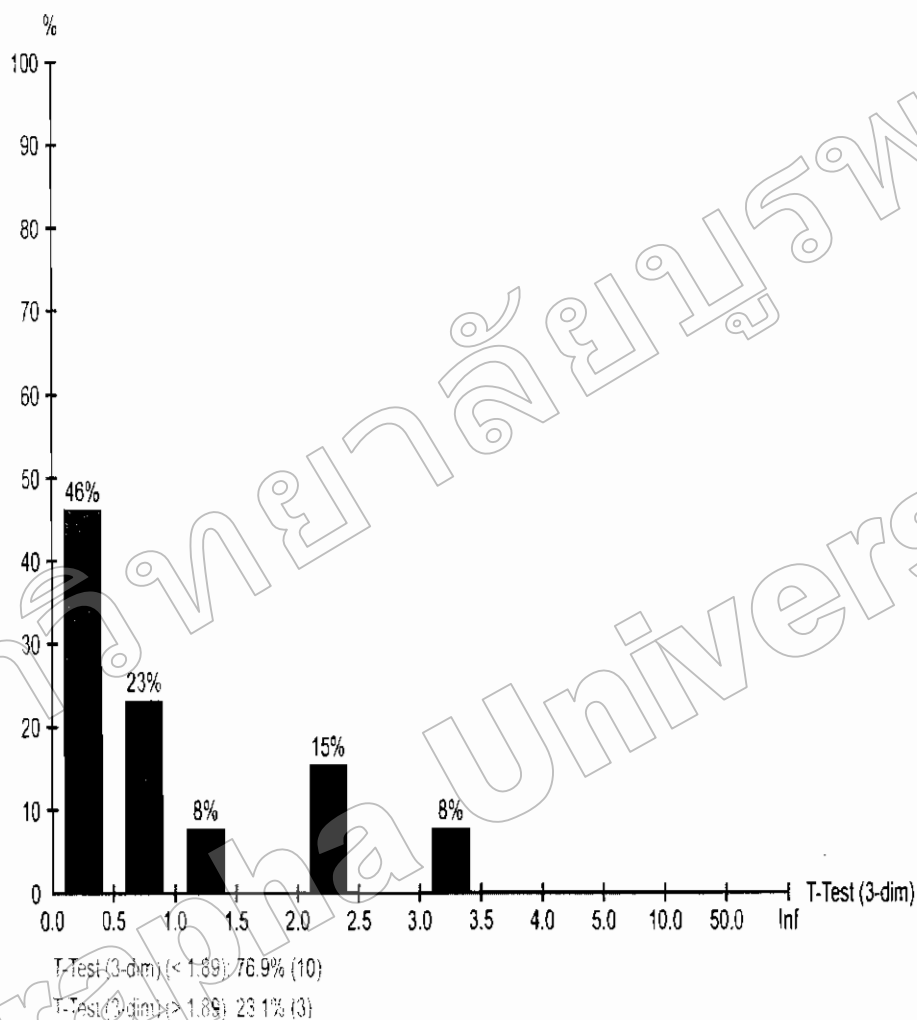
Redundancy:



W-Test:



T-Test (3-dimensional):



Estimated Errors (Observations)

Estimated Errors For Observations With Rejected W-Tests (max 10)

	Station	Target	W-Test	Fact	Est err
DX	26133485	26133495	-2.83	1.4	-0.0238 m
DY			-2.03	1.0	-0.0403 m
DZ			-2.17	1.1	-0.0160 m
DY	26133427	26133495	1.99	1.0	0.0357 m

DY 26133427 26133485 -1.99 1.0 -0.0357 m

Estimated Errors For Observations With Rejected Antenna Hgt W-Tests (max 10)

Station	Target	W-Test	Fact	MDB [m]	Est ant err [m]
26133427	26133495	2.18	1.1	0.0522	0.0407
26133427	26133485	-2.18	1.1	0.0522	-0.0407

Estimated Errors For Observations With Rejected T-Tests (max 10)

	Station	Target	T-Test	Fact	Est arr
OX	26133485	26133495	3.21	1.3	-0.0200 m
DY					0.0005 m
DZ					-0.0100 m
DX	26133427	26133495	2.09	1.1	0.0031 m
DY					0.0287 m
DZ					0.0105 m
DX	26133427	26133485	2.09	1.1	-0.0031 m
DY					-0.0287 m
DZ					-0.0105 m



Loops and Misclosures

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Created: 06/03/2010 08:43:32

Project Information

Project name: Network Phuker
 Date created: 04/25/2010 23:34:51
 Time zone: 7h 00'
 Coordinate system name: WGS 1984
 Application software: LEICA Geo Office 4.0
 Processing kernel: MOVE3 3.3.1

Critical value W-test is: 1.96
 Dimension: 3D

GPS Baseline Loops

Loop 1

From	To	dX[m]	dY[m]	dZ[m]
3657	BUU01	991.9400	-5175.0672	37644.0696
BUU01	3356	-15255.4673	-7394.2157	35381.9743
3356	3657	14263.5255	12569.3009	-73028.0329
X:	-0.0018 m	W-Test:	-0.21	
Y:	0.0179 m		1.15	
Z:	0.0110 m		1.44	
Easting:	-0.0008 m	W-Test:	-0.09	
Northing:	0.0083 m		1.06	
Height:	0.0193 m		1.26	
Closing error:	0.0211 m	(0.1 ppm)	Ratio:(1:7244410)	
Length:	152704.9941 m			



Loops and Misclosures

www.MOVE3.com

(c) 1993-2006 Grontmij

Licensed to Leica Geosystems AG

Created: 06/03/2010 10:43:55

Project Information

Project name: all network_phuket
 Date created: 06/03/2010 09:17:24
 Time zone: 7h 00'
 Coordinate system name: WGS 1984
 Application software: LEICA Geo Office 4.0
 Processing kernel: MOVE3 3.3.1

Critical value W-test is: 1.96
 Dimension: 3D

GPS Baseline Loops

Loop 1

From	To	dX[m]	dY[m]	dZ[m]
26133495	26133432	-712.2929	-489.4547	2624.8498
26133432	26133418	3856.9381	641.4803	-512.9004
26133418	26133495	-3144.6355	-152.0306	-2111.9505
X:	0.0097 m	W-Test:	0.72	
Y:	-0.0051 m		-0.19	
Z:	-0.0011 m		-0.10	
Easting:	-0.0089 m	W-Test:	-0.64	
Northing:	-0.0001 m		-0.01	
Height:	-0.0065 m		-0.25	
Closing error:	0.0110 m	(1.0 ppm)	Ratio:(1.956056)	
Length:	10497.9520 m			

Loop 2

From	To	dX[m]	dY[m]	dZ[m]
26133495	26133427	-678.8668	188.8281	-1996.8831
26133427	26133485	4101.3727	702.9214	-760.8830
26133485	26133495	-3422.7227	-889.5590	2757.7338
X:	-0.0168 m	W-Test:	-1.14	
Y:	-0.0094 m		-0.29	
Z:	-0.0123 m		-1.19	
Easting:	0.0180 m	W-Test:	1.17	
Northing:	-0.0112 m		-1.00	
Height:	-0.0086 m		-0.27	
Closing error:	0.0229 m	(2.1 ppm)	Ratio:(1.473631)	

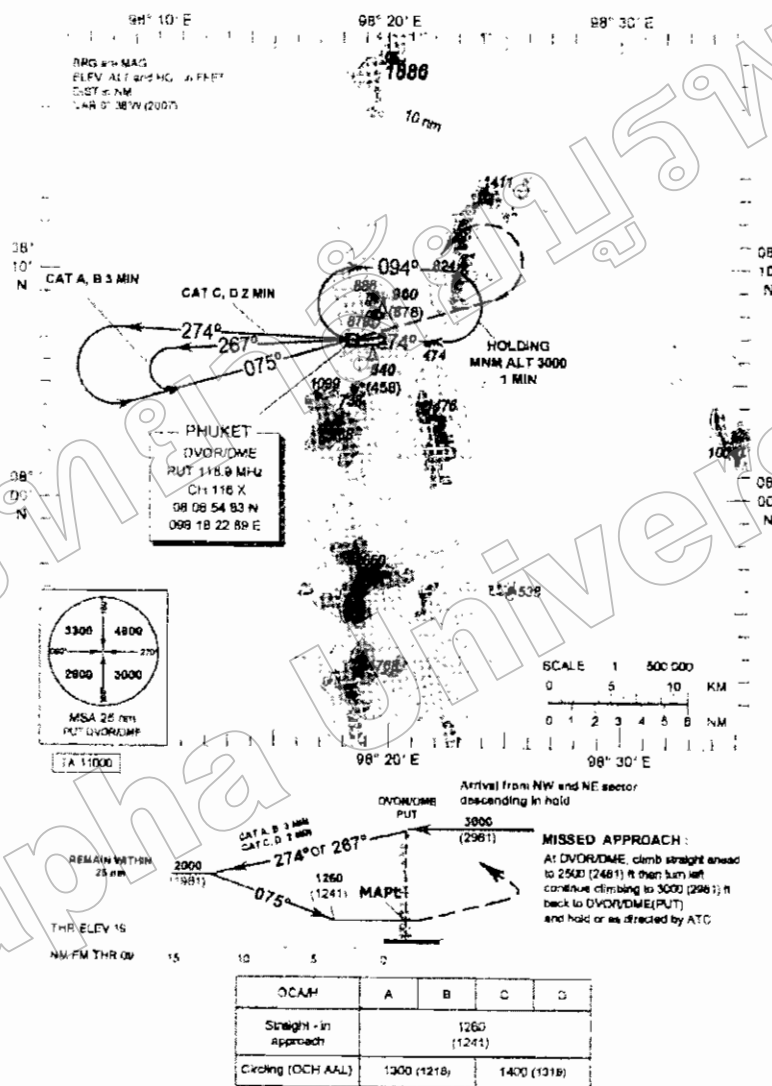
Length:		10832.0405 m			
Loop 3					
From	To	dX[m]	dY[m]	dZ[m]	
26133418	26133495	-3144.6355	-152.0306	-2111.9505	
26133495	26133485	3422.7227	669.5590	-2757.7338	
26133485	BUU01	283.4429	-180.5430	1553.3402	
BUU01	26133461	-710.0831	-348.8463	1733.9554	
26133461	26133418	148.5793	-208.1585	1582.3924	
X:	0.0264 m	W-Test:	1.76		
Y	-0.0194 m		-0.52		
Z	0.0038 m		0.30		
Easting:	-0.0233 m	W-Test:	-1.48		
Northing:	0.0070 m		0.51		
Height:	-0.0222 m		-0.61		
Closing error:	0.0329 m	(2.5 ppm)	Ratio: (1:405979)		
Length:	13373.7624 m				

ภาคผนวก ง

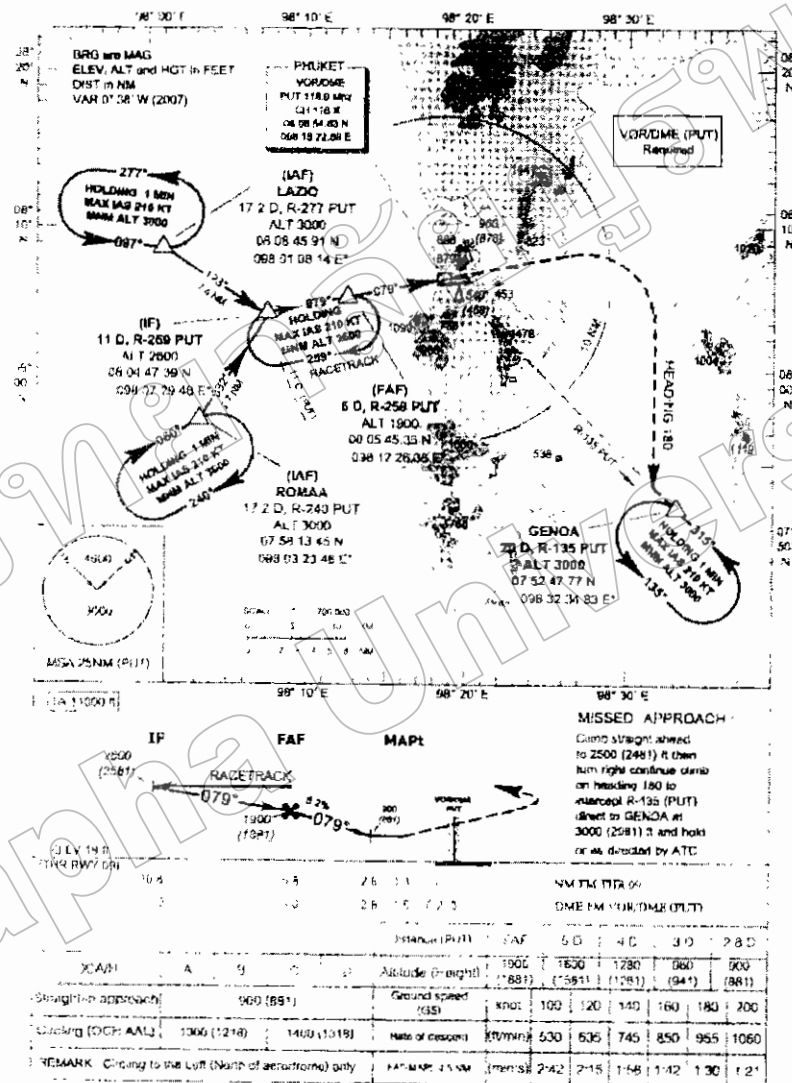
แบบแผนขั้นตอนปฏิบัติการบินที่ประกาศใช้ใน AIP-Thailand ปัจจุบัน

AIP
THAILANDVTSP AD 2-37
10 DEC 08

INSTRUMENT AERODROME ELEV 82 ft
APPROACH HEIGHTS RELATED TO APP 124.7, 284.0
CHART - ICAO THR RWY 08 ELEV 19 ft TWR 118.1, 236.6
PHUKET / Phuket Intl (VTSP)
VOR Y RWY 08



Department of Civil Aviation

AIP
THAILANDVTSP AD 2-39
10 DEC 08INSTRUMENT AERODROME ELEV. 82 ft
APPROACH HEIGHTS RELATED TO
CHART - ICAO THR RWY 09 ELEV 19 ftAPP : 124.7, 284.0
TWR : 118.1, 238.5PHUKET / Phuket Intl (VTSP)
VOR Z RWY 09

Department of Civil Aviation

VTSP AD 2-40
10 DEC 08

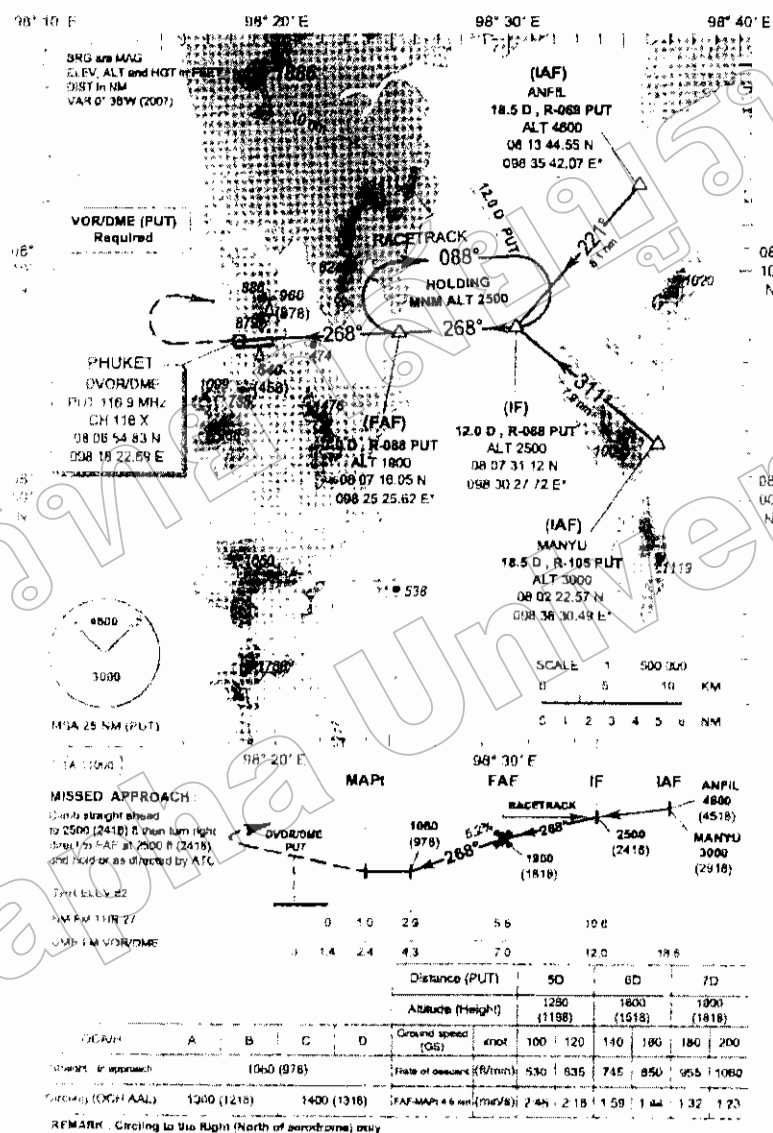
AIP
THAILAND

INSTRUMENT AERODROME ELEV 82 ft
APPROACH HEIGHTS RELATED TO
CHART - ICAO AERODROME ELEV.

APP: 124.7, 284.0
TWR: 118.1, 236.6

PHUKET / Phuket Intl (VTSP)

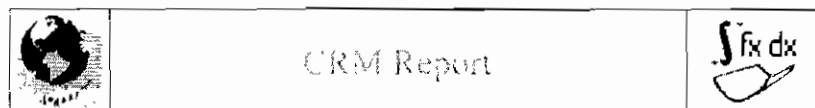
VOR Z RWY 27



Department of Civil Aviation

ภาคผนวก จ

การวิเคราะห์ความเสี่ยงในการลงทุนในประเทศ

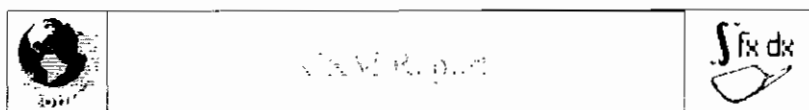


CRM

PHUKET AIRPORT
VTSP / 27

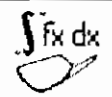
The collision risk model is a computer program that calculates a numerical risk for the precision segment of an ILS approach. This risk is then compared to the target level of safety ($1.0E-07$) to determine the acceptability of the procedure. (see PANS-OPS, Volume II, paragraph 2.1.4.9).

ICAO and ENAC takes no responsibility for the correctness of the data entered into this model or for the applicability of this model to any specific case. It is the responsibility of the user to verify all data used by this model for this specific ILS approach.



