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AIP SUPPLEMENT

A17/11
21 December 2011

JOINT MILITARY AIR EXERCISE IN BANGKOK FIR

Effective from 30 January to 23 February 2012, between 0000 - 1500 UTC except on the weekend and national holiday, joint military exercise named "COBRA GOLD 2012" will take place within Bangkok FIR, details are as follows :

1. EXERCISE AREAS

1.1 CHARLIE 1 (CG-1)

An area bounded by a line joining the following points: 1455N10050E, 1543N10022E, 1616N10022E, then along a 30 NM arc counter clockwise from the Phitsanulok (PSL) VOR (1646.1N 10017.7E) to 1635N10045E, 1632N10127E, 1507N10059E, 1507N10050E then back to the point of origin.

To facilitate multiple users within this airspace, it is divided into **North and South** sectors by a line drawn from N154255 E1002203 to N153708 E1010850.

AR North/South (HI/LO). North ARIP is 1535N 10041E and the South ARIP is 1033N10126E, using left turns. North-HI refueling altitudes are FL160 to FL200 and North-LO refueling altitudes are 8,000' MSL to FL120. South-HI refueling altitudes are FL160 to FL200 and South-LO refueling altitudes are FL120 to FL160. Receivers will rendezvous 1,000 feet below the tanker altitude specified for that day. Receivers will exit the track 1,000 feet above tanker altitude. Contact VICESQUAD/BIG SHELL on 331.3/127.0 to transit from air refueling to working airspace.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : GND - UNL.

1.2 CHARLIE 2 (CG-2)

An area bounded by a line joining the following points: 1632N10127E, 161930N10200E, 1523N10136E, 154245N10111E then back to the point of origin.

Period of activity : 31 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : GND - UNL.

1.3 CHARLIE 3 (CG-3)

An area bounded by a line joining the following points: 161930N10200E, 160840N10230E, 151530N1020945E then along a 20 NM arc counter clockwise around the Korat (KRT) TACAN (151530N1020945E) to 151055N1015040E, 1523N10136E then back to the point of origin.

Period of activity : 31 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : GND - UNL.

1.4 CHARLIE 4 (CG-4)

An area bounded by a line joining the following points: 160840N10230E, 1550N10321E, 1529N10321E, 1512N10305E, 1511N10236E, 1507N1022155E then along a 20 NM arc counter clockwise around the Korat (KRT) TACAN (145611N1020435E) to 151530N1020945E then back to the point of origin, **excluding the Buri Ram Terminal Control Area (TCA).**

Buri Ram TCA: An area bounded by a line joining the following points: 152840N1033030E clockwise along a 20 NM arc from BRM DVOR/DME (151422N1031531.59E) to 1501N10330E, 1453N10240E then along a 35 NM arc counter-clockwise around the Korat TACAN (145611N 1020435E) to 151130N10237E, 151224N1030024E then along a 15 NM arc clockwise around the BRM DVOR/DME to 152918N1031751E, 154407N1032620E, then along a 30 NM arc counter clockwise around the Roi Et (ROT) DVOR/DME (160700.59N 034619.45E) to 153849N1033630E, then back to point of origin. Vertical limits are 2,000' MSL to FL110.

Period of activity : 31 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : GND - UNL.

1.5 CHARLIE 5 (CG-5)

An area bounded by a line joining the following points: 155745N10300E, 1620N10300E, 1600N10343E, 1513N10343E, 1513N10321E, 1550N10321E then back to the point of origin. **CG-5 contains air refueling (AR) Track Gold.**

AR Track Gold. ARCP is 1530N10320E and the ARIP is 1610N10320E, using left turns. Refueling altitudes are FL160 to FL180. Receivers will rendezvous 1,000 feet below the tanker altitude specified for that day. Receivers will exit the track 1,000 feet above tanker altitude.

Contact VICESQUAD/BIG SHELL on 331.3/127.0 to transit from air refueling to working airspace.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : FL150 - FL200.

1.6 CHARLIE 6 (CG-6)

An area bounded by a line joining the following points: 1507N1022155E, 1511N10236E, 1512N10305E, 1529N10321E, 1451N10321E, 1451N1022430E around a 20 NM arc counter clockwise around the Korat TACAN (145611N1020435E) to point of origin, **excluding the Buri Ram TCA.** Aircraft will transit between Korat and CG-6 via the Korat CG-4 departure and recovery procedures identified in Section 6.9.