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	CRM Report	
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DATA

A ADMINISTRATIVE DATA

Date : 08/14/10 at 19:42:48
 User : < Name >
 Office : < Office >
 Remark : Nil

B GROUND DATA

07	ILS glide path angle	3.20	°
08	ILS reference datum height	16.76	M
09	Distance between ILS localizer antenna and runway threshold	2759.59	M
10	Localizer course width at threshold	210.00	M
11	Threshold elevation	24.94	M
12	Distance from final approach point to threshold	10186.00	M
13	Standard termination of precision segment		Y

If No (N) then :

- Termination point before threshold
- Specify distance from termination point to threshold

C AIRCRAFT DATA

14	Standard dimensions	Y
----	---------------------	---

If No (N) then :

- Distance between the flightpaths of the wheels and the GP antenna
- Wing semispan

15	Standard missed approach climb gradient	Y
----	---	---

If No (N), specify climb gradient

D REQUESTED CASES

16	ILS approach category	I
----	-----------------------	---

1. Category I
2. Category I (radio altimeter only)
3. Category II
4. Category II (autopilot only)

17	Select choice of OCA or OCH	OCH
----	-----------------------------	-----

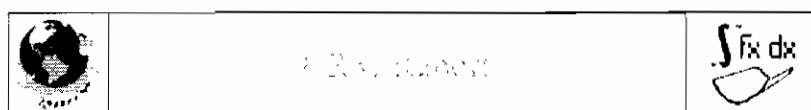
18	Specify unit of measurement for OCA/H	ft
----	---------------------------------------	----

19	Speed category	Risk for specified OCH requested	Minimum acceptable OCH requested
		If Yes (Y) then OCH	
A	Y	198.0	Y
B	Y	198.0	Y
C	N		N
D	N		N

E REPORT FORMAT

21	Total number of obstacles to be processed	168
22	Individual obstacle risk requested for	3

1. Obstacles with individual risk higher than 1.0E-10



2. Obstacles with highest individual risk
3. All obstacles

F OBSTACLE COORDINATE SYSTEM SPECIFICATIONS

23 Runway coordinate system user

If Yes (Y) then specify

1. Unit of horizontal measurement
2. Unit of vertical measurement
3. Height of threshold in this system

Y
M
M
0 M

G OBSTACLE DATA FILE IN USER RUNWAY COORDINATE SYSTEM

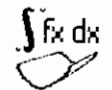
Applied Vegetation on Spot Height : 15.0 M

27 Obstacle data file in user runway coordinate system

Identification	Description	X	Y1	Y2	Z	Veg.
C001	S1-1	580.0	432.0	574.0	30.0	0.0
C002	S2-2	480.0	522.0	594.0	40.0	0.0
C003	S3-1	380.0	108.0	695.0	40.0	0.0
C004	S4-1	280.0	68.0	526.0	40.0	0.0
C005	S4-2	280.0	526.0	641.0	50.0	0.0
C006	S4-3	280.0	641.0	739.0	60.0	0.0
C007	S5-1	180.0	54.0	461.0	30.0	0.0
C008	S5-2	180.0	461.0	608.0	40.0	0.0
C009	S6-1	80.0	63.0	168.0	40.0	0.0
C010	S6-2	80.0	168.0	541.0	50.0	0.0
C011	S6-3	80.0	541.0	557.0	60.0	0.0
C012	S7-1	0.0	57.0	127.0	40.0	0.0
C013	S7-2	0.0	127.0	344.0	50.0	0.0
C014	S7-3	0.0	344.0	544.0	60.0	0.0
C015	S7-4	0.0	544.0	604.0	70.0	0.0
C016	S8-2	-30.0	118.0	187.0	40.0	0.0
C017	S8-3	-30.0	187.0	492.0	50.0	0.0
C018	S8-4	-30.0	492.0	572.0	60.0	0.0
C019	S8-5	-30.0	572.0	589.0	70.0	0.0
C020	S9-2	-130.0	100.0	148.0	40.0	0.0
C021	S9-3	-130.0	148.0	217.0	50.0	0.0
C022	S9-4	-130.0	217.0	313.0	60.0	0.0
C023	S10-2	-180.0	91.0	137.0	40.0	0.0
C024	S10-3	-180.0	137.0	196.0	50.0	0.0
C025	S10-4	-180.0	196.0	328.0	60.0	0.0
C026	S11-2	-230.0	95.0	136.0	40.0	0.0
C027	S11-3	-230.0	136.0	192.0	50.0	0.0
C028	S11-4	-230.0	192.0	290.0	60.0	0.0
C029	S12-2	-266.0	98.0	136.0	40.0	0.0
C030	S12-3	-266.0	136.0	201.0	50.0	0.0
C031	S12-4	-266.0	201.0	258.0	60.0	0.0
C032	S13-2	-330.0	111.0	343.0	40.0	0.0
C033	S13-3	-330.0	343.0	515.0	30.0	0.0
C034	S13-4	-330.0	515.0	598.0	40.0	0.0
C035	S13-5	-330.0	598.0	667.0	50.0	0.0
C036	S14-4	-430.0	436.0	499.0	40.0	0.0
C037	S14-5	-430.0	499.0	822.0	50.0	0.0
C038	S15-2	-530.0	390.0	458.0	40.0	0.0

	CNM Report	
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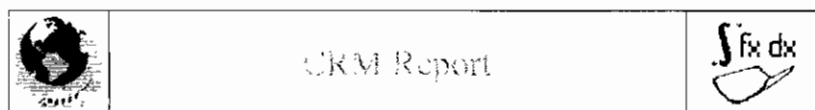
C039	S15-3	-530.0	458.0	540.0	50.0	0.0
C040	S15-4	-530.0	540.0	680.0	60.0	0.0
C041	S15-5	-530.0	680.0	749.0	70.0	0.0
C042	S16-2	-630.0	381.0	443.0	40.0	0.0
C043	S16-3	-630.0	443.0	503.0	50.0	0.0
C044	S16-4	-630.0	503.0	549.0	60.0	0.0
C045	S16-5	-630.0	549.0	580.0	70.0	0.0
C046	S16-6	-630.0	580.0	616.0	80.0	0.0
C047	S16-7	-630.0	616.0	687.0	90.0	0.0
C048	S17-2	-730.0	371.0	428.0	40.0	0.0
C049	S17-3	-730.0	428.0	478.0	50.0	0.0
C050	S17-4	-730.0	478.0	536.0	60.0	0.0
C051	S17-5	-730.0	536.0	567.0	70.0	0.0
C052	S17-6	-730.0	567.0	586.0	80.0	0.0
C053	S17-7	-730.0	586.0	608.0	90.0	0.0
C054	S17-8	-730.0	608.0	631.0	100.0	0.0
C055	S17-9	-730.0	631.0	680.0	110.0	0.0
C056	S17-10	-730.0	680.0	690.0	120.0	0.0
C057	S17-14	-730.0	-368.0	-321.0	40.0	0.0
C058	S17-15	-730.0	-621.0	-368.0	50.0	0.0
C059	S18-2	-770.0	371.0	428.0	40.0	0.0
C060	S18-3	-770.0	428.0	481.0	50.0	0.0
C061	S18-4	-770.0	481.0	531.0	60.0	0.0
C062	S18-5	-770.0	531.0	562.0	70.0	0.0
C063	S18-6	-770.0	562.0	586.0	80.0	0.0
C064	S18-7	-770.0	586.0	601.0	90.0	0.0
C065	S18-8	-770.0	601.0	622.0	100.0	0.0
C066	S18-9	-770.0	622.0	674.0	110.0	0.0
C067	S18-10	-770.0	674.0	689.0	120.0	0.0
C068	S18-14	-770.0	-313.0	-286.0	40.0	0.0
C069	S18-15	-770.0	-374.0	-313.0	50.0	0.0
C070	S18-16	-770.0	-459.0	-374.0	60.0	0.0
C071	S18-17	-770.0	-588.0	-459.0	70.0	0.0
C072	S19-2	-830.0	381.0	448.0	40.0	0.0
C073	S19-3	-830.0	448.0	486.0	50.0	0.0
C074	S19-4	-830.0	486.0	523.0	60.0	0.0
C075	S19-5	-830.0	523.0	555.0	70.0	0.0
C076	S19-6	-830.0	555.0	587.0	80.0	0.0
C077	S19-7	-830.0	587.0	608.0	90.0	0.0
C078	S19-8	-830.0	608.0	633.0	100.0	0.0
C079	S19-9	-830.0	633.0	677.0	110.0	0.0
C080	S19-10	-830.0	677.0	703.0	120.0	0.0
C081	S19-14	-830.0	-323.0	-304.0	40.0	0.0
C082	S19-15	-830.0	-367.0	-323.0	50.0	0.0
C083	S19-16	-830.0	-402.0	-367.0	60.0	0.0
C084	S19-17	-830.0	-448.0	-402.0	70.0	0.0
C085	S19-18	-830.0	-495.0	-448.0	80.0	0.0
C086	S19-19	-830.0	-557.0	-495.0	90.0	0.0
C087	S20-2	-930.0	362.0	432.0	40.0	0.0
C088	S20-3	-930.0	432.0	479.0	50.0	0.0
C089	S20-4	-930.0	479.0	510.0	60.0	0.0
C090	S20-5	-930.0	510.0	542.0	70.0	0.0
C091	S20-6	-930.0	542.0	588.0	80.0	0.0
C092	S20-7	-930.0	588.0	626.0	90.0	0.0
C093	S20-8	-930.0	626.0	701.0	100.0	0.0
C094	S20-12	-930.0	-393.0	-365.0	40.0	0.0

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C095	S20-13	-930.0	-433.0	-393.0	50.0	0.0
C096	S20-14	-930.0	-446.0	-433.0	60.0	0.0
C097	S20-15	-930.0	-478.0	-446.0	70.0	0.0
C098	S20-16	-930.0	-507.0	-478.0	80.0	0.0
C099	S20-17	-930.0	-516.0	-507.0	90.0	0.0
C100	S20-18	-930.0	-538.0	-516.0	100.0	0.0
C101	S20-19	-930.0	-604.0	-538.0	110.0	0.0
C102	S21-2	-980.0	316.0	393.0	40.0	0.0
C103	S21-3	-980.0	393.0	451.0	50.0	0.0
C104	S21-4	-980.0	451.0	499.0	60.0	0.0
C105	S21-5	-980.0	499.0	536.0	70.0	0.0
C106	S21-6	-980.0	536.0	601.0	80.0	0.0
C107	S21-7	-980.0	601.0	682.0	90.0	0.0
C108	S21-10	-980.0	-428.0	-402.0	40.0	0.0
C109	S21-11	-980.0	-464.0	-428.0	50.0	0.0
C110	S21-12	-980.0	-468.0	-464.0	60.0	0.0
C111	S21-13	-980.0	-499.0	-468.0	70.0	0.0
C112	S21-14	-980.0	-528.0	-499.0	80.0	0.0
C113	S21-15	-980.0	-538.0	-528.0	90.0	0.0
C114	S21-16	-980.0	-554.0	-538.0	100.0	0.0
C115	S21-17	-980.0	-574.0	-554.0	110.0	0.0
C116	S21-18	-980.0	-621.0	-574.0	120.0	0.0
C117	S22-2	-1030.0	289.0	353.0	40.0	0.0
C118	S22-3	-1030.0	353.0	422.0	50.0	0.0
C119	S22-4	-1030.0	422.0	470.0	60.0	0.0
C120	S22-5	-1030.0	470.0	513.0	70.0	0.0
C121	S22-6	-1030.0	513.0	672.0	80.0	0.0
C122	S22-10	-1030.0	-457.0	-426.0	40.0	0.0
C123	S22-11	-1030.0	-479.0	-457.0	50.0	0.0
C124	S22-12	-1030.0	-489.0	-479.0	60.0	0.0
C125	S22-13	-1030.0	-520.0	-489.0	70.0	0.0
C126	S22-14	-1030.0	-548.0	-520.0	80.0	0.0
C127	S22-15	-1030.0	-561.0	-548.0	90.0	0.0
C128	S22-16	-1030.0	-571.0	-561.0	100.0	0.0
C129	S22-17	-1030.0	-596.0	-571.0	110.0	0.0
C130	S22-18	-1030.0	-655.0	-596.0	120.0	0.0
C131	S23-2	-1130.0	137.0	219.0	40.0	0.0
C132	S23-3	-1130.0	219.0	297.0	50.0	0.0
C133	S23-4	-1130.0	297.0	355.0	60.0	0.0
C134	S23-5	-1130.0	355.0	412.0	70.0	0.0
C135	S23-6	-1130.0	412.0	557.0	80.0	0.0
C136	S23-10	-1130.0	-438.0	-408.0	40.0	0.0
C137	S23-11	-1130.0	-483.0	-438.0	50.0	0.0
C138	S23-12	-1130.0	-533.0	-483.0	60.0	0.0
C139	S23-13	-1130.0	-562.0	-533.0	70.0	0.0
C140	S23-14	-1130.0	-589.0	-562.0	80.0	0.0
C141	S23-15	-1130.0	-628.0	-589.0	90.0	0.0
C142	S23-16	-1130.0	-658.0	-628.0	100.0	0.0
C143	S23-17	-1130.0	-709.0	-658.0	110.0	0.0
C144	S24-2	-1179.0	131.0	183.0	40.0	0.0
C145	S24-3	-1179.0	183.0	236.0	50.0	0.0
C146	S24-4	-1179.0	236.0	296.0	60.0	0.0
C147	S24-5	-1179.0	296.0	357.0	70.0	0.0
C148	S24-6	-1179.0	357.0	485.0	80.0	0.0
C149	S24-11	-1179.0	-399.0	-341.0	40.0	0.0
C150	S24-12	-1179.0	-437.0	-399.0	50.0	0.0

	CRM Report	
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C151	S24-13	-1179.0	-491.0	-437.0	60.0	0.0
C152	S24-14	-1179.0	-555.0	-491.0	70.0	0.0
C153	S24-15	-1179.0	-605.0	-555.0	80.0	0.0
C154	S24-16	-1179.0	-649.0	-605.0	90.0	0.0
C155	S24-17	-1179.0	-692.0	-649.0	100.0	0.0
C156	S25-2	-1230.0	124.0	216.0	40.0	0.0
C157	S25-3	-1230.0	216.0	272.0	50.0	0.0
C158	S25-4	-1230.0	272.0	373.0	60.0	0.0
C159	S25-5	-1230.0	373.0	436.0	70.0	0.0
C160	S25-10	-1230.0	-448.0	-390.0	40.0	0.0
C161	S25-11	-1230.0	-532.0	-448.0	50.0	0.0
C162	S25-12	-1230.0	-620.0	-532.0	60.0	0.0
C163	S25-13	-1230.0	-675.0	-620.0	70.0	0.0
C164	S25-14	-1230.0	-718.0	-675.0	80.0	0.0
C165	S25-15	-1230.0	-759.0	-718.0	90.0	0.0
C166	S25-16	-1230.0	-840.0	-759.0	100.0	0.0
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	0.0
C168	GS	-281.0	-193.0	-193.0	12.0	0.0



SUMMARY

A SUMMARY OF OBSTACLE INFORMATION

Total number of obstacles entered : 168

All obstacles are in the precision segment

B SUMMARY OF ILS APPROACH PARAMETER INFORMATION

B - 1 Ground data

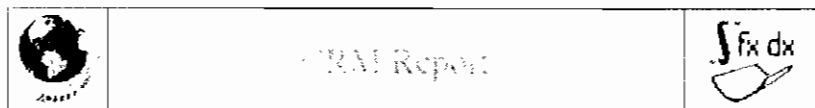
ILS glide path angle	3.20 °
ILS reference datum height	16.76 M
Distance between ILS localizer antenna and runway threshold	2759.59 M
Localizer course width at threshold	210.00 M
Localizer course sector angle	4.35 °
Threshold elevation	24.94 M
Distance from final approach point to threshold	10186.00 M
Termination of precision segment	-12900.00 M

B - 2 Aircraft data

Distance between the flightpaths of the wheels and the GP antenna	6.00 M
Wing semispan	30.00 M
Standard missed approach climb gradient	2.50 %

C SUMMARY OF WARNING

No warning for the entered parameters.



SPEED CATEGORY A

A SPECIFIED OCH : 198 FT

Total risk for this approach : **9.85 E-05**
 Risk of hitting the ground plane : **9.05 E-13**

Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C012	S7-1	0.0	57.0	127.0	40.0	3.18 E-05
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	5.48 E-07
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	2.85 E-05
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	5.14 E-06
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	7.57 E-08
C009	S6-1	80.0	63.0	168.0	40.0	2.89 E-05
C015	S7-4	0.0	544.0	604.0	70.0	*
C014	S7-3	0.0	344.0	544.0	60.0	1.43 E-13
C013	S7-2	0.0	127.0	344.0	50.0	2.09 E-06
C012	S7-1	0.0	57.0	127.0	40.0	3.18 E-05
C019	S8-5	-30.0	572.0	589.0	70.0	*
C018	S8-4	-30.0	492.0	572.0	60.0	*
C017	S8-3	-30.0	187.0	492.0	50.0	4.08 E-08
C016	S8-2	-30.0	118.0	187.0	40.0	5.42 E-07
C022	S9-4	-130.0	217.0	313.0	60.0	3.94 E-08
C021	S9-3	-130.0	148.0	217.0	50.0	7.35 E-07
C020	S9-2	-130.0	100.0	148.0	40.0	1.39 E-06
C025	S10-4	-180.0	196.0	328.0	60.0	2.37 E-07
C024	S10-3	-180.0	137.0	196.0	50.0	1.56 E-06
C023	S10-2	-180.0	91.0	137.0	40.0	2.03 E-06
C028	S11-4	-230.0	192.0	290.0	60.0	4.14 E-07
C027	S11-3	-230.0	136.0	192.0	50.0	1.74 E-06
C026	S11-2	-230.0	95.0	136.0	40.0	1.36 E-06
C031	S12-4	-266.0	201.0	258.0	60.0	3.12 E-07
C030	S12-3	-266.0	136.0	201.0	50.0	1.76 E-06
C029	S12-2	-266.0	98.0	136.0	40.0	1.00 E-06
C168	GS	-281.0	-193.0	-193.0	12.0	3.16 E-14
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	2.89 E-14
C032	S13-2	-330.0	111.0	343.0	40.0	3.99 E-07
C037	S14-5	-430.0	499.0	822.0	50.0	5.94 E-15
C036	S14-4	-430.0	436.0	499.0	40.0	8.54 E-15

	CRM Report	
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C041	S15-5	-530.0	680.0	749.0	70.0	*
C040	S15-4	-530.0	540.0	680.0	60.0	2.67 E-14
C039	S15-3	-530.0	458.0	540.0	50.0	1.58 E-13
C038	S15-2	-530.0	390.0	458.0	40.0	3.49 E-13
C047	S16-7	-630.0	616.0	687.0	90.0	5.93 E-14
C046	S16-6	-630.0	580.0	616.0	80.0	1.75 E-13
C045	S16-5	-630.0	549.0	580.0	70.0	2.76 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	4.92 E-13
C043	S16-3	-630.0	443.0	503.0	50.0	1.02 E-12
C042	S16-2	-630.0	381.0	443.0	40.0	9.53 E-13
C056	S17-10	-730.0	680.0	690.0	120.0	2.68 E-14
C055	S17-9	-730.0	631.0	680.0	110.0	1.65 E-13
C054	S17-8	-730.0	608.0	631.0	100.0	3.75 E-13
C053	S17-7	-730.0	586.0	608.0	90.0	8.09 E-13
C052	S17-6	-730.0	567.0	586.0	80.0	1.19 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	1.78 E-12
C050	S17-4	-730.0	478.0	536.0	60.0	5.26 E-12
C049	S17-3	-730.0	428.0	478.0	50.0	4.54 E-12
C048	S17-2	-730.0	371.0	428.0	40.0	1.78 E-12
C057	S17-14	-730.0	-368.0	-321.0	40.0	1.44 E-11
C058	S17-15	-730.0	-621.0	-368.0	50.0	7.68 E-11
C067	S18-10	-770.0	674.0	689.0	120.0	6.02 E-14
C066	S18-9	-770.0	622.0	674.0	110.0	4.12 E-13
C065	S18-8	-770.0	601.0	622.0	100.0	8.79 E-13
C064	S18-7	-770.0	586.0	601.0	90.0	1.42 E-12
C063	S18-6	-770.0	562.0	586.0	80.0	2.55 E-12
C062	S18-5	-770.0	531.0	562.0	70.0	3.64 E-12
C061	S18-4	-770.0	481.0	531.0	60.0	6.53 E-12
C060	S18-3	-770.0	428.0	481.0	50.0	5.49 E-12
C059	S18-2	-770.0	371.0	428.0	40.0	1.73 E-12
C068	S18-14	-770.0	-313.0	-286.0	40.0	4.50 E-11
C069	S18-15	-770.0	-374.0	-313.0	50.0	7.17 E-10
C070	S18-16	-770.0	-459.0	-374.0	60.0	1.02 E-09
C071	S18-17	-770.0	-588.0	-459.0	70.0	1.28 E-10
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	1.52 E-09
C080	S19-10	-830.0	677.0	703.0	120.0	1.29 E-13
C079	S19-9	-830.0	633.0	677.0	110.0	6.35 E-13
C078	S19-8	-830.0	608.0	633.0	100.0	1.59 E-12
C077	S19-7	-830.0	587.0	608.0	90.0	3.19 E-12
C076	S19-6	-830.0	555.0	587.0	80.0	7.71 E-12
C075	S19-5	-830.0	523.0	555.0	70.0	1.05 E-11
C074	S19-4	-830.0	486.0	523.0	60.0	8.30 E-12
C073	S19-3	-830.0	448.0	486.0	50.0	2.70 E-12
C072	S19-2	-830.0	381.0	448.0	40.0	1.04 E-12
C081	S19-14	-830.0	-323.0	-304.0	40.0	1.75 E-11
C082	S19-15	-830.0	-367.0	-323.0	50.0	4.48 E-10
C083	S19-16	-830.0	-402.0	-367.0	60.0	1.59 E-09
C084	S19-17	-830.0	-448.0	-402.0	70.0	2.86 E-09
C085	S19-18	-830.0	-495.0	-448.0	80.0	1.21 E-09
C086	S19-19	-830.0	-557.0	-495.0	90.0	2.25 E-10
C093	S20-8	-930.0	626.0	701.0	100.0	3.22 E-12
C092	S20-7	-930.0	588.0	626.0	90.0	1.20 E-11
C091	S20-6	-930.0	542.0	588.0	80.0	4.64 E-11
C090	S20-5	-930.0	510.0	542.0	70.0	4.92 E-11
C089	S20-4	-930.0	479.0	510.0	60.0	2.11 E-11
C088	S20-3	-930.0	432.0	479.0	50.0	6.59 E-12

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		CMM Report				
C087	S20-2	-930.0	362.0	432.0	40.0	1.50 E-12
C094	S20-12	-930.0	-393.0	-365.0	40.0	1.31 E-12
C095	S20-13	-930.0	-433.0	-393.0	50.0	2.99 E-11
C096	S20-14	-930.0	-446.0	-433.0	60.0	1.43 E-10
C097	S20-15	-930.0	-478.0	-446.0	70.0	7.99 E-10
C098	S20-16	-930.0	-507.0	-478.0	80.0	8.06 E-10
C099	S20-17	-930.0	-516.0	-507.0	90.0	4.25 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	3.60 E-10
C101	S20-19	-930.0	-604.0	-538.0	110.0	1.42 E-10
C107	S21-7	-980.0	601.0	682.0	90.0	1.33 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	1.03 E-10
C105	S21-5	-980.0	499.0	536.0	70.0	1.16 E-10
C104	S21-4	-980.0	451.0	499.0	60.0	8.25 E-11
C103	S21-3	-980.0	393.0	451.0	50.0	2.78 E-11
C102	S21-2	-980.0	316.0	393.0	40.0	5.13 E-12
C109	S21-11	-980.0	-464.0	-428.0	50.0	7.59 E-12
C110	S21-12	-980.0	-468.0	-464.0	60.0	4.60 E-11
C111	S21-13	-980.0	-499.0	-468.0	70.0	4.25 E-10
C112	S21-14	-980.0	-528.0	-499.0	80.0	5.06 E-10
C113	S21-15	-980.0	-538.0	-528.0	90.0	2.97 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	2.51 E-10
C115	S21-17	-980.0	-574.0	-554.0	110.0	1.31 E-10
C116	S21-18	-980.0	-621.0	-574.0	120.0	5.64 E-11
C121	S22-6	-1030.0	513.0	672.0	80.0	4.38 E-10
C120	S22-5	-1030.0	470.0	513.0	70.0	5.09 E-10
C119	S22-4	-1030.0	422.0	470.0	60.0	2.65 E-10
C118	S22-3	-1030.0	353.0	422.0	50.0	9.04 E-11
C117	S22-2	-1030.0	289.0	353.0	40.0	8.07 E-12
C122	S22-10	-1030.0	-457.0	-426.0	40.0	9.68 E-14
C123	S22-11	-1030.0	-479.0	-457.0	50.0	2.39 E-12
C124	S22-12	-1030.0	-489.0	-479.0	60.0	2.94 E-11
C125	S22-13	-1030.0	-520.0	-489.0	70.0	2.37 E-10
C126	S22-14	-1030.0	-548.0	-520.0	80.0	3.19 E-10
C127	S22-15	-1030.0	-561.0	-548.0	90.0	2.19 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	1.69 E-10
C129	S22-17	-1030.0	-596.0	-571.0	110.0	1.20 E-10
C130	S22-18	-1030.0	-655.0	-596.0	120.0	4.32 E-11
C135	S23-6	-1130.0	412.0	557.0	80.0	3.13 E-08
C134	S23-5	-1130.0	355.0	412.0	70.0	2.91 E-08
C133	S23-4	-1130.0	297.0	355.0	60.0	1.05 E-08
C132	S23-3	-1130.0	219.0	297.0	50.0	2.55 E-09
C131	S23-2	-1130.0	137.0	219.0	40.0	2.60 E-10
C136	S23-10	-1130.0	-438.0	-408.0	40.0	1.02 E-13
C137	S23-11	-1130.0	-483.0	-438.0	50.0	3.97 E-12
C138	S23-12	-1130.0	-533.0	-483.0	60.0	3.13 E-11
C139	S23-13	-1130.0	-562.0	-533.0	70.0	6.77 E-11
C140	S23-14	-1130.0	-589.0	-562.0	80.0	1.28 E-10
C141	S23-15	-1130.0	-628.0	-589.0	90.0	1.18 E-10
C142	S23-16	-1130.0	-658.0	-628.0	100.0	3.68 E-11
C143	S23-17	-1130.0	-709.0	-658.0	110.0	1.30 E-11
C148	S24-6	-1179.0	357.0	485.0	80.0	1.80 E-07
C147	S24-5	-1179.0	296.0	357.0	70.0	1.44 E-07
C146	S24-4	-1179.0	236.0	296.0	60.0	4.57 E-08
C145	S24-3	-1179.0	183.0	236.0	50.0	4.65 E-09
C144	S24-2	-1179.0	131.0	183.0	40.0	1.71 E-10
C149	S24-11	-1179.0	-399.0	-341.0	40.0	5.22 E-13

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C150	S24-12	-1179.0	-437.0	-399.0	50.0	1.10 E-11
C151	S24-13	-1179.0	-491.0	-437.0	60.0	1.47 E-10
C152	S24-14	-1179.0	-555.0	-491.0	70.0	3.96 E-10
C153	S24-15	-1179.0	-605.0	-555.0	80.0	2.44 E-10
C154	S24-16	-1179.0	-649.0	-605.0	90.0	1.02 E-10
C155	S24-17	-1179.0	-692.0	-649.0	100.0	2.92 E-11
C159	S25-5	-1230.0	373.0	436.0	70.0	1.58 E-08
C158	S25-4	-1230.0	272.0	373.0	60.0	1.35 E-08
C157	S25-3	-1230.0	216.0	272.0	50.0	1.22 E-09
C156	S25-2	-1230.0	124.0	216.0	40.0	1.16 E-10
C160	S25-10	-1230.0	-448.0	-390.0	40.0	8.54 E-14
C161	S25-11	-1230.0	-532.0	-448.0	50.0	2.00 E-12
C162	S25-12	-1230.0	-620.0	-532.0	60.0	5.72 E-12
C163	S25-13	-1230.0	-675.0	-620.0	70.0	3.84 E-12
C164	S25-14	-1230.0	-718.0	-675.0	80.0	3.52 E-12
C165	S25-15	-1230.0	-759.0	-718.0	90.0	2.48 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	1.14 E-12

B MINIMUM OCH : 258 FT

Total risk for this approach : 9.57 E-08
Risk of hitting the ground plane : < 1.0 E-15

Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C004	S4-1	280.0	68.0	526.0	40.0	3.28 E-08
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	1.91 E-09
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	3.28 E-08
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	1.63 E-10
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	2.34 E-09
C009	S6-1	80.0	63.0	168.0	40.0	6.29 E-09
C015	S7-4	0.0	544.0	604.0	70.0	*
C014	S7-3	0.0	344.0	544.0	60.0	4.25 E-12
C013	S7-2	0.0	127.0	344.0	50.0	1.20 E-08
C012	S7-1	0.0	57.0	127.0	40.0	3.36 E-09
C019	S8-5	-30.0	572.0	589.0	70.0	*
C018	S8-4	-30.0	492.0	572.0	60.0	*
C017	S8-3	-30.0	187.0	492.0	50.0	6.41 E-10
C016	S8-2	-30.0	118.0	187.0	40.0	1.65 E-10
C022	S9-4	-130.0	217.0	313.0	60.0	4.88 E-09
C021	S9-3	-130.0	148.0	217.0	50.0	2.06 E-09
C020	S9-2	-130.0	100.0	148.0	40.0	1.33 E-10
C025	S10-4	-180.0	196.0	328.0	60.0	1.01 E-08

1.33 E-10 (min) E-15

	CRM Report	
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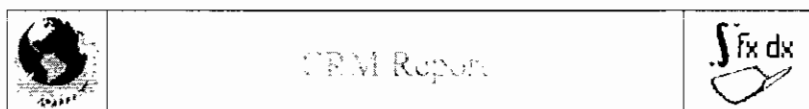
C024	S10-3	-180.0	137.0	196.0	50.0	2.24 E-09
C023	S10-2	-180.0	91.0	137.0	40.0	1.09 E-10
C028	S11-4	-230.0	192.0	290.0	60.0	9.79 E-09
C027	S11-3	-230.0	136.0	192.0	50.0	1.57 E-09
C026	S11-2	-230.0	95.0	136.0	40.0	5.14 E-11
C031	S12-4	-266.0	201.0	258.0	60.0	5.87 E-09
C030	S12-3	-266.0	136.0	201.0	50.0	1.16 E-09
C029	S12-2	-266.0	98.0	136.0	40.0	2.96 E-11
C168	GS	-281.0	-193.0	-193.0	12.0	*
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	*
C032	S13-2	-330.0	141.0	343.0	40.0	8.58 E-12
C037	S14-5	-430.0	499.0	822.0	50.0	*
C036	S14-4	-430.0	436.0	499.0	40.0	*
C041	S15-5	-530.0	680.0	749.0	70.0	*
C040	S15-4	-530.0	540.0	680.0	60.0	3.40 E-15
C039	S15-3	-530.0	458.0	540.0	50.0	1.17 E-15
C038	S15-2	-530.0	390.0	458.0	40.0	*
C047	S16-7	-630.0	616.0	687.0	90.0	1.67 E-12
C046	S16-6	-630.0	580.0	616.0	80.0	8.68 E-13
C045	S16-5	-630.0	549.0	580.0	70.0	1.55 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	2.01 E-14
C043	S16-3	-630.0	443.0	503.0	50.0	1.52 E-15
C042	S16-2	-630.0	381.0	443.0	40.0	*
C056	S17-10	-730.0	680.0	690.0	120.0	3.83 E-12
C055	S17-9	-730.0	631.0	680.0	110.0	2.02 E-11
C054	S17-8	-730.0	608.0	631.0	100.0	2.30 E-11
C053	S17-7	-730.0	586.0	608.0	90.0	1.26 E-11
C052	S17-6	-730.0	567.0	586.0	80.0	2.59 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	3.44 E-13
C050	S17-4	-730.0	478.0	536.0	60.0	4.62 E-14
C049	S17-3	-730.0	428.0	478.0	50.0	1.40 E-15
C048	S17-2	-730.0	371.0	428.0	40.0	*
C057	S17-14	-730.0	-368.0	-321.0	40.0	*
C058	S17-15	-730.0	-621.0	-368.0	50.0	9.63 E-15
C067	S18-10	-770.0	674.0	689.0	120.0	7.86 E-12
C066	S18-9	-770.0	622.0	674.0	110.0	4.51 E-11
C065	S18-8	-770.0	601.0	622.0	100.0	4.41 E-11
C064	S18-7	-770.0	586.0	601.0	90.0	1.65 E-11
C063	S18-6	-770.0	562.0	586.0	80.0	3.77 E-12
C062	S18-5	-770.0	531.0	562.0	70.0	4.32 E-13
C061	S18-4	-770.0	481.0	531.0	60.0	3.59 E-14
C060	S18-3	-770.0	428.0	481.0	50.0	1.03 E-15
C059	S18-2	-770.0	371.0	428.0	40.0	*
C068	S18-14	-770.0	-313.0	-286.0	40.0	*
C069	S18-15	-770.0	-374.0	-313.0	50.0	3.15 E-14
C070	S18-16	-770.0	-459.0	-374.0	60.0	1.17 E-12
C071	S18-17	-770.0	-588.0	-459.0	70.0	6.17 E-12
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	1.04 E-08
C080	S19-10	-830.0	677.0	703.0	120.0	1.46 E-11
C079	S19-9	-830.0	633.0	677.0	110.0	5.50 E-11
C078	S19-8	-830.0	608.0	633.0	100.0	5.62 E-11
C077	S19-7	-830.0	587.0	608.0	90.0	2.30 E-11
C076	S19-6	-830.0	555.0	587.0	80.0	5.98 E-12
C075	S19-5	-830.0	523.0	555.0	70.0	5.70 E-13

	CM Report	
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C074	S19-4	-830.0	486.0	523.0	60.0	2.31 E-14
C073	S19-3	-830.0	448.0	486.0	50.0	*
C072	S19-2	-830.0	381.0	448.0	40.0	*
C081	S19-14	-830.0	-323.0	-304.0	40.0	*
C082	S19-15	-830.0	-367.0	-323.0	50.0	1.22 E-14
C083	S19-16	-830.0	-402.0	-367.0	60.0	8.79 E-13
C084	S19-17	-830.0	-448.0	-402.0	70.0	3.00 E-11
C085	S19-18	-830.0	-495.0	-448.0	80.0	2.53 E-10
C086	S19-19	-830.0	-557.0	-495.0	90.0	7.15 E-10
C093	S20-8	-930.0	626.0	701.0	100.0	6.21 E-11
C092	S20-7	-930.0	588.0	626.0	90.0	3.60 E-11
C091	S20-6	-930.0	542.0	588.0	80.0	1.09 E-11
C090	S20-5	-930.0	510.0	542.0	70.0	7.18 E-13
C089	S20-4	-930.0	479.0	510.0	60.0	1.63 E-14
C088	S20-3	-930.0	432.0	479.0	50.0	*
C087	S20-2	-930.0	362.0	432.0	40.0	*
C094	S20-12	-930.0	-393.0	-365.0	40.0	*
C095	S20-13	-930.0	-433.0	-393.0	50.0	*
C096	S20-14	-930.0	-446.0	-433.0	60.0	5.97 E-14
C097	S20-15	-930.0	-478.0	-446.0	70.0	5.08 E-12
C098	S20-16	-930.0	-507.0	-478.0	80.0	8.48 E-11
C099	S20-17	-930.0	-516.0	-507.0	90.0	5.44 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	2.87 E-09
C101	S20-19	-930.0	-604.0	-538.0	110.0	4.36 E-09
C107	S21-7	-980.0	601.0	682.0	90.0	2.76 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	1.33 E-11
C105	S21-5	-980.0	499.0	536.0	70.0	8.41 E-13
C104	S21-4	-980.0	451.0	499.0	60.0	2.63 E-14
C103	S21-3	-980.0	393.0	451.0	50.0	*
C102	S21-2	-980.0	316.0	393.0	40.0	*
C109	S21-11	-980.0	-464.0	-428.0	50.0	*
C110	S21-12	-980.0	-468.0	-464.0	60.0	1.62 E-14
C111	S21-13	-980.0	-499.0	-468.0	70.0	2.08 E-12
C112	S21-14	-980.0	-528.0	-499.0	80.0	4.09 E-11
C113	S21-15	-980.0	-538.0	-528.0	90.0	2.97 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	1.67 E-09
C115	S21-17	-980.0	-574.0	-554.0	110.0	3.30 E-09
C116	S21-18	-980.0	-621.0	-574.0	120.0	3.01 E-09
C121	S22-6	-1030.0	513.0	672.0	80.0	2.56 E-11
C120	S22-5	-1030.0	470.0	513.0	70.0	1.53 E-12
C119	S22-4	-1030.0	422.0	470.0	60.0	3.75 E-14
C118	S22-3	-1030.0	353.0	422.0	50.0	*
C117	S22-2	-1030.0	289.0	353.0	40.0	*
C122	S22-10	-1030.0	-457.0	-426.0	40.0	*
C123	S22-11	-1030.0	-479.0	-457.0	50.0	*
C124	S22-12	-1030.0	-489.0	-479.0	60.0	7.33 E-15
C125	S22-13	-1030.0	-520.0	-489.0	70.0	8.77 E-13
C126	S22-14	-1030.0	-548.0	-520.0	80.0	1.95 E-11
C127	S22-15	-1030.0	-561.0	-548.0	90.0	1.68 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	9.30 E-10
C129	S22-17	-1030.0	-596.0	-571.0	110.0	2.56 E-09
C130	S22-18	-1030.0	-655.0	-596.0	120.0	2.14 E-09
C135	S23-6	-1130.0	412.0	557.0	80.0	2.60 E-10
C134	S23-5	-1130.0	355.0	412.0	70.0	1.36 E-11
C133	S23-4	-1130.0	297.0	355.0	60.0	2.79 E-13
C132	S23-3	-1130.0	219.0	297.0	50.0	3.48 E-15