Buri Ram TCA: An area bounded by a line joining the following points: 152840N1033030E clockwise along a 20 NM arc from BRM DVOR/DME (151422N1031532E) to 1501N10330E, 1453N10240E then along a 35 NM arc counter clockwise around the Korat TACAN (145611N 1020435E) to 151130N10237E, 151224N1030024E then along a 15 NM arc clockwise around the BRM DVOR/DME to 152918N1031751E, 154407N1032620E, then along a 30 NM arc counter clockwise around the ROT DVOR/DME (1607N1034618E) to 153849N1033630E then back to point of origin. **Vertical limits are 2,000' MSL to FL110.**

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC
Vertical limits : FL160 - FL210.

1.7 CHARLIE 7 (CG-7)

An area bounded by a line joining the following points: 1437N10213E along a 20 NM arc counter clockwise around the Korat (KRT) TACAN (145611N1020435E) to 1451N1022430E, 1451N10321E, 1433N10321E, 1428N1030145E, 1356N10220E, 1356N1020830E then back to the point of origin. **CG-7 contains air refueling (AR) tracks Bronze-HI and Bronze-LO.**

AR Tracks Bronze-HI and Bronze-LO. ARCP is 1430N10220E and the ARIP is 1445N 10300E, using left turns. Bronze-HI refueling altitudes are FL160 to FL190 and Bronze-LO refueling altitudes are 8,000 ft. MSL to FL120. Receivers will rendezvous 1,000 feet below the tanker altitude specified for that day. Receivers will exit the track 1,000 feet above tanker altitude. **Contact VICESQUAD/ BIG SHELL on 331.3/127.0 to transit from air refueling to working airspace.**

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC
Vertical limits : GND - FL200.

1.8 CHARLIE 8 (CG-8)

An area bounded by a line joining the following points: 153740N1010915E, 1507N1014715E, then along a 20 NM arc counter clockwise around the Korat (KRT) TACAN (145611N1020435E) to 1455N 10144E, 1455N10059E, 1507N10059E then back to the point of origin. **CG-8 contains air refueling (AR) tracks Brown-HI and Brown-LO.**

AR Tracks Brown-HI and Brown-LO. ARCP is 1525N10115E and the ARIP is 1505N10135E, using left turns. Brown-HI refuelling altitudes are FL160 to FL180 and Brown-LO refueling altitudes are 8,000 ft MSL to FL120. Receivers will rendezvous 1,000 feet below the tanker altitude specified for that day. Receivers will exit the track 1,000 feet above tanker altitude.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC
Vertical limits : GND - UNL.

1.9 CHARLIE 12 (CG-12)

A 20 NM radius circle centered on point 1639N10258E.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 – 1500 UTC.
Vertical limits : GND - FL150.

See Range Procedures for Namphong Range (Chapter 3)

1.10 CHARLIE 13 (CG-13)

An area bounded by a line joining the following points: 143946N1015337E, 143248N1014930E, 142234N1020742E, 142927N1021149E, then back to the point of origin.

Period of activity : 9 - 10 February 2012, between 0100-0600 UTC.
Vertical limits : GND - FL100.

Airspace shall only be active during combined air/ground operations at Phu Lamyai range complex.

1.11 NORTHERN TRAINING AREA (NTA)

An area bounded by a line joining the following points: 161910N1020320E, 163144N 1012636E, 1635N10045E, then along a 30 NM arc counterclockwise from the Phitsanulok (PSL) VOR (1646.1N 10017.7E) to 171418N1002900E, 174318N1002830E, 174918N1003530E, 175654N1002830E, 180442N1003124E, 181042N1003136E, 181806N1002900E, 182848N1003830E, 182642N1004712E, 180718N1005112E, 173712N1003648E, 172336N1004500E, 171430N1005848E, 171512N1011218E, 174300N1015448E, 174148N1021754E, 161910N1020346E, then back to point of origin.

This training area will be utilized by the 353 Special Operations Group (SOG) for low level operations. 353rd SOG aircraft shall remain clear of active CG exercise airspace. Utilization of CG airspace will be based on availability and incorporation into the daily exercise flight schedule to ensure deconfliction with other air/ground assets.

Entry/Exit: Routing will be direct flight from Chang Mai to NAN or UTTARDIT as published in Exercise Flight Schedule.

Period of activity : 31 Jan - 23 Feb 2012, between 0100 – 1600 UTC.
Vertical limits : GND - 3000 MSL

1.12 RECOVERY CORRIDOR

A 5 NM wide corridor bounded by a line joining points 1507N1014715E, 151055N1015040E, 154245N10111E, 153740N1010915E, then back to the point of origin. The primary purpose of this corridor is to provide a safe departure/recovery route for aircraft transiting to and from areas CG-1, CG-2, CG-3, and CG-8. **When packages are assigned CG-1, 2, 3 and 8 simultaneously, the airspace includes the recovery corridor.**

Period of activity : 31 Jan - 23 Feb 2012, between 0100 - 1100 UTC.
Vertical limits : GND - UNL.

1.13 TRANSITION AREA (TA)

A circle of 20 NM radius centered on Korat TACAN (145611N1020435E). The primary purpose of TA is to provide a safe transition for aircraft transiting to/from one exercise area to another. Aircraft transitioning from one area to another area via the TA utilize appropriate altitude for direction of flight. **Note: Northeast bound aircraft use FL160, FL180, or FL200.**

Southwest bound aircraft use FL170 or FL190.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1100 UTC.
Vertical limits : FL160 - FL200.

1.14 CHANDY RANGE.

Chandy Range is located on KRT R-274/68 DME. Exact coordinates are as follows: 1507N10059E, 1507N10050E, 1455N10050E, 1455N10059E to point of origin. Vertical limits are surface to FL240. The northern section of Chandy is the conventional range for practice ordnance delivery and the southern section is the tactical range for live ordnance delivery

(Live ordnance delivery allowed only at Target 9 (see detail), Weapons drops are limited to multiples of two not to exceed 2,000 lbs per drop, 20 mm only authorized on the target 9 also)

Prior to entry into the range, aircraft must contact Chandy Range, "Chandy" on **285.4/134.75**.

See FTX flight schedule for period of activity.

1.15 VICTOR BLUE / AGGRESSOR AREA

A restricted area has been established to facilitate flying operations for the Royal Thai Prince. The VICTOR BLUE airspace lies between the Bangkok (BKK) VOR/DME (135336.8N 1003546.3E) 005 and 050 radials from 40 NM to 80 NM arc. Vertical limits are surface to unlimited. Air operations in the vicinity of Victor Blue are prohibited when active (Chandy Range, CG-8, and CG-1 South of 1520N).

1.16 PRIMARY TRANSITION CORRIDOR (PTC)

An area bounded by a line joining the following points : 1436N10203E then along a 20 NM arc counter clockwise from Korat "KRT" TACAN (145611N1020435E) 1437N10213E 1244N10200E 1249N10149E then back to the point of origin.

Routing : Northbound FW flights at FL180, Southbound flights at FL160

NOTE : Contact Bangkok Center once airborne for higher transit altitude.

Northbound - 135.5, Southbound - 133.1

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1100 UTC.

Vertical limits : SFC - 5,000 ft. and FL160 - FL180.

1.17 CHANDY TRANSITION CORRIDOR (CTC)

An area bounded by a line joining the following points : 1455N10110E, 1455N10122130E, 143330N10202E, 1422N10201E then back to the point of origin.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1100 UTC.

Vertical limits : SFC - 5,000 ft. and FL160 - FL180.

Northbound FW flights at FL180 and Southbound flights at FL160.

1.18 UTAPHAO TRANSITION CORRIDOR (UTC)

An area bounded by a line joining the following points : 1245N10058E, 1238N10058E, 1307N10203E, 1309N10150E then back to the point of origin.

Period of activity : 31 Jan - 18 Feb 2012, between 0000 - 1100 UTC.

Vertical limits : FL160 - FL180.

1.19 SIERRA

Area bounded by a line joining the following points: 1318N10138E, 1302N10213E, 1239N10213E, 1247N10152E, 1256N10138E then back to point of origin.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC.

Vertical limits : SFC - 15,000 ft.

1.20 X-RAY

Area bounded by a line joining the following points: 1240N10115E, 1235N10137E, 1210N10140E, 1210N10045E, 1220N10045E then to point of origin.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC

Vertical limits : SFC - FL260.