	Final Report	
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C131	S23-2	-1130.0	137.0	219.0	40.0	*
C136	S23-10	-1130.0	-438.0	-408.0	40.0	*
C137	S23-11	-1130.0	-483.0	-438.0	50.0	*
C138	S23-12	-1130.0	-533.0	-483.0	60.0	3.06 E-15
C139	S23-13	-1130.0	-562.0	-533.0	70.0	1.44 E-13
C140	S23-14	-1130.0	-589.0	-562.0	80.0	4.39 E-12
C141	S23-15	-1130.0	-628.0	-589.0	90.0	5.31 E-11
C142	S23-16	-1130.0	-658.0	-628.0	100.0	1.60 E-10
C143	S23-17	-1130.0	-709.0	-658.0	110.0	2.73 E-10
C148	S24-6	-1179.0	357.0	485.0	80.0	7.11 E-10
C147	S24-5	-1179.0	296.0	357.0	70.0	3.45 E-11
C146	S24-4	-1179.0	236.0	296.0	60.0	6.41 E-13
C145	S24-3	-1179.0	183.0	236.0	50.0	3.70 E-15
C144	S24-2	-1179.0	131.0	183.0	40.0	*
C149	S24-11	-1179.0	-399.0	-341.0	40.0	*
C150	S24-12	-1179.0	-437.0	-399.0	50.0	*
C151	S24-13	-1179.0	-491.0	-437.0	60.0	5.98 E-15
C152	S24-14	-1179.0	-555.0	-491.0	70.0	3.43 E-13
C153	S24-15	-1179.0	-605.0	-555.0	80.0	4.82 E-12
C154	S24-16	-1179.0	-649.0	-605.0	90.0	3.32 E-11
C155	S24-17	-1179.0	-692.0	-649.0	100.0	9.88 E-11
C159	S25-5	-1230.0	373.0	436.0	70.0	3.69 E-12
C158	S25-4	-1230.0	272.0	373.0	60.0	1.55 E-13
C157	S25-3	-1230.0	216.0	272.0	50.0	*
C156	S25-2	-1230.0	124.0	216.0	40.0	*
C160	S25-10	-1230.0	-448.0	-390.0	40.0	*
C161	S25-11	-1230.0	-532.0	-448.0	50.0	*
C162	S25-12	-1230.0	-620.0	-532.0	60.0	*
C163	S25-13	-1230.0	-675.0	-620.0	70.0	6.84 E-15
C164	S25-14	-1230.0	-718.0	-675.0	80.0	1.12 E-13
C165	S25-15	-1230.0	-759.0	-718.0	90.0	9.64 E-13
C166	S25-16	-1230.0	-840.0	-759.0	100.0	3.52 E-12



SPEED CATEGORY B

A SPECIFIED OCH : 198 FT

Total risk for this approach : **2.12 E-04**
 Risk of hitting the ground plane : **4.21 E-12**

Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C012	S7-1	0.0	57.0	127.0	40.0	7.62 E-05
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	8.10 E-07
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	5.33 E-05
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	1.20 E-05
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	1.21 E-07
C009	S6-1	80.0	63.0	168.0	40.0	6.44 E-05
C015	S7-4	0.0	544.0	604.0	70.0	*
C014	S7-3	0.0	344.0	544.0	60.0	1.84 E-13
C013	S7-2	0.0	127.0	344.0	50.0	3.55 E-06
C012	S7-1	0.0	57.0	127.0	40.0	7.62 E-05
C019	S8-5	-30.0	572.0	589.0	70.0	*
C018	S8-4	-30.0	492.0	572.0	60.0	*
C017	S8-3	-30.0	187.0	492.0	50.0	7.10 E-08
C016	S8-2	-30.0	118.0	187.0	40.0	1.34 E-06
C022	S9-4	-130.0	217.0	313.0	60.0	5.49 E-08
C021	S9-3	-130.0	148.0	217.0	50.0	1.39 E-06
C020	S9-2	-130.0	100.0	148.0	40.0	3.76 E-06
C025	S10-4	-180.0	196.0	328.0	60.0	3.42 E-07
C024	S10-3	-180.0	137.0	196.0	50.0	3.08 E-06
C023	S10-2	-180.0	91.0	137.0	40.0	5.78 E-06
C028	S11-4	-230.0	192.0	290.0	60.0	6.18 E-07
C027	S11-3	-230.0	136.0	192.0	50.0	3.58 E-06
C026	S11-2	-230.0	95.0	136.0	40.0	4.05 E-06
C031	S12-4	-266.0	201.0	258.0	60.0	4.78 E-07
C030	S12-3	-266.0	136.0	201.0	50.0	3.73 E-06
C029	S12-2	-266.0	98.0	136.0	40.0	3.10 E-06
C168	GS	-281.0	-193.0	-193.0	12.0	3.28 E-13
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	1.43 E-13
C032	S13-2	-330.0	111.0	343.0	40.0	1.31 E-06
C037	S14-5	-430.0	499.0	822.0	50.0	1.47 E-14
C036	S14-4	-430.0	436.0	499.0	40.0	3.11 E-14

	CEM Report	
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C041	S15-5	-530.0	680.0	749.0	70.0	*
C040	S15-4	-530.0	540.0	680.0	60.0	5.04 E-14
C039	S15-3	-530.0	458.0	540.0	50.0	4.29 E-13
C038	S15-2	-530.0	390.0	458.0	40.0	1.41 E-12
C047	S16-7	-630.0	616.0	687.0	90.0	6.16 E-14
C046	S16-6	-630.0	580.0	616.0	80.0	2.05 E-13
C045	S16-5	-630.0	549.0	580.0	70.0	4.13 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	1.01 E-12
C043	S16-3	-630.0	443.0	503.0	50.0	3.04 E-12
C042	S16-2	-630.0	381.0	443.0	40.0	4.26 E-12
C056	S17-10	-730.0	680.0	690.0	120.0	2.68 E-14
C055	S17-9	-730.0	631.0	680.0	110.0	1.65 E-13
C054	S17-8	-730.0	608.0	631.0	100.0	3.78 E-13
C053	S17-7	-730.0	586.0	608.0	90.0	8.58 E-13
C052	S17-6	-730.0	567.0	586.0	80.0	1.47 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	2.86 E-12
C050	S17-4	-730.0	478.0	536.0	60.0	1.18 E-11
C049	S17-3	-730.0	428.0	478.0	50.0	1.50 E-11
C048	S17-2	-730.0	371.0	428.0	40.0	8.81 E-12
C057	S17-14	-730.0	-368.0	-321.0	40.0	7.13 E-11
C058	S17-15	-730.0	-621.0	-368.0	50.0	2.53 E-10
C067	S18-10	-770.0	674.0	689.0	120.0	6.02 E-14
C066	S18-9	-770.0	622.0	674.0	110.0	4.19 E-13
C065	S18-8	-770.0	601.0	622.0	100.0	8.88 E-13
C064	S18-7	-770.0	586.0	601.0	90.0	1.52 E-12
C063	S18-6	-770.0	562.0	586.0	80.0	3.22 E-12
C062	S18-5	-770.0	531.0	562.0	70.0	6.04 E-12
C061	S18-4	-770.0	481.0	531.0	60.0	1.53 E-11
C060	S18-3	-770.0	428.0	481.0	50.0	1.88 E-11
C059	S18-2	-770.0	371.0	428.0	40.0	8.94 E-12
C068	S18-14	-770.0	-313.0	-286.0	40.0	2.33 E-10
C069	S18-15	-770.0	-374.0	-313.0	50.0	2.46 E-09
C070	S18-16	-770.0	-459.0	-374.0	60.0	2.38 E-09
C071	S18-17	-770.0	-588.0	-459.0	70.0	2.12 E-10
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	1.55 E-09
C080	S19-10	-830.0	677.0	703.0	120.0	1.29 E-13
C079	S19-9	-830.0	633.0	677.0	110.0	6.36 E-13
C078	S19-8	-830.0	608.0	633.0	100.0	1.61 E-12
C077	S19-7	-830.0	587.0	608.0	90.0	3.48 E-12
C076	S19-6	-830.0	555.0	587.0	80.0	1.01 E-11
C075	S19-5	-830.0	523.0	555.0	70.0	1.82 E-11
C074	S19-4	-830.0	486.0	523.0	60.0	2.05 E-11
C073	S19-3	-830.0	448.0	486.0	50.0	9.82 E-12
C072	S19-2	-830.0	381.0	448.0	40.0	5.74 E-12
C081	S19-14	-830.0	-323.0	-304.0	40.0	9.68 E-11
C082	S19-15	-830.0	-367.0	-323.0	50.0	1.63 E-09
C083	S19-16	-830.0	-402.0	-367.0	60.0	3.93 E-09
C084	S19-17	-830.0	-448.0	-402.0	70.0	4.98 E-09
C085	S19-18	-830.0	-495.0	-448.0	80.0	1.59 E-09
C086	S19-19	-830.0	-557.0	-495.0	90.0	2.45 E-10
C093	S20-8	-930.0	626.0	701.0	100.0	3.29 E-12
C092	S20-7	-930.0	588.0	626.0	90.0	1.35 E-11
C091	S20-6	-930.0	542.0	588.0	80.0	6.47 E-11
C090	S20-5	-930.0	510.0	542.0	70.0	9.30 E-11
C089	S20-4	-930.0	479.0	510.0	60.0	5.71 E-11
C088	S20-3	-930.0	432.0	479.0	50.0	2.66 E-11

	CRM Report	
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C087	S20-2	-930.0	362.0	432.0	40.0	9.27 E-12
C094	S20-12	-930.0	-393.0	-365.0	40.0	8.10 E-12
C095	S20-13	-930.0	-433.0	-393.0	50.0	1.20 E-10
C096	S20-14	-930.0	-446.0	-433.0	60.0	3.88 E-10
C097	S20-15	-930.0	-478.0	-446.0	70.0	1.51 E-09
C098	S20-16	-930.0	-507.0	-478.0	80.0	1.12 E-09
C099	S20-17	-930.0	-516.0	-507.0	90.0	4.80 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	3.69 E-10
C101	S20-19	-930.0	-604.0	-538.0	110.0	1.42 E-10
C107	S21-7	-980.0	601.0	682.0	90.0	1.53 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	1.49 E-10
C105	S21-5	-980.0	499.0	536.0	70.0	2.29 E-10
C104	S21-4	-980.0	451.0	499.0	60.0	2.35 E-10
C103	S21-3	-980.0	393.0	451.0	50.0	1.18 E-10
C102	S21-2	-980.0	316.0	393.0	40.0	3.33 E-11
C109	S21-11	-980.0	-464.0	-428.0	50.0	3.22 E-11
C110	S21-12	-980.0	-468.0	-464.0	60.0	1.31 E-10
C111	S21-13	-980.0	-499.0	-468.0	70.0	8.38 E-10
C112	S21-14	-980.0	-528.0	-499.0	80.0	7.30 E-10
C113	S21-15	-980.0	-538.0	-528.0	90.0	3.41 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	2.59 E-10
C115	S21-17	-980.0	-574.0	-554.0	110.0	1.31 E-10
C116	S21-18	-980.0	-621.0	-574.0	120.0	5.64 E-11
C121	S22-6	-1030.0	513.0	672.0	80.0	6.54 E-10
C120	S22-5	-1030.0	470.0	513.0	70.0	1.05 E-09
C119	S22-4	-1030.0	422.0	470.0	60.0	7.91 E-10
C118	S22-3	-1030.0	353.0	422.0	50.0	4.04 E-10
C117	S22-2	-1030.0	289.0	353.0	40.0	5.53 E-11
C122	S22-10	-1030.0	-457.0	-426.0	40.0	6.64 E-13
C123	S22-11	-1030.0	-479.0	-457.0	50.0	1.07 E-11
C124	S22-12	-1030.0	-489.0	-479.0	60.0	8.77 E-11
C125	S22-13	-1030.0	-520.0	-489.0	70.0	4.87 E-10
C126	S22-14	-1030.0	-548.0	-520.0	80.0	4.77 E-10
C127	S22-15	-1030.0	-561.0	-548.0	90.0	2.57 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	1.76 E-10
C129	S22-17	-1030.0	-596.0	-571.0	110.0	1.21 E-10
C130	S22-18	-1030.0	-655.0	-596.0	120.0	4.32 E-11
C135	S23-6	-1130.0	412.0	557.0	80.0	5.04 E-08
C134	S23-5	-1130.0	355.0	412.0	70.0	6.56 E-08
C133	S23-4	-1130.0	297.0	355.0	60.0	3.45 E-08
C132	S23-3	-1130.0	219.0	297.0	50.0	1.27 E-08
C131	S23-2	-1130.0	137.0	219.0	40.0	1.99 E-09
C136	S23-10	-1130.0	-438.0	-408.0	40.0	7.81 E-13
C137	S23-11	-1130.0	-483.0	-438.0	50.0	1.97 E-11
C138	S23-12	-1130.0	-533.0	-483.0	60.0	1.03 E-10
C139	S23-13	-1130.0	-562.0	-533.0	70.0	1.52 E-10
C140	S23-14	-1130.0	-589.0	-562.0	80.0	2.05 E-10
C141	S23-15	-1130.0	-628.0	-589.0	90.0	1.46 E-10
C142	S23-16	-1130.0	-658.0	-628.0	100.0	3.91 E-11
C143	S23-17	-1130.0	-709.0	-658.0	110.0	1.31 E-11
C148	S24-6	-1179.0	357.0	485.0	80.0	3.00 E-07
C147	S24-5	-1179.0	296.0	357.0	70.0	3.39 E-07
C146	S24-4	-1179.0	236.0	296.0	60.0	1.58 E-07
C145	S24-3	-1179.0	183.0	236.0	50.0	2.42 E-08
C144	S24-2	-1179.0	131.0	183.0	40.0	1.38 E-09
C149	S24-11	-1179.0	-399.0	-341.0	40.0	4.22 E-12

	CNM Report	
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C150	S24-12	-1179.0	-437.0	-399.0	50.0	5.73 E-11
C151	S24-13	-1179.0	-491.0	-437.0	60.0	5.09 E-10
C152	S24-14	-1179.0	-555.0	-491.0	70.0	9.32 E-10
C153	S24-15	-1179.0	-605.0	-555.0	80.0	4.08 E-10
C154	S24-16	-1179.0	-649.0	-605.0	90.0	1.30 E-10
C155	S24-17	-1179.0	-692.0	-649.0	100.0	3.14 E-11
C159	S25-5	-1230.0	373.0	436.0	70.0	3.91 E-08
C158	S25-4	-1230.0	272.0	373.0	60.0	4.91 E-08
C157	S25-3	-1230.0	216.0	272.0	50.0	6.76 E-09
C156	S25-2	-1230.0	124.0	216.0	40.0	9.89 E-10
C160	S25-10	-1230.0	-448.0	-390.0	40.0	7.31 E-13
C161	S25-11	-1230.0	-532.0	-448.0	50.0	1.11 E-11
C162	S25-12	-1230.0	-620.0	-532.0	60.0	2.09 E-11
C163	S25-13	-1230.0	-675.0	-620.0	70.0	9.47 E-12
C164	S25-14	-1230.0	-718.0	-675.0	80.0	6.13 E-12
C165	S25-15	-1230.0	-759.0	-718.0	90.0	3.25 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	1.25 E-12

B MINIMUM OCH : 269 FT

Total risk for this approach : 9.43 E-08
 Risk of hitting the ground plane : < 1.0 E-15

Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C004	S4-1	280.0	68.0	526.0	40.0	2.27 E-08
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	1.62 E-09
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	2.27 E-08
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	1.32 E-10
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	2.77 E-09
C009	S6-1	80.0	63.0	168.0	40.0	4.99 E-09
C015	S7-4	0.0	544.0	604.0	70.0	2.57 E-15
C014	S7-3	0.0	344.0	544.0	60.0	1.16 E-11
C013	S7-2	0.0	127.0	344.0	50.0	1.18 E-08
C012	S7-1	0.0	57.0	127.0	40.0	2.55 E-09
C019	S8-5	-30.0	572.0	589.0	70.0	1.10 E-15
C018	S8-4	-30.0	492.0	572.0	60.0	2.82 E-15
C017	S8-3	-30.0	187.0	492.0	50.0	7.31 E-10
C016	S8-2	-30.0	118.0	187.0	40.0	1.50 E-10
C022	S9-4	-130.0	217.0	313.0	60.0	5.84 E-09
C021	S9-3	-130.0	148.0	217.0	50.0	1.98 E-09
C020	S9-2	-130.0	100.0	148.0	40.0	1.10 E-10
C025	S10-4	-180.0	196.0	328.0	60.0	1.11 E-08

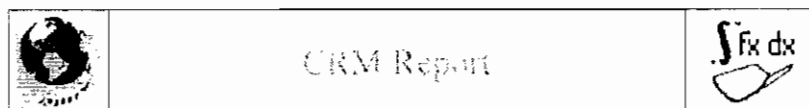
		FEM Report				
C024	S10-3	-180.0	137.0	196.0	50.0	2.07 E-09
C023	S10-2	-180.0	91.0	137.0	40.0	8.69 E-11
C028	S11-4	-230.0	192.0	290.0	60.0	1.03 E-08
C027	S11-3	-230.0	136.0	192.0	50.0	1.41 E-09
C026	S11-2	-230.0	95.0	136.0	40.0	4.09 E-11
C031	S12-4	-266.0	201.0	258.0	60.0	6.16 E-09
C030	S12-3	-266.0	136.0	201.0	50.0	1.03 E-09
C029	S12-2	-266.0	98.0	136.0	40.0	2.35 E-11
C168	GS	-281.0	-193.0	-193.0	12.0	*
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	*
C032	S13-2	-330.0	111.0	343.0	40.0	6.90 E-12
C037	S14-5	-430.0	499.0	822.0	50.0	*
C036	S14-4	-430.0	436.0	499.0	40.0	*
C041	S15-5	-530.0	680.0	749.0	70.0	1.10 E-15
C040	S15-4	-530.0	540.0	680.0	60.0	6.77 E-15
C039	S15-3	-530.0	458.0	540.0	50.0	1.83 E-15
C038	S15-2	-530.0	390.0	458.0	40.0	*
C047	S16-7	-630.0	616.0	687.0	90.0	3.81 E-12
C046	S16-6	-630.0	580.0	616.0	80.0	1.82 E-12
C045	S16-5	-630.0	549.0	580.0	70.0	2.92 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	3.24 E-14
C043	S16-3	-630.0	443.0	503.0	50.0	2.00 E-15
C042	S16-2	-630.0	381.0	443.0	40.0	*
C056	S17-10	-730.0	680.0	690.0	120.0	9.59 E-12
C055	S17-9	-730.0	631.0	680.0	110.0	4.85 E-11
C054	S17-8	-730.0	608.0	631.0	100.0	5.11 E-11
C053	S17-7	-730.0	586.0	608.0	90.0	2.56 E-11
C052	S17-6	-730.0	567.0	586.0	80.0	4.75 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	5.58 E-13
C050	S17-4	-730.0	478.0	536.0	60.0	6.21 E-14
C049	S17-3	-730.0	428.0	478.0	50.0	1.62 E-15
C048	S17-2	-730.0	371.0	428.0	40.0	*
C057	S17-14	-730.0	-368.0	-321.0	40.0	*
C058	S17-15	-730.0	-621.0	-368.0	50.0	9.95 E-15
C067	S18-10	-770.0	674.0	689.0	120.0	1.93 E-11
C066	S18-9	-770.0	622.0	674.0	110.0	1.04 E-10
C065	S18-8	-770.0	601.0	622.0	100.0	9.34 E-11
C064	S18-7	-770.0	586.0	601.0	90.0	3.18 E-11
C063	S18-6	-770.0	562.0	586.0	80.0	6.53 E-12
C062	S18-5	-770.0	531.0	562.0	70.0	6.62 E-13
C061	S18-4	-770.0	481.0	531.0	60.0	4.68 E-14
C060	S18-3	-770.0	428.0	481.0	50.0	1.16 E-15
C059	S18-2	-770.0	371.0	428.0	40.0	*
C068	S18-14	-770.0	-313.0	-286.0	40.0	*
C069	S18-15	-770.0	-374.0	-313.0	50.0	2.95 E-14
C070	S18-16	-770.0	-459.0	-374.0	60.0	1.23 E-12
C071	S18-17	-770.0	-588.0	-459.0	70.0	8.00 E-12
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	1.48 E-08
C080	S19-10	-830.0	677.0	703.0	120.0	3.48 E-11
C079	S19-9	-830.0	633.0	677.0	110.0	1.22 E-10
C078	S19-8	-830.0	608.0	633.0	100.0	1.13 E-10
C077	S19-7	-830.0	587.0	608.0	90.0	4.17 E-11
C076	S19-6	-830.0	555.0	587.0	80.0	9.54 E-12
C075	S19-5	-830.0	523.0	555.0	70.0	8.07 E-13

	
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C074	S19-4	-830.0	486.0	523.0	60.0	2.88 E-14
C073	S19-3	-830.0	448.0	486.0	50.0	*
C072	S19-2	-830.0	381.0	448.0	40.0	*
C081	S19-14	-830.0	-323.0	-304.0	40.0	*
C082	S19-15	-830.0	-367.0	-323.0	50.0	1.13 E-14
C083	S19-16	-830.0	-402.0	-367.0	60.0	8.78 E-13
C084	S19-17	-830.0	-448.0	-402.0	70.0	3.29 E-11
C085	S19-18	-830.0	-495.0	-448.0	80.0	3.18 E-10
C086	S19-19	-830.0	-557.0	-495.0	90.0	1.06 E-09
C093	S20-8	-930.0	626.0	701.0	100.0	1.16 E-10
C092	S20-7	-930.0	588.0	626.0	90.0	5.90 E-11
C091	S20-6	-930.0	542.0	588.0	80.0	1.54 E-11
C090	S20-5	-930.0	510.0	542.0	70.0	8.90 E-13
C089	S20-4	-930.0	479.0	510.0	60.0	1.84 E-14
C088	S20-3	-930.0	432.0	479.0	50.0	*
C087	S20-2	-930.0	362.0	432.0	40.0	*
C094	S20-12	-930.0	-393.0	-365.0	40.0	*
C095	S20-13	-930.0	-433.0	-393.0	50.0	*
C096	S20-14	-930.0	-446.0	-433.0	60.0	6.19 E-14
C097	S20-15	-930.0	-478.0	-446.0	70.0	5.58 E-12
C098	S20-16	-930.0	-507.0	-478.0	80.0	1.04 E-10
C099	S20-17	-930.0	-516.0	-507.0	90.0	7.45 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	4.28 E-09
C101	S20-19	-930.0	-604.0	-538.0	110.0	7.32 E-09
C107	S21-7	-980.0	601.0	682.0	90.0	4.43 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	1.76 E-11
C105	S21-5	-980.0	499.0	536.0	70.0	9.89 E-13
C104	S21-4	-980.0	451.0	499.0	60.0	2.76 E-14
C103	S21-3	-980.0	393.0	451.0	50.0	*
C102	S21-2	-980.0	316.0	393.0	40.0	*
C109	S21-11	-980.0	-464.0	-428.0	50.0	*
C110	S21-12	-980.0	-468.0	-464.0	60.0	1.70 E-14
C111	S21-13	-980.0	-499.0	-468.0	70.0	2.31 E-12
C112	S21-14	-980.0	-528.0	-499.0	80.0	5.03 E-11
C113	S21-15	-980.0	-538.0	-528.0	90.0	4.07 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	2.48 E-09
C115	S21-17	-980.0	-574.0	-554.0	110.0	5.44 E-09
C116	S21-18	-980.0	-621.0	-574.0	120.0	5.46 E-09
C121	S22-6	-1030.0	513.0	672.0	80.0	3.15 E-11
C120	S22-5	-1030.0	470.0	513.0	70.0	1.66 E-12
C119	S22-4	-1030.0	422.0	470.0	60.0	3.67 E-14
C118	S22-3	-1030.0	353.0	422.0	50.0	*
C117	S22-2	-1030.0	289.0	353.0	40.0	*
C122	S22-10	-1030.0	-457.0	-426.0	40.0	*
C123	S22-11	-1030.0	-479.0	-457.0	50.0	*
C124	S22-12	-1030.0	-489.0	-479.0	60.0	7.70 E-15
C125	S22-13	-1030.0	-520.0	-489.0	70.0	9.76 E-13
C126	S22-14	-1030.0	-548.0	-520.0	80.0	2.40 E-11
C127	S22-15	-1030.0	-561.0	-548.0	90.0	2.29 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	1.39 E-09
C129	S22-17	-1030.0	-596.0	-571.0	110.0	4.17 E-09
C130	S22-18	-1030.0	-655.0	-596.0	120.0	3.87 E-09
C135	S23-6	-1130.0	412.0	557.0	80.0	2.63 E-10
C134	S23-5	-1130.0	355.0	412.0	70.0	1.24 E-11
C133	S23-4	-1130.0	297.0	355.0	60.0	2.36 E-13
C132	S23-3	-1130.0	219.0	297.0	50.0	2.74 E-15

	CRM Report	
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C131	S23-2	-1130.0	137.0	219.0	40.0	*
C136	S23-10	-1130.0	-438.0	-408.0	40.0	*
C137	S23-11	-1130.0	-483.0	-438.0	50.0	*
C138	S23-12	-1130.0	-533.0	-483.0	60.0	3.10 E-15
C139	S23-13	-1130.0	-562.0	-533.0	70.0	1.62 E-13
C140	S23-14	-1130.0	-589.0	-562.0	80.0	5.40 E-12
C141	S23-15	-1130.0	-628.0	-589.0	90.0	7.25 E-11
C142	S23-16	-1130.0	-658.0	-628.0	100.0	2.49 E-10
C143	S23-17	-1130.0	-709.0	-658.0	110.0	4.76 E-10
C148	S24-6	-1179.0	357.0	485.0	80.0	6.72 E-10
C147	S24-5	-1179.0	296.0	357.0	70.0	2.98 E-11
C146	S24-4	-1179.0	236.0	296.0	60.0	5.15 E-13
C145	S24-3	-1179.0	183.0	236.0	50.0	2.81 E-15
C144	S24-2	-1179.0	131.0	183.0	40.0	*
C149	S24-11	-1179.0	-399.0	-341.0	40.0	*
C150	S24-12	-1179.0	-437.0	-399.0	50.0	*
C151	S24-13	-1179.0	-491.0	-437.0	60.0	5.61 E-15
C152	S24-14	-1179.0	-555.0	-491.0	70.0	3.53 E-13
C153	S24-15	-1179.0	-605.0	-555.0	80.0	5.69 E-12
C154	S24-16	-1179.0	-649.0	-605.0	90.0	4.49 E-11
C155	S24-17	-1179.0	-692.0	-649.0	100.0	1.53 E-10
C159	S25-5	-1230.0	373.0	436.0	70.0	3.32 E-12
C158	S25-4	-1230.0	272.0	373.0	60.0	1.25 E-13
C157	S25-3	-1230.0	216.0	272.0	50.0	*
C156	S25-2	-1230.0	124.0	216.0	40.0	*
C160	S25-10	-1230.0	-448.0	-390.0	40.0	*
C161	S25-11	-1230.0	-532.0	-448.0	50.0	*
C162	S25-12	-1230.0	-620.0	-532.0	60.0	*
C163	S25-13	-1230.0	-675.0	-620.0	70.0	8.34 E-15
C164	S25-14	-1230.0	-718.0	-675.0	80.0	1.55 E-13
C165	S25-15	-1230.0	-759.0	-718.0	90.0	1.48 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	5.99 E-12



SUMMARY OF RESULTS

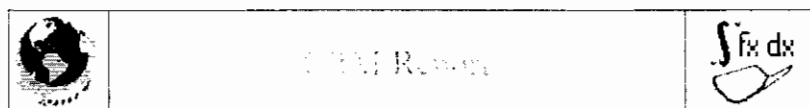
A RESULTS : CATEGORY I

It is important that information on this summary report be checked against the complete report before any official use is made of it.

Cat.	OCH type	OCH ft	Risk	Obstacle with highest individual risk		
				Ref.	Description	Risk
A	Specified Minimum	198	9.85 E-05	C012 C004	S7-1	3.18 E-05
		258	9.57 E-08		S4-1	3.28 E-08
B	Specified Minimum	198	2.12 E-04	C012 C004	S7-1	7.62 E-05
		269	9.43 E-08		S4-1	2.27 E-08

B FILES INFORMATION

Site file : NIL
Obstacle file : VTSP_THR 27.cou

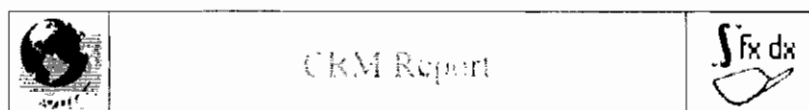


CRM

PHUKET AIRPORT
VTSP / 27

The collision risk model is a computer program that calculates a numerical risk for the precision segment of an ILS approach. This risk is then compared to the target level of safety ($1.0E-07$) to determine the acceptability of the procedure. (see PANS-OPS, Volume II, paragraph 2.1.4.9).

ICAO and ENAC takes no responsibility for the correctness of the data entered into this model or for the applicability of this model to any specific case. It is the responsibility of the user to verify all data used by this model for this specific ILS approach.



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	ICAO Report	
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DATA

A ADMINISTRATIVE DATA

Date : 08/14/10 at 19:54:06
 User : < Name >
 Office : < Office >
 Remark : Nil

B GROUND DATA

07	ILS glide path angle	3.20	°
08	ILS reference datum height	16.76	M
09	Distance between ILS localizer antenna and runway threshold	2759.59	M
10	Localizer course width at threshold	210.00	M
11	Threshold elevation	24.94	M
12	Distance from final approach point to threshold	10186.00	M
13	Standard termination of precision segment		Y
	IF No (N) then :		
	- Termination point before threshold		
	- Specify distance from termination point to threshold		

C AIRCRAFT DATA

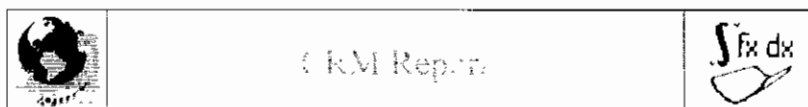
14	Standard dimensions		Y
	IF No (N) then :		
	- Distance between the flightpaths of the wheels and the GP antenna		
	- Wing semispan		
15	Standard missed approach climb gradient		Y
	IF No (N), specify climb gradient		

D REQUESTED CASES

16	ILS approach category		I
	1. Category I		
	2. Category I (radio altimeter only)		
	3. Category II		
	4. Category II (autopilot only)		
17	Select choice of OCA or OCH		OCH
18	Specify unit of measurement for OCA/H		ft
19	Speed category	Risk for specified OCH requested If Yes (Y) then OCH	Minimum acceptable OCH requested
	A	N	N
	B	N	N
	C	Y 198.0	Y
	D	Y 198.0	Y

E REPORT FORMAT

21	Total number of obstacles to be processed	168
22	Individual obstacle risk requested for	3
	1. Obstacles with individual risk higher than 1.0E-10	



2. Obstacles with highest individual risk
3. All obstacles

F OBSTACLE COORDINATE SYSTEM SPECIFICATIONS

23 Runway coordinate system user

If Yes (Y) then specify

1. Unit of horizontal measurement
2. Unit of vertical measurement
3. Height of threshold in this system

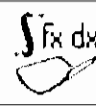
Y
M
M
0 M

G OBSTACLE DATA FILE IN USER RUNWAY COORDINATE SYSTEM

Applied Vegetation on Spot Height : 15.0 M

27 Obstacle data file in user runway coordinate system

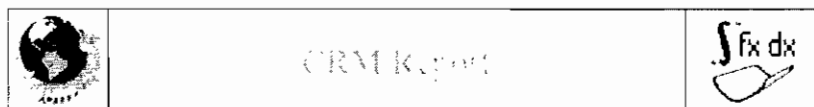
Identification	Description	X	Y1	Y2	Z	Veg.
C001	S1-1	580.0	432.0	574.0	30.0	0.0
C002	S2-2	480.0	522.0	594.0	40.0	0.0
C003	S3-1	380.0	108.0	695.0	40.0	0.0
C004	S4-1	280.0	68.0	526.0	40.0	0.0
C005	S4-2	280.0	526.0	641.0	50.0	0.0
C006	S4-3	280.0	641.0	739.0	60.0	0.0
C007	S5-1	180.0	54.0	461.0	30.0	0.0
C008	S5-2	180.0	461.0	608.0	40.0	0.0
C009	S6-1	80.0	63.0	168.0	40.0	0.0
C010	S6-2	80.0	168.0	541.0	50.0	0.0
C011	S6-3	80.0	541.0	557.0	60.0	0.0
C012	S7-1	0.0	57.0	127.0	40.0	0.0
C013	S7-2	0.0	127.0	344.0	50.0	0.0
C014	S7-3	0.0	344.0	544.0	60.0	0.0
C015	S7-4	0.0	544.0	604.0	70.0	0.0
C016	S8-2	-30.0	118.0	187.0	40.0	0.0
C017	S8-3	-30.0	187.0	492.0	50.0	0.0
C018	S8-4	-30.0	492.0	572.0	60.0	0.0
C019	S8-5	-30.0	572.0	589.0	70.0	0.0
C020	S9-2	-130.0	100.0	148.0	40.0	0.0
C021	S9-3	-130.0	148.0	217.0	50.0	0.0
C022	S9-4	-130.0	217.0	313.0	60.0	0.0
C023	S10-2	-180.0	91.0	137.0	40.0	0.0
C024	S10-3	-180.0	137.0	196.0	50.0	0.0
C025	S10-4	-180.0	196.0	328.0	60.0	0.0
C026	S11-2	-230.0	95.0	136.0	40.0	0.0
C027	S11-3	-230.0	136.0	192.0	50.0	0.0
C028	S11-4	-230.0	192.0	290.0	60.0	0.0
C029	S12-2	-266.0	98.0	136.0	40.0	0.0
C030	S12-3	-266.0	136.0	201.0	50.0	0.0
C031	S12-4	-266.0	201.0	258.0	60.0	0.0
C032	S13-2	-330.0	111.0	343.0	40.0	0.0
C033	S13-3	-330.0	343.0	515.0	30.0	0.0
C034	S13-4	-330.0	515.0	598.0	40.0	0.0
C035	S13-5	-330.0	598.0	667.0	50.0	0.0
C036	S14-4	-430.0	436.0	499.0	40.0	0.0
C037	S14-5	-430.0	499.0	822.0	50.0	0.0
C038	S15-2	-530.0	390.0	458.0	40.0	0.0

		Unit: Baht/Ream				
C039	S15-3	-530.0	458.0	540.0	50.0	0.0
C040	S15-4	-530.0	540.0	680.0	60.0	0.0
C041	S15-5	-530.0	680.0	749.0	70.0	0.0
C042	S16-2	-630.0	381.0	443.0	40.0	0.0
C043	S16-3	-630.0	443.0	503.0	50.0	0.0
C044	S16-4	-630.0	503.0	549.0	60.0	0.0
C045	S16-5	-630.0	549.0	580.0	70.0	0.0
C046	S16-6	-630.0	580.0	616.0	80.0	0.0
C047	S16-7	-630.0	616.0	687.0	90.0	0.0
C048	S17-2	-730.0	371.0	428.0	40.0	0.0
C049	S17-3	-730.0	428.0	478.0	50.0	0.0
C050	S17-4	-730.0	478.0	536.0	60.0	0.0
C051	S17-5	-730.0	536.0	567.0	70.0	0.0
C052	S17-6	-730.0	567.0	586.0	80.0	0.0
C053	S17-7	-730.0	586.0	608.0	90.0	0.0
C054	S17-8	-730.0	608.0	631.0	100.0	0.0
C055	S17-9	-730.0	631.0	680.0	110.0	0.0
C056	S17-10	-730.0	680.0	690.0	120.0	0.0
C057	S17-14	-730.0	-368.0	-321.0	40.0	0.0
C058	S17-15	-730.0	-621.0	-368.0	50.0	0.0
C059	S18-2	-770.0	371.0	428.0	40.0	0.0
C060	S18-3	-770.0	428.0	481.0	50.0	0.0
C061	S18-4	-770.0	481.0	531.0	60.0	0.0
C062	S18-5	-770.0	531.0	562.0	70.0	0.0
C063	S18-6	-770.0	562.0	586.0	80.0	0.0
C064	S18-7	-770.0	586.0	601.0	90.0	0.0
C065	S18-8	-770.0	601.0	622.0	100.0	0.0
C066	S18-9	-770.0	622.0	674.0	110.0	0.0
C067	S18-10	-770.0	674.0	689.0	120.0	0.0
C068	S18-14	-770.0	-313.0	-286.0	40.0	0.0
C069	S18-15	-770.0	-374.0	-313.0	50.0	0.0
C070	S18-16	-770.0	-459.0	-374.0	60.0	0.0
C071	S18-17	-770.0	-588.0	-459.0	70.0	0.0
C072	S19-2	-830.0	381.0	448.0	40.0	0.0
C073	S19-3	-830.0	448.0	486.0	50.0	0.0
C074	S19-4	-830.0	486.0	523.0	60.0	0.0
C075	S19-5	-830.0	523.0	555.0	70.0	0.0
C076	S19-6	-830.0	555.0	587.0	80.0	0.0
C077	S19-7	-830.0	587.0	608.0	90.0	0.0
C078	S19-8	-830.0	608.0	633.0	100.0	0.0
C079	S19-9	-830.0	633.0	677.0	110.0	0.0
C080	S19-10	-830.0	677.0	703.0	120.0	0.0
C081	S19-14	-830.0	-323.0	-304.0	40.0	0.0
C082	S19-15	-830.0	-367.0	-323.0	50.0	0.0
C083	S19-16	-830.0	-402.0	-367.0	60.0	0.0
C084	S19-17	-830.0	-448.0	-402.0	70.0	0.0
C085	S19-18	-830.0	-495.0	-448.0	80.0	0.0
C086	S19-19	-830.0	-557.0	-495.0	90.0	0.0
C087	S20-2	-930.0	362.0	432.0	40.0	0.0
C088	S20-3	-930.0	432.0	479.0	50.0	0.0
C089	S20-4	-930.0	479.0	510.0	60.0	0.0
C090	S20-5	-930.0	510.0	542.0	70.0	0.0
C091	S20-6	-930.0	542.0	588.0	80.0	0.0
C092	S20-7	-930.0	588.0	626.0	90.0	0.0
C093	S20-8	-930.0	626.0	701.0	100.0	0.0
C094	S20-12	-930.0	-393.0	-365.0	40.0	0.0