1.21 X-RAY EXTENDED

Area bounded by a line joining the following points: 1210N10140E, 1120N10159E, 1045N10210E, 1000N10144E, 1000N10125E, 1200N10045E, 1210N10045E then back to the point of origin.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC.

Vertical limits : SFC - FL260.

CAUTION: X-Ray Extended will not be scheduled for exercise flights on Tuesdays, Wednesdays, and Fridays from 1430-1630. This is to allow scheduled civilian air traffic to transit area.

1.22 YANKEE

Area bounded by a line joining the following points: 1256N10138E, 1247N10152E, 1239N 10213E, 1233N10207E, 1239N10158E, 1232N10152E, 1225N10200E to a counterclockwise arc of 20 NM radius centered on Trat NDB (121628.1N1021850.08E) 1200N10207E, 1120N10158E, 1210N10140E, 1235N10137E then back to the point of origin. Controlling agency is BIG SHELL on 127.0

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : (Yankee - Lo) : SFC - 9,000 ft.
(Yankee - HI) : FL180 - FL200.

Contact Bangkok control 283.5/135.5 or Trat approach 118.6 to transit from Yankee LO to Yankee HI.

1.23 ZULU

Area bounded by a line joining the following points: 1245N10025E, 1245N10058E, 122865N 10058E, 1220N10045E, 1200N10045E, 1200N10025E then back to the point of origin.

Period of activity : 31 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : (Zulu - LO) : SFC-6,000 ft. MSL
(Zulu - High) : 6,000 - FL130 MSL

1.24 WHISKY 1

Area bounded by a line joining the following point's 1255N10110E, 1255N10122E, 1235N 10137E, 1240N10115E, 123640N1011000E then back to point of origin.

Period of activity : 31 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : 4,000 ft. AGL - 9,000 ft. MSL.

1.25 WHISKY 2

Area bounded by a line joining the following point's 1255N10122E, 1255N10135E, 1235N 10137E then back to the point of origin.

Period of activity : 30 Jan - 23 Feb 2012, between 0100 - 1500 UTC.
Vertical limits : 4,000 ft. AGL - 9,000 ft. MSL.

1.26 STANDARD HELICOPTER ROUTING

USS Boat to Khok Kathiam

All helicopter traffic transiting between USS Boat and Khok Kathiam shall follow the below routing. All flights will be annotated on the LFC schedule. All aircraft must remain at or below 1000' AGL until H4.

Contact ATC after H4 for higher altitude.

On departure, contact Utaphao approach at: Pri 134.5/ 273.3 / Sec 119.7

Then aircraft shall contact Bangkok Approach at Point H1 (Inlet): Pri 125.8 / 259.6 / Sec 122.35. If no communication with Bangkok Approach, aircraft must remain clear of Bangkok control area. Must have flight following for entire route of flight.

HELICOPTER TRANSITION ROUTE POINTS : USS Boat

H1 – **Bangpakong** / 47P QQ 16056 89896 (N 13 28.09 E100 59.45)

H2 – **Bang Nam Prew** / 47P QQ 20613 66111 (N 13 15.14 E101 02.10)

H3 – **Ongkarak** / 47P PR 07984 60944 (N 14 07 02.77 E100 00 01.47)

H4 – Hinkong / 47P QR 02451 93712	(N 14 24 30 E100 52 40)
H5 – Road Intersection (entry point Papa) / 47P PS 92896 27755	(N 14 43 00 E100 47 50)
VTBL – Khok Kathiam	(N 14 52.28.42 E100 39 48.12)

2. WARNING AREA

2.1 FLYING OVER GAS SEPARATION PLANT IN RAYONG (Ban Map Ta Phut) is hazardous.

Aircraft are to avoid area starting from 1241.2N101108.0E then clockwise along an arc of 2 NM radius from 1243.0N 10109.0E to 1243.0N10111.0E then direct to 1238.5N10111.0E from this point make an arc of 5 NM radius from 1243.0N10109.0E clockwise to 1238.2N10108.0E then direct to the starting point, altitude 2,000 ft. MSL

2.2 FLYING OVER RESTRICTED AREAS VT R3 HUA HIN PALACE. Aircraft will avoid flying GND/UNL within 5 NM radius centered on point 123600N 0995700E.