		  				
C095	S20-13	-930.0	-433.0	-393.0	50.0	0.0
C096	S20-14	-930.0	-446.0	-433.0	60.0	0.0
C097	S20-15	-930.0	-478.0	-446.0	70.0	0.0
C098	S20-16	-930.0	-507.0	-478.0	80.0	0.0
C099	S20-17	-930.0	-516.0	-507.0	90.0	0.0
C100	S20-18	-930.0	-538.0	-516.0	100.0	0.0
C101	S20-19	-930.0	-604.0	-538.0	110.0	0.0
C102	S21-2	-980.0	316.0	393.0	40.0	0.0
C103	S21-3	-980.0	393.0	451.0	50.0	0.0
C104	S21-4	-980.0	451.0	499.0	60.0	0.0
C105	S21-5	-980.0	499.0	536.0	70.0	0.0
C106	S21-6	-980.0	536.0	601.0	80.0	0.0
C107	S21-7	-980.0	601.0	682.0	90.0	0.0
C108	S21-10	-980.0	-428.0	-402.0	40.0	0.0
C109	S21-11	-980.0	-464.0	-428.0	50.0	0.0
C110	S21-12	-980.0	-468.0	-464.0	60.0	0.0
C111	S21-13	-980.0	-499.0	-468.0	70.0	0.0
C112	S21-14	-980.0	-528.0	-499.0	80.0	0.0
C113	S21-15	-980.0	-538.0	-528.0	90.0	0.0
C114	S21-16	-980.0	-554.0	-538.0	100.0	0.0
C115	S21-17	-980.0	-574.0	-554.0	110.0	0.0
C116	S21-18	-980.0	-621.0	-574.0	120.0	0.0
C117	S22-2	-1030.0	289.0	353.0	40.0	0.0
C118	S22-3	-1030.0	353.0	422.0	50.0	0.0
C119	S22-4	-1030.0	422.0	470.0	60.0	0.0
C120	S22-5	-1030.0	470.0	515.0	70.0	0.0
C121	S22-6	-1030.0	515.0	672.0	80.0	0.0
C122	S22-10	-1030.0	-457.0	-426.0	40.0	0.0
C123	S22-11	-1030.0	-479.0	-457.0	50.0	0.0
C124	S22-12	-1030.0	-489.0	-479.0	60.0	0.0
C125	S22-13	-1030.0	-520.0	-489.0	70.0	0.0
C126	S22-14	-1030.0	-548.0	-520.0	80.0	0.0
C127	S22-15	-1030.0	-561.0	-548.0	90.0	0.0
C128	S22-16	-1030.0	-571.0	-561.0	100.0	0.0
C129	S22-17	-1030.0	-596.0	-571.0	110.0	0.0
C130	S22-18	-1030.0	-655.0	-596.0	120.0	0.0
C131	S23-2	-1130.0	137.0	219.0	40.0	0.0
C132	S23-3	-1130.0	219.0	297.0	50.0	0.0
C133	S23-4	-1130.0	297.0	355.0	60.0	0.0
C134	S23-5	-1130.0	355.0	412.0	70.0	0.0
C135	S23-6	-1130.0	412.0	557.0	80.0	0.0
C136	S23-10	-1130.0	-438.0	-408.0	40.0	0.0
C137	S23-11	-1130.0	-483.0	-438.0	50.0	0.0
C138	S23-12	-1130.0	-533.0	-483.0	60.0	0.0
C139	S23-13	-1130.0	-562.0	-533.0	70.0	0.0
C140	S23-14	-1130.0	-589.0	-562.0	80.0	0.0
C141	S23-15	-1130.0	-628.0	-589.0	90.0	0.0
C142	S23-16	-1130.0	-658.0	-628.0	100.0	0.0
C143	S23-17	-1130.0	-709.0	-658.0	110.0	0.0
C144	S24-2	-1179.0	131.0	183.0	40.0	0.0
C145	S24-3	-1179.0	183.0	236.0	50.0	0.0
C146	S24-4	-1179.0	236.0	296.0	60.0	0.0
C147	S24-5	-1179.0	296.0	357.0	70.0	0.0
C148	S24-6	-1179.0	357.0	485.0	80.0	0.0
C149	S24-11	-1179.0	-399.0	-341.0	40.0	0.0
C150	S24-12	-1179.0	-437.0	-399.0	50.0	0.0

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C151	S24-13	-1179.0	-491.0	-437.0	60.0	0.0
C152	S24-14	-1179.0	-555.0	-491.0	70.0	0.0
C153	S24-15	-1179.0	-605.0	-555.0	80.0	0.0
C154	S24-16	-1179.0	-649.0	-605.0	90.0	0.0
C155	S24-17	-1179.0	-692.0	-649.0	100.0	0.0
C156	S25-2	-1230.0	124.0	216.0	40.0	0.0
C157	S25-3	-1230.0	216.0	272.0	50.0	0.0
C158	S25-4	-1230.0	272.0	373.0	60.0	0.0
C159	S25-5	-1230.0	373.0	436.0	70.0	0.0
C160	S25-10	-1230.0	-448.0	-390.0	40.0	0.0
C161	S25-11	-1230.0	-532.0	-448.0	50.0	0.0
C162	S25-12	-1230.0	-620.0	-532.0	60.0	0.0
C163	S25-13	-1230.0	-675.0	-620.0	70.0	0.0
C164	S25-14	-1230.0	-718.0	-675.0	80.0	0.0
C165	S25-15	-1230.0	-759.0	-718.0	90.0	0.0
C166	S25-16	-1230.0	-840.0	-759.0	100.0	0.0
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	0.0
C168	GS	-281.0	-193.0	-193.0	12.0	0.0



SUMMARY

A SUMMARY OF OBSTACLE INFORMATION

Total number of obstacles entered : 168

All obstacles are in the precision segment

B SUMMARY OF ILS APPROACH PARAMETER INFORMATION

B - 1 Ground data

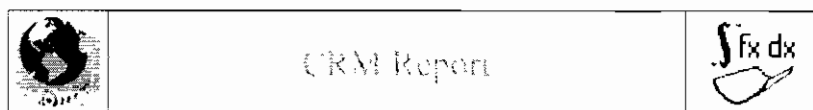
ILS glide path angle	3.20 °
ILS reference datum height	16.76 M
Distance between ILS localizer antenna and runway threshold	2759.59 M
Localizer course width at threshold	210.00 M
Localizer course sector angle	4.35 °
Threshold elevation	24.94 M
Distance from final approach point to threshold	10186.00 M
Termination of precision segment	-12900.00 M

B - 2 Aircraft data

Distance between the flightpaths of the wheels and the GP antenna	7.00 M
non standard (# 6.00 M)	
Wing semispan	32.50 M
non standard (# 30.00 M)	
Standard missed approach climb gradient	2.50 %

C SUMMARY OF WARNING

No warning for the entered parameters.



SPEED CATEGORY C

A SPECIFIED OCH : 198 FT

Total risk for this approach : 5.27 E-04
 Risk of hitting the ground plane : 1.96 E-11

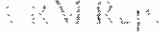
Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C012	S7-1	0.0	57.0	127.0	40.0	2.04 E-04
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	1.71 E-06
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	1.13 E-04
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	3.50 E-05
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	2.62 E-07
C009	S6-1	80.0	63.0	168.0	40.0	1.65 E-04
C015	S7-4	0.0	544.0	604.0	70.0	*
C014	S7-3	0.0	344.0	544.0	60.0	3.86 E-13
C013	S7-2	0.0	127.0	344.0	50.0	7.31 E-06
C012	S7-1	0.0	57.0	127.0	40.0	2.04 E-04
C019	S8-5	-30.0	572.0	589.0	70.0	*
C018	S8-4	-30.0	492.0	572.0	60.0	*
C017	S8-3	-30.0	187.0	492.0	50.0	1.63 E-07
C016	S8-2	-30.0	118.0	187.0	40.0	3.99 E-06
C022	S9-4	-130.0	217.0	313.0	60.0	1.07 E-07
C021	S9-3	-130.0	148.0	217.0	50.0	3.20 E-06
C020	S9-2	-130.0	100.0	148.0	40.0	1.21 E-05
C025	S10-4	-180.0	196.0	328.0	60.0	6.28 E-07
C024	S10-3	-180.0	137.0	196.0	50.0	7.18 E-06
C023	S10-2	-180.0	91.0	137.0	40.0	1.91 E-05
C028	S11-4	-230.0	192.0	290.0	60.0	1.13 E-06
C027	S11-3	-230.0	136.0	192.0	50.0	8.59 E-06
C026	S11-2	-230.0	95.0	136.0	40.0	1.40 E-05
C031	S12-4	-266.0	201.0	258.0	60.0	8.95 E-07
C030	S12-3	-266.0	136.0	201.0	50.0	9.18 E-06
C029	S12-2	-266.0	98.0	136.0	40.0	1.11 E-05
C168	GS	-281.0	-193.0	-193.0	12.0	5.16 E-12
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	1.21 E-12
C032	S13-2	-330.0	111.0	343.0	40.0	5.01 E-06
C037	S14-5	-430.0	499.0	822.0	50.0	5.29 E-14
C036	S14-4	-430.0	436.0	499.0	40.0	1.81 E-13

	Report	
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C041	S15-5	-530.0	680.0	749.0	70.0	1.02 E-15
C040	S15-4	-530.0	540.0	680.0	60.0	1.32 E-13
C039	S15-3	-530.0	458.0	540.0	50.0	1.74 E-12
C038	S15-2	-530.0	390.0	458.0	40.0	8.62 E-12
C047	S16-7	-630.0	616.0	687.0	90.0	9.18 E-14
C046	S16-6	-630.0	580.0	616.0	80.0	3.36 E-13
C045	S16-5	-630.0	549.0	580.0	70.0	8.49 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	2.96 E-12
C043	S16-3	-630.0	443.0	503.0	50.0	1.32 E-11
C042	S16-2	-630.0	381.0	443.0	40.0	2.72 E-11
C056	S17-10	-730.0	680.0	690.0	120.0	3.87 E-14
C055	S17-9	-730.0	631.0	680.0	110.0	2.36 E-13
C054	S17-8	-730.0	608.0	631.0	100.0	5.48 E-13
C053	S17-7	-730.0	586.0	608.0	90.0	1.29 E-12
C052	S17-6	-730.0	567.0	586.0	80.0	2.51 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	6.32 E-12
C050	S17-4	-730.0	478.0	536.0	60.0	3.69 E-11
C049	S17-3	-730.0	428.0	478.0	50.0	6.77 E-11
C048	S17-2	-730.0	371.0	428.0	40.0	5.94 E-11
C057	S17-14	-730.0	-368.0	-321.0	40.0	4.55 E-10
C058	S17-13	-730.0	-621.0	-368.0	50.0	1.07 E-09
C067	S18-10	-770.0	674.0	689.0	120.0	8.59 E-14
C066	S18-9	-770.0	622.0	674.0	110.0	5.88 E-13
C065	S18-8	-770.0	601.0	622.0	100.0	1.29 E-12
C064	S18-7	-770.0	586.0	601.0	90.0	2.31 E-12
C063	S18-6	-770.0	562.0	586.0	80.0	5.61 E-12
C062	S18-5	-770.0	531.0	562.0	70.0	1.37 E-11
C061	S18-4	-770.0	481.0	531.0	60.0	4.87 E-11
C060	S18-3	-770.0	428.0	481.0	50.0	8.72 E-11
C059	S18-2	-770.0	371.0	428.0	40.0	6.22 E-11
C068	S18-14	-770.0	-313.0	-286.0	40.0	1.51 E-09
C069	S18-15	-770.0	-374.0	-313.0	50.0	1.01 E-08
C070	S18-16	-770.0	-459.0	-374.0	60.0	6.80 E-09
C071	S18-17	-770.0	-588.0	-459.0	70.0	4.65 E-10
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	2.21 E-09
C080	S19-10	-830.0	677.0	703.0	120.0	1.82 E-13
C079	S19-9	-830.0	633.0	677.0	110.0	8.98 E-13
C078	S19-8	-830.0	608.0	633.0	100.0	2.32 E-12
C077	S19-7	-830.0	587.0	608.0	90.0	5.31 E-12
C076	S19-6	-830.0	555.0	587.0	80.0	1.80 E-11
C075	S19-5	-830.0	523.0	555.0	70.0	4.25 E-11
C074	S19-4	-830.0	486.0	523.0	60.0	6.78 E-11
C073	S19-3	-830.0	448.0	486.0	50.0	4.84 E-11
C072	S19-2	-830.0	381.0	448.0	40.0	4.23 E-11
C081	S19-14	-830.0	-323.0	-304.0	40.0	6.75 E-10
C082	S19-15	-830.0	-367.0	-323.0	50.0	7.12 E-09
C083	S19-16	-830.0	-402.0	-367.0	60.0	1.16 E-08
C084	S19-17	-830.0	-448.0	-402.0	70.0	1.05 E-08
C085	S19-18	-830.0	-495.0	-448.0	80.0	2.68 E-09
C086	S19-19	-830.0	-557.0	-495.0	90.0	3.70 E-10
C093	S20-8	-930.0	626.0	701.0	100.0	4.69 E-12
C092	S20-7	-930.0	588.0	626.0	90.0	2.08 E-11
C091	S20-6	-930.0	542.0	588.0	80.0	1.19 E-10
C090	S20-5	-930.0	510.0	542.0	70.0	2.27 E-10
C089	S20-4	-930.0	479.0	510.0	60.0	2.00 E-10
C088	S20-3	-930.0	432.0	479.0	50.0	1.39 E-10

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C087	S20-2	-930.0	362.0	432.0	40.0	7.37 E-11
C094	S20-12	-930.0	-393.0	-365.0	40.0	6.49 E-11
C095	S20-13	-930.0	-433.0	-393.0	50.0	6.06 E-10
C096	S20-14	-930.0	-446.0	-433.0	60.0	1.31 E-09
C097	S20-15	-930.0	-478.0	-446.0	70.0	3.49 E-09
C098	S20-16	-930.0	-507.0	-478.0	80.0	1.99 E-09
C099	S20-17	-930.0	-516.0	-507.0	90.0	7.27 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	5.25 E-10
C101	S20-19	-930.0	-604.0	-538.0	110.0	2.02 E-10
C107	S21-7	-980.0	601.0	682.0	90.0	2.37 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	2.76 E-10
C105	S21-5	-980.0	499.0	536.0	70.0	5.70 E-10
C104	S21-4	-980.0	451.0	499.0	60.0	8.28 E-10
C103	S21-3	-980.0	393.0	451.0	50.0	6.19 E-10
C102	S21-2	-980.0	316.0	393.0	40.0	2.73 E-10
C109	S21-11	-980.0	-464.0	-428.0	50.0	1.75 E-10
C110	S21-12	-980.0	-468.0	-464.0	60.0	4.72 E-10
C111	S21-13	-980.0	-499.0	-468.0	70.0	2.03 E-09
C112	S21-14	-980.0	-528.0	-499.0	80.0	1.33 E-09
C113	S21-15	-980.0	-538.0	-528.0	90.0	5.23 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	3.69 E-10
C115	S21-17	-980.0	-574.0	-554.0	110.0	1.86 E-10
C116	S21-18	-980.0	-621.0	-574.0	120.0	7.99 E-11
C121	S22-6	-1030.0	513.0	672.0	80.0	1.22 E-09
C120	S22-5	-1030.0	470.0	513.0	70.0	2.61 E-09
C119	S22-4	-1030.0	422.0	470.0	60.0	2.83 E-09
C118	S22-3	-1030.0	353.0	422.0	50.0	2.17 E-09
C117	S22-2	-1030.0	289.0	353.0	40.0	4.76 E-10
C122	S22-10	-1030.0	-457.0	-426.0	40.0	6.17 E-12
C123	S22-11	-1030.0	-479.0	-457.0	50.0	6.20 E-11
C124	S22-12	-1030.0	-489.0	-479.0	60.0	3.31 E-10
C125	S22-13	-1030.0	-520.0	-489.0	70.0	1.23 E-09
C126	S22-14	-1030.0	-548.0	-520.0	80.0	8.93 E-10
C127	S22-15	-1030.0	-561.0	-548.0	90.0	3.98 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	2.51 E-10
C129	S22-17	-1030.0	-596.0	-571.0	110.0	1.70 E-10
C130	S22-18	-1030.0	-655.0	-596.0	120.0	6.06 E-11
C135	S23-6	-1130.0	412.0	557.0	80.0	9.03 E-08
C134	S23-5	-1130.0	355.0	412.0	70.0	1.62 E-07
C133	S23-4	-1130.0	297.0	355.0	60.0	1.27 E-07
C132	S23-3	-1130.0	219.0	297.0	50.0	7.25 E-08
C131	S23-2	-1130.0	137.0	219.0	40.0	1.85 E-08
C136	S23-10	-1130.0	-438.0	-408.0	40.0	7.98 E-12
C137	S23-11	-1130.0	-483.0	-438.0	50.0	1.23 E-10
C138	S23-12	-1130.0	-533.0	-483.0	60.0	4.18 E-10
C139	S23-13	-1130.0	-562.0	-533.0	70.0	4.24 E-10
C140	S23-14	-1130.0	-589.0	-562.0	80.0	4.11 E-10
C141	S23-15	-1130.0	-628.0	-589.0	90.0	2.32 E-10
C142	S23-16	-1130.0	-658.0	-628.0	100.0	5.58 E-11
C143	S23-17	-1130.0	-709.0	-658.0	110.0	1.81 E-11
C148	S24-6	-1179.0	357.0	485.0	80.0	5.38 E-07
C147	S24-5	-1179.0	296.0	357.0	70.0	8.55 E-07
C146	S24-4	-1179.0	236.0	296.0	60.0	6.01 E-07
C145	S24-3	-1179.0	183.0	236.0	50.0	1.46 E-07
C144	S24-2	-1179.0	131.0	183.0	40.0	1.36 E-08
C149	S24-11	-1179.0	-399.0	-341.0	40.0	4.38 E-11

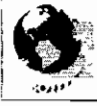
		
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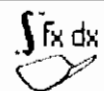
C150	S24-12	-1179.0	-437.0	-399.0	50.0	3.68 E-10
C151	S24-13	-1179.0	-491.0	-437.0	60.0	2.08 E-09
C152	S24-14	-1179.0	-555.0	-491.0	70.0	2.59 E-09
C153	S24-15	-1179.0	-605.0	-555.0	80.0	8.31 E-10
C154	S24-16	-1179.0	-649.0	-605.0	90.0	2.09 E-10
C155	S24-17	-1179.0	-692.0	-649.0	100.0	4.48 E-11
C159	S25-5	-1230.0	373.0	436.0	70.0	1.06 E-07
C158	S25-4	-1230.0	272.0	373.0	60.0	1.98 E-07
C157	S25-3	-1230.0	216.0	272.0	50.0	4.34 E-08
C156	S25-2	-1230.0	124.0	216.0	40.0	1.03 E-08
C160	S25-10	-1230.0	-448.0	-390.0	40.0	8.21 E-12
C161	S25-11	-1230.0	-532.0	-448.0	50.0	7.66 E-11
C162	S25-12	-1230.0	-620.0	-532.0	60.0	9.50 E-11
C163	S25-13	-1230.0	-675.0	-620.0	70.0	2.95 E-11
C164	S25-14	-1230.0	-718.0	-675.0	80.0	1.33 E-11
C165	S25-15	-1230.0	-759.0	-718.0	90.0	5.35 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	1.74 E-12

B MINIMUM OCH : 284 FT

Total risk for this approach : **9.64 E-08**
 Risk of hitting the ground plane : **< 1.0 E-15**

Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	2.32 E-08
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	9.69 E-10
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	9.99 E-09
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	4.75 E-11
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	2.84 E-09
C009	S6-1	80.0	63.0	168.0	40.0	2.70 E-09
C015	S7-4	0.0	544.0	604.0	70.0	1.56 E-14
C014	S7-3	0.0	344.0	544.0	60.0	3.83 E-11
C013	S7-2	0.0	127.0	344.0	50.0	9.26 E-09
C012	S7-1	0.0	57.0	127.0	40.0	1.28 E-09
C019	S8-5	-30.0	572.0	589.0	70.0	6.32 E-15
C018	S8-4	-30.0	492.0	572.0	60.0	1.56 E-14
C017	S8-3	-30.0	187.0	492.0	50.0	7.02 E-10
C016	S8-2	-30.0	118.0	187.0	40.0	9.85 E-11
C022	S9-4	-130.0	217.0	313.0	60.0	6.24 E-09
C021	S9-3	-130.0	148.0	217.0	50.0	1.48 E-09
C020	S9-2	-130.0	100.0	148.0	40.0	6.26 E-11
C025	S10-4	-180.0	196.0	328.0	60.0	1.05 E-08

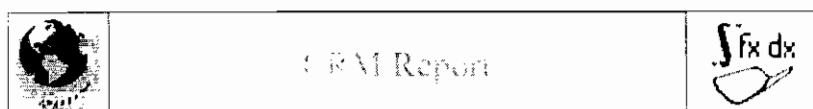
		GRAM Rep. A.				
C024	S10-3	-180.0	137.0	196.0	50.0	1.43 E-09
C023	S10-2	-180.0	91.0	137.0	40.0	4.61 E-11
C028	S11-4	-230.0	192.0	290.0	60.0	9.10 E-09
C027	S11-3	-230.0	136.0	192.0	50.0	9.30 E-10
C026	S11-2	-230.0	95.0	136.0	40.0	2.14 E-11
C031	S12-4	-266.0	201.0	258.0	60.0	5.36 E-09
C030	S12-3	-266.0	136.0	201.0	50.0	6.62 E-10
C029	S12-2	-266.0	98.0	136.0	40.0	1.22 E-11
C168	GS	-281.0	-193.0	-193.0	12.0	*
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	*
C032	S13-2	-330.0	111.0	343.0	40.0	3.62 E-12
C037	S14-5	-430.0	499.0	822.0	50.0	*
C036	S14-4	-430.0	436.0	499.0	40.0	*
C041	S15-5	-530.0	680.0	749.0	70.0	3.04 E-15
C040	S15-4	-530.0	540.0	680.0	60.0	1.51 E-14
C039	S15-3	-530.0	458.0	540.0	50.0	2.53 E-15
C038	S15-2	-530.0	390.0	458.0	40.0	*
C047	S16-7	-630.0	616.0	687.0	90.0	1.30 E-11
C046	S16-6	-630.0	580.0	616.0	80.0	4.90 E-12
C045	S16-5	-630.0	549.0	580.0	70.0	6.13 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	4.99 E-14
C043	S16-3	-630.0	443.0	503.0	50.0	2.16 E-15
C042	S16-2	-630.0	381.0	443.0	40.0	*
C056	S17-10	-730.0	680.0	690.0	120.0	4.46 E-11
C055	S17-9	-730.0	631.0	680.0	110.0	1.92 E-10
C054	S17-8	-730.0	608.0	631.0	100.0	1.67 E-10
C053	S17-7	-730.0	586.0	608.0	90.0	6.68 E-11
C052	S17-6	-730.0	567.0	586.0	80.0	9.97 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	9.09 E-13
C050	S17-4	-730.0	478.0	536.0	60.0	7.19 E-14
C049	S17-3	-730.0	428.0	478.0	50.0	1.43 E-15
C048	S17-2	-730.0	371.0	428.0	40.0	*
C057	S17-14	-730.0	-368.0	-321.0	40.0	*
C058	S17-15	-730.0	-621.0	-368.0	50.0	7.51 E-15
C067	S18-10	-770.0	674.0	689.0	120.0	8.56 E-11
C066	S18-9	-770.0	622.0	674.0	110.0	3.78 E-10
C065	S18-8	-770.0	601.0	622.0	100.0	2.77 E-10
C064	S18-7	-770.0	586.0	601.0	90.0	7.68 E-11
C063	S18-6	-770.0	562.0	586.0	80.0	1.24 E-11
C062	S18-5	-770.0	531.0	562.0	70.0	9.83 E-13
C061	S18-4	-770.0	481.0	531.0	60.0	5.14 E-14
C060	S18-3	-770.0	428.0	481.0	50.0	*
C059	S18-2	-770.0	371.0	428.0	40.0	*
C068	S18-14	-770.0	-313.0	-286.0	40.0	*
C069	S18-15	-770.0	-374.0	-313.0	50.0	1.93 E-14
C070	S18-16	-770.0	-459.0	-374.0	60.0	9.86 E-13
C071	S18-17	-770.0	-588.0	-459.0	70.0	9.15 E-12
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	2.32 E-08
C080	S19-10	-830.0	677.0	703.0	120.0	1.43 E-10
C079	S19-9	-830.0	633.0	677.0	110.0	4.09 E-10
C078	S19-8	-830.0	608.0	633.0	100.0	3.05 E-10
C077	S19-7	-830.0	587.0	608.0	90.0	8.99 E-11
C076	S19-6	-830.0	555.0	587.0	80.0	1.59 E-11
C075	S19-5	-830.0	523.0	555.0	70.0	1.05 E-12

	CRM Report	
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C074	S19-4	-830.0	486.0	523.0	60.0	2.94 E-14
C073	S19-3	-830.0	448.0	486.0	50.0	*
C072	S19-2	-830.0	381.0	448.0	40.0	*
C081	S19-14	-830.0	-323.0	-304.0	40.0	*
C082	S19-15	-830.0	-367.0	-323.0	50.0	7.22 E-15
C083	S19-16	-830.0	-402.0	-367.0	60.0	6.59 E-13
C084	S19-17	-830.0	-448.0	-402.0	70.0	2.96 E-11
C085	S19-18	-830.0	-495.0	-448.0	80.0	3.67 E-10
C086	S19-19	-830.0	-557.0	-495.0	90.0	1.65 E-09
C093	S20-8	-930.0	626.0	701.0	100.0	2.78 E-10
C092	S20-7	-930.0	588.0	626.0	90.0	1.07 E-10
C091	S20-6	-930.0	542.0	588.0	80.0	2.07 E-11
C090	S20-5	-930.0	510.0	542.0	70.0	9.55 E-13
C089	S20-4	-930.0	479.0	510.0	60.0	1.62 E-14
C088	S20-3	-930.0	432.0	479.0	50.0	*
C087	S20-2	-930.0	362.0	432.0	40.0	*
C094	S20-12	-930.0	-393.0	-365.0	40.0	*
C095	S20-13	-930.0	-433.0	-393.0	50.0	*
C096	S20-14	-930.0	-446.0	-433.0	60.0	4.86 E-14
C097	S20-15	-930.0	-478.0	-446.0	70.0	5.01 E-12
C098	S20-16	-930.0	-507.0	-478.0	80.0	1.15 E-10
C099	S20-17	-930.0	-516.0	-507.0	90.0	1.03 E-09
C100	S20-18	-930.0	-538.0	-516.0	100.0	7.15 E-09
C101	S20-19	-930.0	-604.0	-538.0	110.0	1.53 E-08
C107	S21-7	-980.0	601.0	682.0	90.0	7.70 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	2.17 E-11
C105	S21-5	-980.0	499.0	536.0	70.0	9.62 E-13
C104	S21-4	-980.0	451.0	499.0	60.0	2.15 E-14
C103	S21-3	-980.0	393.0	451.0	50.0	*
C102	S21-2	-980.0	316.0	393.0	40.0	*
C109	S21-11	-980.0	-464.0	-428.0	50.0	*
C110	S21-12	-980.0	-468.0	-464.0	60.0	1.37 E-14
C111	S21-13	-980.0	-499.0	-468.0	70.0	2.07 E-12
C112	S21-14	-980.0	-528.0	-499.0	80.0	5.53 E-11
C113	S21-15	-980.0	-538.0	-528.0	90.0	5.62 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	4.12 E-09
C115	S21-17	-980.0	-574.0	-554.0	110.0	1.10 E-08
C116	S21-18	-980.0	-621.0	-574.0	120.0	1.35 E-08
C121	S22-6	-1030.0	513.0	672.0	80.0	3.40 E-11
C120	S22-5	-1030.0	470.0	513.0	70.0	1.42 E-12
C119	S22-4	-1030.0	422.0	470.0	60.0	2.60 E-14
C118	S22-3	-1030.0	353.0	422.0	50.0	*
C117	S22-2	-1030.0	289.0	353.0	40.0	*
C122	S22-10	-1030.0	-457.0	-426.0	40.0	*
C123	S22-11	-1030.0	-479.0	-457.0	50.0	*
C124	S22-12	-1030.0	-489.0	-479.0	60.0	6.13 E-15
C125	S22-13	-1030.0	-520.0	-489.0	70.0	8.75 E-13
C126	S22-14	-1030.0	-548.0	-520.0	80.0	2.63 E-11
C127	S22-15	-1030.0	-561.0	-548.0	90.0	3.13 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	2.29 E-09
C129	S22-17	-1030.0	-596.0	-571.0	110.0	8.28 E-09
C130	S22-18	-1030.0	-655.0	-596.0	120.0	9.50 E-09
C135	S23-6	-1130.0	412.0	557.0	80.0	2.11 E-10
C134	S23-5	-1130.0	355.0	412.0	70.0	8.23 E-12
C133	S23-4	-1130.0	297.0	355.0	60.0	1.34 E-13
C132	S23-3	-1130.0	219.0	297.0	50.0	1.33 E-15

	2019 Report	
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C131	S23-2	-1130.0	137.0	219.0	40.0	*
C136	S23-10	-1130.0	-438.0	-408.0	40.0	*
C137	S23-11	-1130.0	-483.0	-438.0	50.0	*
C138	S23-12	-1130.0	-533.0	-483.0	60.0	2.27 E-15
C139	S23-13	-1130.0	-562.0	-533.0	70.0	1.45 E-13
C140	S23-14	-1130.0	-589.0	-562.0	80.0	5.86 E-12
C141	S23-15	-1130.0	-628.0	-589.0	90.0	9.67 E-11
C142	S23-16	-1130.0	-658.0	-628.0	100.0	4.32 E-10
C143	S23-17	-1130.0	-709.0	-658.0	110.0	1.05 E-09
C148	S24-6	-1179.0	357.0	485.0	80.0	4.88 E-10
C147	S24-5	-1179.0	296.0	357.0	70.0	1.80 E-11
C146	S24-4	-1179.0	236.0	296.0	60.0	2.67 E-13
C145	S24-3	-1179.0	183.0	236.0	50.0	1.28 E-15
C144	S24-2	-1179.0	131.0	183.0	40.0	*
C149	S24-11	-1179.0	-399.0	-341.0	40.0	*
C150	S24-12	-1179.0	-437.0	-399.0	50.0	*
C151	S24-13	-1179.0	-491.0	-437.0	60.0	3.67 E-15
C152	S24-14	-1179.0	-555.0	-491.0	70.0	2.77 E-13
C153	S24-15	-1179.0	-605.0	-555.0	80.0	5.74 E-12
C154	S24-16	-1179.0	-649.0	-605.0	90.0	5.85 E-11
C155	S24-17	-1179.0	-692.0	-649.0	100.0	2.60 E-10
C159	S25-5	-1230.0	373.0	436.0	70.0	2.12 E-12
C158	S25-4	-1230.0	272.0	373.0	60.0	6.61 E-14
C157	S25-3	-1230.0	216.0	272.0	50.0	*
C156	S25-2	-1230.0	124.0	216.0	40.0	*
C160	S25-10	-1230.0	-448.0	-390.0	40.0	*
C161	S25-11	-1230.0	-532.0	-448.0	50.0	*
C162	S25-12	-1230.0	-620.0	-532.0	60.0	*
C163	S25-13	-1230.0	-675.0	-620.0	70.0	8.33 E-15
C164	S25-14	-1230.0	-718.0	-675.0	80.0	1.99 E-13
C165	S25-15	-1230.0	-759.0	-718.0	90.0	2.41 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	1.22 E-11



SPEED CATEGORY D

A SPECIFIED OCH : 198 FT

Total risk for this approach : 9.97 E-04
 Risk of hitting the ground plane : 9.09 E-11

Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C012	S7-1	0.0	57.0	127.0	40.0	4.24 E-04
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	2.52 E-06
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	1.68 E-04
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	8.18 E-05
C011	S6-3	80.0	541.0	557.0	60.0	*
C010	S6-2	80.0	168.0	541.0	50.0	3.52 E-07
C009	S6-1	80.0	63.0	168.0	40.0	3.16 E-04
C015	S7-4	0.0	544.0	604.0	70.0	*
C014	S7-3	0.0	344.0	544.0	60.0	4.35 E-13
C013	S7-2	0.0	127.0	344.0	50.0	1.04 E-05
C012	S7-1	0.0	57.0	127.0	40.0	4.24 E-04
C019	S8-5	-30.0	572.0	589.0	70.0	*
C018	S8-4	-30.0	492.0	572.0	60.0	*
C017	S8-3	-30.0	187.0	492.0	50.0	2.38 E-07
C016	S8-2	-30.0	118.0	187.0	40.0	8.57 E-06
C022	S9-4	-130.0	217.0	313.0	60.0	1.27 E-07
C021	S9-3	-130.0	148.0	217.0	50.0	5.09 E-06
C020	S9-2	-130.0	100.0	148.0	40.0	2.90 E-05
C025	S10-4	-180.0	196.0	328.0	60.0	7.71 E-07
C024	S10-3	-180.0	137.0	196.0	50.0	1.20 E-05
C023	S10-2	-180.0	91.0	137.0	40.0	4.87 E-05
C028	S11-4	-230.0	192.0	290.0	60.0	1.44 E-06
C027	S11-3	-230.0	136.0	192.0	50.0	1.50 E-05
C026	S11-2	-230.0	95.0	136.0	40.0	3.79 E-05
C031	S12-4	-266.0	201.0	258.0	60.0	1.16 E-06
C030	S12-3	-266.0	136.0	201.0	50.0	1.66 E-05
C029	S12-2	-266.0	98.0	136.0	40.0	3.13 E-05
C168	GS	-281.0	-193.0	-193.0	12.0	2.61 E-11
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	2.63 E-15
C033	S13-3	-330.0	343.0	515.0	30.0	6.41 E-12
C032	S13-2	-330.0	111.0	343.0	40.0	1.54 E-05
C037	S14-5	-430.0	499.0	822.0	50.0	1.14 E-13
C036	S14-4	-430.0	436.0	499.0	40.0	6.34 E-13

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C043	S15-5	-530.0	680.0	749.0	70.0	1.22 E-15
C040	S15-4	-530.0	540.0	680.0	60.0	2.11 E-13
C039	S15-3	-530.0	458.0	540.0	50.0	4.19 E-12
C038	S15-2	-530.0	390.0	458.0	40.0	3.45 E-11
C047	S16-7	-630.0	616.0	687.0	90.0	9.25 E-14
C046	S16-6	-630.0	580.0	616.0	80.0	3.58 E-13
C045	S16-5	-630.0	549.0	580.0	70.0	1.08 E-12
C044	S16-4	-630.0	503.0	549.0	60.0	5.16 E-12
C043	S16-3	-630.0	443.0	503.0	50.0	3.58 E-11
C042	S16-2	-630.0	381.0	443.0	40.0	1.25 E-10
C056	S17-10	-730.0	680.0	690.0	120.0	3.87 E-14
C055	S17-9	-730.0	631.0	680.0	110.0	2.36 E-13
C054	S17-8	-730.0	608.0	631.0	100.0	5.48 E-13
C053	S17-7	-730.0	586.0	608.0	90.0	1.31 E-12
C052	S17-6	-730.0	567.0	586.0	80.0	2.75 E-12
C051	S17-5	-730.0	536.0	567.0	70.0	8.56 E-12
C050	S17-4	-730.0	478.0	536.0	60.0	7.12 E-11
C049	S17-3	-730.0	428.0	478.0	50.0	2.08 E-10
C048	S17-2	-730.0	371.0	428.0	40.0	3.15 E-10
C057	S17-14	-730.0	-368.0	-321.0	40.0	2.41 E-09
C058	S17-15	-730.0	-621.0	-368.0	50.0	3.28 E-09
C067	S18-10	-770.0	674.0	689.0	120.0	8.59 E-14
C066	S18-9	-770.0	622.0	674.0	110.0	5.88 E-13
C065	S18-8	-770.0	601.0	622.0	100.0	1.29 E-12
C064	S18-7	-770.0	586.0	601.0	90.0	2.35 E-12
C063	S18-6	-770.0	562.0	586.0	80.0	6.24 E-12
C062	S18-5	-770.0	531.0	562.0	70.0	1.91 E-11
C061	S18-4	-770.0	481.0	531.0	60.0	9.79 E-11
C060	S18-3	-770.0	428.0	481.0	50.0	2.82 E-10
C059	S18-2	-770.0	371.0	428.0	40.0	3.50 E-10
C068	S18-14	-770.0	-313.0	-286.0	40.0	8.47 E-09
C069	S18-15	-770.0	-374.0	-313.0	50.0	3.27 E-08
C070	S18-16	-770.0	-459.0	-374.0	60.0	1.37 E-08
C071	S18-17	-770.0	-588.0	-459.0	70.0	6.49 E-10
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	2.22 E-09
C080	S19-10	-830.0	677.0	703.0	120.0	1.82 E-13
C079	S19-9	-830.0	633.0	677.0	110.0	8.98 E-13
C078	S19-8	-830.0	608.0	633.0	100.0	2.33 E-12
C077	S19-7	-830.0	587.0	608.0	90.0	5.44 E-12
C076	S19-6	-830.0	555.0	587.0	80.0	2.05 E-11
C075	S19-5	-830.0	523.0	555.0	70.0	6.22 E-11
C074	S19-4	-830.0	486.0	523.0	60.0	1.46 E-10
C073	S19-3	-830.0	448.0	486.0	50.0	1.69 E-10
C072	S19-2	-830.0	381.0	448.0	40.0	2.60 E-10
C081	S19-14	-830.0	-323.0	-304.0	40.0	4.15 E-09
C082	S19-15	-830.0	-367.0	-323.0	50.0	2.49 E-08
C083	S19-16	-830.0	-402.0	-367.0	60.0	2.49 E-08
C084	S19-17	-830.0	-448.0	-402.0	70.0	1.54 E-08
C085	S19-18	-830.0	-495.0	-448.0	80.0	3.05 E-09
C086	S19-19	-830.0	-557.0	-495.0	90.0	3.80 E-10
C093	S20-8	-930.0	626.0	701.0	100.0	4.71 E-12
C092	S20-7	-930.0	588.0	626.0	90.0	2.17 E-11
C091	S20-6	-930.0	542.0	588.0	80.0	1.42 E-10
C090	S20-5	-930.0	510.0	542.0	70.0	3.62 E-10
C089	S20-4	-930.0	479.0	510.0	60.0	4.81 E-10
C088	S20-3	-930.0	432.0	479.0	50.0	5.55 E-10

	CRM Report	
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C087	S20-2	-930.0	362.0	432.0	40.0	5.27 E-10
C094	S20-12	-930.0	-393.0	-365.0	40.0	4.64 E-10
C095	S20-13	-930.0	-433.0	-393.0	50.0	2.42 E-09
C096	S20-14	-930.0	-446.0	-433.0	60.0	3.15 E-09
C097	S20-15	-930.0	-478.0	-446.0	70.0	5.56 E-09
C098	S20-16	-930.0	-507.0	-478.0	80.0	2.37 E-09
C099	S20-17	-930.0	-516.0	-507.0	90.0	7.57 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	5.28 E-10
C101	S20-19	-930.0	-604.0	-538.0	110.0	2.02 E-10
C107	S21-7	-980.0	601.0	682.0	90.0	2.49 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	3.40 E-10
C105	S21-5	-980.0	499.0	536.0	70.0	9.48 E-10
C104	S21-4	-980.0	451.0	499.0	60.0	2.11 E-09
C103	S21-3	-980.0	393.0	451.0	50.0	2.65 E-09
C102	S21-2	-980.0	316.0	393.0	40.0	2.11 E-09
C109	S21-11	-980.0	-464.0	-428.0	50.0	7.48 E-10
C110	S21-12	-980.0	-468.0	-464.0	60.0	1.20 E-09
C111	S21-13	-980.0	-499.0	-468.0	70.0	3.38 E-09
C112	S21-14	-980.0	-528.0	-499.0	80.0	1.63 E-09
C113	S21-15	-980.0	-538.0	-528.0	90.0	5.50 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	3.71 E-10
C115	S21-17	-980.0	-574.0	-554.0	110.0	1.86 E-10
C116	S21-18	-980.0	-621.0	-574.0	120.0	7.99 E-11
C121	S22-6	-1030.0	513.0	672.0	80.0	1.54 E-09
C120	S22-5	-1030.0	470.0	513.0	70.0	4.56 E-09
C119	S22-4	-1030.0	422.0	470.0	60.0	7.66 E-09
C118	S22-3	-1030.0	353.0	422.0	50.0	9.96 E-09
C117	S22-2	-1030.0	289.0	353.0	40.0	3.97 E-09
C122	S22-10	-1030.0	-457.0	-426.0	40.0	5.16 E-11
C123	S22-11	-1030.0	-479.0	-457.0	50.0	2.85 E-10
C124	S22-12	-1030.0	-489.0	-479.0	60.0	8.98 E-10
C125	S22-13	-1030.0	-520.0	-489.0	70.0	2.15 E-09
C126	S22-14	-1030.0	-548.0	-520.0	80.0	1.13 E-09
C127	S22-15	-1030.0	-561.0	-548.0	90.0	4.24 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	2.53 E-10
C129	S22-17	-1030.0	-596.0	-571.0	110.0	1.70 E-10
C130	S22-18	-1030.0	-655.0	-596.0	120.0	6.06 E-11
C135	S23-6	-1130.0	412.0	557.0	80.0	1.22 E-07
C134	S23-5	-1130.0	355.0	412.0	70.0	3.12 E-07
C133	S23-4	-1130.0	297.0	355.0	60.0	3.89 E-07
C132	S23-3	-1130.0	219.0	297.0	50.0	3.84 E-07
C131	S23-2	-1130.0	137.0	219.0	40.0	1.81 E-07
C136	S23-10	-1130.0	-438.0	-408.0	40.0	7.81 E-11
C137	S23-11	-1130.0	-483.0	-438.0	50.0	6.53 E-10
C138	S23-12	-1130.0	-533.0	-483.0	60.0	1.28 E-09
C139	S23-13	-1130.0	-562.0	-533.0	70.0	8.18 E-10
C140	S23-14	-1130.0	-589.0	-562.0	80.0	5.57 E-10
C141	S23-15	-1130.0	-628.0	-589.0	90.0	2.55 E-10
C142	S23-16	-1130.0	-658.0	-628.0	100.0	5.66 E-11
C143	S23-17	-1130.0	-709.0	-658.0	110.0	1.81 E-11
C148	S24-6	-1179.0	357.0	485.0	80.0	7.56 E-07
C147	S24-5	-1179.0	296.0	357.0	70.0	1.74 E-06
C146	S24-4	-1179.0	236.0	296.0	60.0	1.96 E-06
C145	S24-3	-1179.0	183.0	236.0	50.0	8.30 E-07
C144	S24-2	-1179.0	131.0	183.0	40.0	1.45 E-07
C149	S24-11	-1179.0	-399.0	-341.0	40.0	4.66 E-10

	
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C150	S24-12	-1179.0	-437.0	-399.0	50.0	2.10 E-09
C151	S24-13	-1179.0	-491.0	-437.0	60.0	6.81 E-09
C152	S24-14	-1179.0	-555.0	-491.0	70.0	5.27 E-09
C153	S24-15	-1179.0	-605.0	-555.0	80.0	1.17 E-09
C154	S24-16	-1179.0	-649.0	-605.0	90.0	2.34 E-10
C155	S24-17	-1179.0	-692.0	-649.0	100.0	4.56 E-11
C159	S25-5	-1230.0	373.0	436.0	70.0	2.27 E-07
C158	S25-4	-1230.0	272.0	373.0	60.0	6.91 E-07
C157	S25-3	-1230.0	216.0	272.0	50.0	2.67 E-07
C156	S25-2	-1230.0	124.0	216.0	40.0	1.19 E-07
C160	S25-10	-1230.0	-448.0	-390.0	40.0	9.51 E-11
C161	S25-11	-1230.0	-532.0	-448.0	50.0	4.71 E-10
C162	S25-12	-1230.0	-620.0	-532.0	60.0	3.32 E-10
C163	S25-13	-1230.0	-675.0	-620.0	70.0	6.34 E-11
C164	S25-14	-1230.0	-718.0	-675.0	80.0	1.95 E-11
C165	S25-15	-1230.0	-759.0	-718.0	90.0	6.09 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	1.79 E-12

B MINIMUM OCH : 303 FT

Total risk for this approach : **9.54 E-08**
 Risk of hitting the ground plane : **< 1.0 E-15**

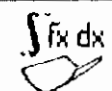
Identification	Description	X	Y1	Y2	Z	Risk
Obstacle with highest individual risk						
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	2.52 E-08
All obstacles						
C108	S21-10	980.0	-428.0	-402.0	40.0	*
C001	S1-1	580.0	432.0	574.0	30.0	*
C002	S2-2	480.0	522.0	594.0	40.0	*
C003	S3-1	380.0	108.0	695.0	40.0	3.45 E-10
C006	S4-3	280.0	641.0	739.0	60.0	*
C005	S4-2	280.0	526.0	641.0	50.0	*
C004	S4-1	280.0	68.0	526.0	40.0	2.62 E-09
C008	S5-2	180.0	461.0	608.0	40.0	*
C007	S5-1	180.0	54.0	461.0	30.0	1.12 E-11
C011	S6-3	80.0	541.0	557.0	60.0	2.14 E-15
C010	S6-2	80.0	168.0	541.0	50.0	1.91 E-09
C009	S6-1	80.0	63.0	168.0	40.0	1.07 E-09
C015	S7-4	0.0	544.0	604.0	70.0	6.54 E-14
C014	S7-3	0.0	344.0	544.0	60.0	6.31 E-11
C013	S7-2	0.0	127.0	344.0	50.0	4.94 E-09
C012	S7-1	0.0	57.0	127.0	40.0	4.82 E-10
C019	S8-5	-30.0	572.0	589.0	70.0	2.43 E-14
C018	S8-4	-30.0	492.0	572.0	60.0	5.66 E-14
C017	S8-3	-30.0	187.0	492.0	50.0	4.49 E-10
C016	S8-2	-30.0	118.0	187.0	40.0	4.63 E-11
C022	S9-4	-130.0	217.0	313.0	60.0	4.47 E-09
C021	S9-3	-130.0	148.0	217.0	50.0	7.74 E-10
C020	S9-2	-130.0	100.0	148.0	40.0	2.62 E-11
C025	S10-4	-180.0	196.0	328.0	60.0	6.76 E-09

	Final Report	
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C024	S10-3	-180.0	137.0	196.0	50.0	6.99 E-10
C023	S10-2	-180.0	91.0	137.0	40.0	1.84 E-11
C028	S11-4	-230.0	192.0	290.0	60.0	5.57 E-09
C027	S11-3	-230.0	136.0	192.0	50.0	4.42 E-10
C026	S11-2	-230.0	95.0	136.0	40.0	8.52 E-12
C031	S12-4	-266.0	201.0	258.0	60.0	3.24 E-09
C030	S12-3	-266.0	136.0	201.0	50.0	3.09 E-10
C029	S12-2	-266.0	98.0	136.0	40.0	4.84 E-12
C168	GS	-281.0	-193.0	-193.0	12.0	*
C035	S13-5	-330.0	598.0	667.0	50.0	*
C034	S13-4	-330.0	515.0	598.0	40.0	*
C033	S13-3	-330.0	343.0	515.0	30.0	*
C032	S13-2	-330.0	111.0	343.0	40.0	1.48 E-12
C037	S14-5	-430.0	499.0	822.0	50.0	*
C036	S14-4	-430.0	436.0	499.0	40.0	*
C041	S15-5	-530.0	680.0	749.0	70.0	6.18 E-15
C040	S15-4	-530.0	540.0	680.0	60.0	2.05 E-14
C039	S15-3	-530.0	458.0	540.0	50.0	2.28 E-15
C038	S15-2	-530.0	390.0	458.0	40.0	*
C047	S16-7	-630.0	616.0	687.0	90.0	2.90 E-11
C046	S16-6	-630.0	580.0	616.0	80.0	8.18 E-12
C045	S16-5	-630.0	549.0	580.0	70.0	7.90 E-13
C044	S16-4	-630.0	503.0	549.0	60.0	4.87 E-14
C043	S16-3	-630.0	443.0	503.0	50.0	1.61 E-15
C042	S16-2	-630.0	381.0	443.0	40.0	*
C056	S17-10	-730.0	680.0	690.0	120.0	3.65 E-10
C055	S17-9	-730.0	631.0	680.0	110.0	5.47 E-10
C054	S17-8	-730.0	608.0	631.0	100.0	3.63 E-10
C053	S17-7	-730.0	586.0	608.0	90.0	1.11 E-10
C052	S17-6	-730.0	567.0	586.0	80.0	1.31 E-11
C051	S17-5	-730.0	536.0	567.0	70.0	9.38 E-13
C050	S17-4	-730.0	478.0	536.0	60.0	5.61 E-14
C049	S17-3	-730.0	428.0	478.0	50.0	*
C048	S17-2	-730.0	371.0	428.0	40.0	*
C057	S17-14	-730.0	-368.0	-321.0	40.0	*
C058	S17-15	-730.0	-621.0	-368.0	50.0	4.34 E-15
C067	S18-10	-770.0	674.0	689.0	120.0	2.94 E-10
C066	S18-9	-770.0	622.0	674.0	110.0	9.72 E-10
C065	S18-8	-770.0	601.0	622.0	100.0	5.43 E-10
C064	S18-7	-770.0	586.0	601.0	90.0	1.18 E-10
C063	S18-6	-770.0	562.0	586.0	80.0	1.50 E-11
C062	S18-5	-770.0	531.0	562.0	70.0	9.32 E-13
C061	S18-4	-770.0	481.0	531.0	60.0	3.86 E-14
C060	S18-3	-770.0	428.0	481.0	50.0	*
C059	S18-2	-770.0	371.0	428.0	40.0	*
C068	S18-14	-770.0	-313.0	-286.0	40.0	*
C069	S18-15	-770.0	-374.0	-313.0	50.0	9.90 E-15
C070	S18-16	-770.0	-459.0	-374.0	60.0	5.81 E-13
C071	S18-17	-770.0	-588.0	-459.0	70.0	7.08 E-12
C167	ATC Tower	-813.0	-452.0	-452.0	98.0	2.52 E-08
C080	S19-10	-830.0	677.0	703.0	120.0	4.51 E-10
C079	S19-9	-830.0	633.0	677.0	110.0	9.75 E-10
C078	S19-8	-830.0	608.0	633.0	100.0	5.48 E-10
C077	S19-7	-830.0	587.0	608.0	90.0	1.25 E-10
C076	S19-6	-830.0	555.0	587.0	80.0	1.70 E-11
C075	S19-5	-830.0	523.0	555.0	70.0	8.91 E-13

	Final Report	
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C074	S19-4	-830.0	486.0	523.0	60.0	2.09 E-14
C073	S19-3	-830.0	448.0	486.0	50.0	*
C072	S19-2	-830.0	381.0	448.0	40.0	*
C081	S19-14	-830.0	-323.0	-304.0	40.0	*
C082	S19-15	-830.0	-367.0	-323.0	50.0	3.66 E-15
C083	S19-16	-830.0	-402.0	-367.0	60.0	3.66 E-13
C084	S19-17	-830.0	-448.0	-402.0	70.0	1.88 E-11
C085	S19-18	-830.0	-495.0	-448.0	80.0	2.91 E-10
C086	S19-19	-830.0	-557.0	-495.0	90.0	1.74 E-09
C093	S20-8	-930.0	626.0	701.0	100.0	4.48 E-10
C092	S20-7	-930.0	588.0	626.0	90.0	1.27 E-10
C091	S20-6	-930.0	542.0	588.0	80.0	1.86 E-11
C090	S20-5	-930.0	510.0	542.0	70.0	7.00 E-13
C089	S20-4	-930.0	479.0	510.0	60.0	1.03 E-14
C088	S20-3	-930.0	432.0	479.0	50.0	*
C087	S20-2	-930.0	362.0	432.0	40.0	*
C094	S20-12	-930.0	-393.0	-365.0	40.0	*
C095	S20-13	-930.0	-433.0	-393.0	50.0	*
C096	S20-14	-930.0	-446.0	-433.0	60.0	2.81 E-14
C097	S20-15	-930.0	-478.0	-446.0	70.0	3.19 E-12
C098	S20-16	-930.0	-507.0	-478.0	80.0	8.73 E-11
C099	S20-17	-930.0	-516.0	-507.0	90.0	9.67 E-10
C100	S20-18	-930.0	-538.0	-516.0	100.0	8.28 E-09
C101	S20-19	-930.0	-604.0	-538.0	110.0	2.33 E-08
C107	S21-7	-980.0	601.0	682.0	90.0	8.90 E-11
C106	S21-6	-980.0	536.0	601.0	80.0	1.81 E-11
C105	S21-5	-980.0	499.0	536.0	70.0	6.56 E-13
C104	S21-4	-980.0	451.0	499.0	60.0	1.26 E-14
C103	S21-3	-980.0	393.0	451.0	50.0	*
C102	S21-2	-980.0	316.0	393.0	40.0	*
C109	S21-11	-980.0	-464.0	-428.0	50.0	*
C110	S21-12	-980.0	-468.0	-464.0	60.0	8.08 E-15
C111	S21-13	-980.0	-499.0	-468.0	70.0	1.32 E-12
C112	S21-14	-980.0	-528.0	-499.0	80.0	4.18 E-11
C113	S21-15	-980.0	-538.0	-528.0	90.0	5.20 E-10
C114	S21-16	-980.0	-554.0	-538.0	100.0	4.71 E-09
C115	S21-17	-980.0	-574.0	-554.0	110.0	1.61 E-08
C116	S21-18	-980.0	-621.0	-574.0	120.0	2.52 E-08
C121	S22-6	-1030.0	513.0	672.0	80.0	2.57 E-11
C120	S22-5	-1030.0	470.0	513.0	70.0	8.78 E-13
C119	S22-4	-1030.0	422.0	470.0	60.0	1.41 E-14
C118	S22-3	-1030.0	353.0	422.0	50.0	*
C117	S22-2	-1030.0	289.0	353.0	40.0	*
C122	S22-10	-1030.0	-457.0	-426.0	40.0	*
C123	S22-11	-1030.0	-479.0	-457.0	50.0	*
C124	S22-12	-1030.0	-489.0	-479.0	60.0	3.59 E-15
C125	S22-13	-1030.0	-520.0	-489.0	70.0	5.58 E-13
C126	S22-14	-1030.0	-548.0	-520.0	80.0	1.98 E-11
C127	S22-15	-1030.0	-561.0	-548.0	90.0	2.88 E-10
C128	S22-16	-1030.0	-571.0	-561.0	100.0	2.59 E-09
C129	S22-17	-1030.0	-596.0	-571.0	110.0	1.18 E-08
C130	S22-18	-1030.0	-655.0	-596.0	120.0	1.77 E-08
C135	S23-6	-1130.0	412.0	557.0	80.0	1.25 E-10
C134	S23-5	-1130.0	355.0	412.0	70.0	4.13 E-12
C133	S23-4	-1130.0	297.0	355.0	60.0	6.07 E-14
C132	S23-3	-1130.0	219.0	297.0	50.0	*

	
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C131	S23-2	-1130.0	137.0	219.0	40.0	*
C136	S23-10	-1130.0	-438.0	-408.0	40.0	*
C137	S23-11	-1130.0	-483.0	-438.0	50.0	*
C138	S23-12	-1130.0	-533.0	-483.0	60.0	1.28 E-15
C139	S23-13	-1130.0	-562.0	-533.0	70.0	9.29 E-14
C140	S23-14	-1130.0	-589.0	-562.0	80.0	4.37 E-12
C141	S23-15	-1130.0	-628.0	-589.0	90.0	8.82 E-11
C142	S23-16	-1130.0	-658.0	-628.0	100.0	5.10 E-10
C143	S23-17	-1130.0	-709.0	-658.0	110.0	1.64 E-09
C148	S24-6	-1179.0	357.0	-485.0	80.0	2.62 E-10
C147	S24-5	-1179.0	296.0	-357.0	70.0	8.36 E-12
C146	S24-4	-1179.0	236.0	-296.0	60.0	1.12 E-13
C145	S24-3	-1179.0	183.0	-236.0	50.0	*
C144	S24-2	-1179.0	131.0	-183.0	40.0	*
C149	S24-11	-1179.0	-399.0	-341.0	40.0	*
C150	S24-12	-1179.0	-437.0	-399.0	50.0	*
C151	S24-13	-1179.0	-491.0	-437.0	60.0	1.90 E-15
C152	S24-14	-1179.0	-555.0	-491.0	70.0	1.61 E-13
C153	S24-15	-1179.0	-605.0	-555.0	80.0	4.02 E-12
C154	S24-16	-1179.0	-649.0	-605.0	90.0	5.23 E-11
C155	S24-17	-1179.0	-692.0	-649.0	100.0	3.05 E-10
C159	S25-5	-1230.0	373.0	436.0	70.0	1.04 E-12
C158	S25-4	-1230.0	272.0	373.0	60.0	2.86 E-14
C157	S25-3	-1230.0	216.0	272.0	50.0	*
C156	S25-2	-1230.0	124.0	216.0	40.0	*
C160	S25-10	-1230.0	-448.0	-390.0	40.0	*
C161	S25-11	-1230.0	-532.0	-448.0	50.0	*
C162	S25-12	-1230.0	-620.0	-532.0	60.0	*
C163	S25-13	-1230.0	-675.0	-620.0	70.0	5.97 E-15
C164	S25-14	-1230.0	-718.0	-675.0	80.0	1.74 E-13
C165	S25-15	-1230.0	-759.0	-718.0	90.0	2.63 E-12
C166	S25-16	-1230.0	-840.0	-759.0	100.0	1.72 E-11

	CRM Report	
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SUMMARY OF RESULTS

A RESULTS : CATEGORY I

It is important that information on this summary report be checked against the complete report before any official use is made of it.

Cat.	OCH type	OCH ft	Risk	Obstacle with highest individual risk		
				Ref.	Description	Risk
C	Specified	198	5.27 E-04	C012	S7-1	2.04 E-04
C	Minimum	284	9.64 E-08	C167	ATC Tower	2.32 E-08
D	Specified	198	9.97 E-04	C012	S7-1	4.24 E-04
D	Minimum	303	9.54 E-08	C167	ATC Tower	2.52 E-08

B FILES INFORMATION

Site file : NIL
Obstacle file : VTSP_THR 27.cou