3. ACTION IN EVENT OF EMERGENCY

In case of civil and non-exercise military aircraft experiencing and emergency that make it necessary to enter an active exercise area should immediately advise one of the following agencies:

- 3.1 Bangkok Area Control Centre (BACC) sector concerned.
- 3.2 If unable to contact BACC an aircraft should contact OSCAR or any other GCI facilities.
- 3.3 Frequency of these agencies are as followed :

BACC Sector 1	Freq : 256.6 and 120.5 MHz
Sector 2	Freq : 285.3, 133.1 and 122.45 MHz
Sector 3	Freq : 283.5 and 135.5 MHz
Sector 4	Freq : 263.8 and 128.1 MHz
Sector 5	Freq : 268.5 and 125.7 MHz
Sector 6	Freq : 265.9 and 123.95 MHz
Sector 7	Freq : 246.5, 124.5 and 126.5 MHz
Sector 8	Freq : 268.5, 132.1 and 133.9 MHz
BANGKOK Approach	Freq : 259.6, 125.8 and 122.35 MHz
KAMPHAENG Approach	Freq : 127.75 and 347.2 MHz
OSCAR Control	Freq : 331.3 and 127.0 MHz
BRIGHAM Control	Freq : 331.3 and 127.0 MHz
U-TAPHAO Approach	Freq : 243.0, 273.3, 134.5 and 119.7 MHz
U-TAPHAO Tower	Freq : 227.0 and 118.3 MHz
KHORAT Approach	Freq : 285.0 and 129.75 MHz
KHORAT Tower	Freq : 240.5 and 122.2 MHz

COBRA GOLD aircraft experiencing an emergency and unable to contact their appropriate control agencies will contact OSCAR or BRIGHAM control or any other GCI facility on Freq 331.3 MHz, 127.0 MHz or guard Freq 243.0 and 121.5 MHz.

4. CLEARANCE RESTRICTION

Clearance Restriction and procedures for Don Mung Intl (VTBD) and Suvarnabhumi Intl (VTBS) All aircraft departing/arriving VTBD or VTBS shall strictly comply with the following restrictions:

4.1 Aircraft tracking on B346/W39 between BKK and PCB will be re-routed via BKK W9 PSL W26 PCB and vice versa to avoid exercise airspace.

4.2 Aircraft tracking on R474, W21 between BKK and CMP will be re-routed as follows:

a. Outbound flight from VTBD/VTBS to VTN will be re-routed via BKK W9 PSL W27 LOY B218 VTN.

b. Inbound flight to VTBD/VTBS will be re-routed via VTN R474 CMP G473 PSL W9 BKK

c. Outbound from VTBD/VTBS to VTUD will be re-routed via W9 PSL W26 CMP W21 and Vice versa.

4.3 Aircraft Departure from VTBD/VTBS to VTUK, VTUW, VTUI, VTUV will be re-routed as follows:

a. To VTUK : BKK WI RAMEI W38 ROT W5 KKN and vice versa

b. To VTUI/VTUW : BKK W1 RAMEI W38 ROT DCT SKN W6 NKP and vice versa

c. To VTUV : BKK WI GRASO R345 ROT and vice versa

4.4 Aircraft operated on A202 between F140-F250 or W1 between F160-F210 shall be radar vectored or level changed for avoid exercise area.

4.5 Aircraft departing or arriving VTBD/VTBS on W1 required to cross 65 NM from BKK VOR/DME at F210 or above to avoid Chandy Transition Corridor (CTC F160-F180) and transition area (TA : F160-F200)

4.6 Aircraft departing VTBD/VTBS on A1 east of BKK shall be cross 70 NM BKK VOR/DME at F210 or above to avoid Primary Transition Corridor and Charlie 7 (PTC : F160 - F180), (CG-7 : GND - F200)

4.7 Aircraft departing or arriving VTBD/VTBS on airway G474 required to cross 60 NM BKK VOR/ DME at F190 or above to avoid Primary Transition Corridor (PTC. F160 - F180) or maintain F150 or below, if unable

4.8 Aircraft departing or arriving VTBD/VTBS on airway R468/B204 East of BKK required to cross 70 NM BKK VOR/DME at F190 or above to avoid Primary Transition Corridor (PTC. F160 - F180) or maintain F150 or below, if unable

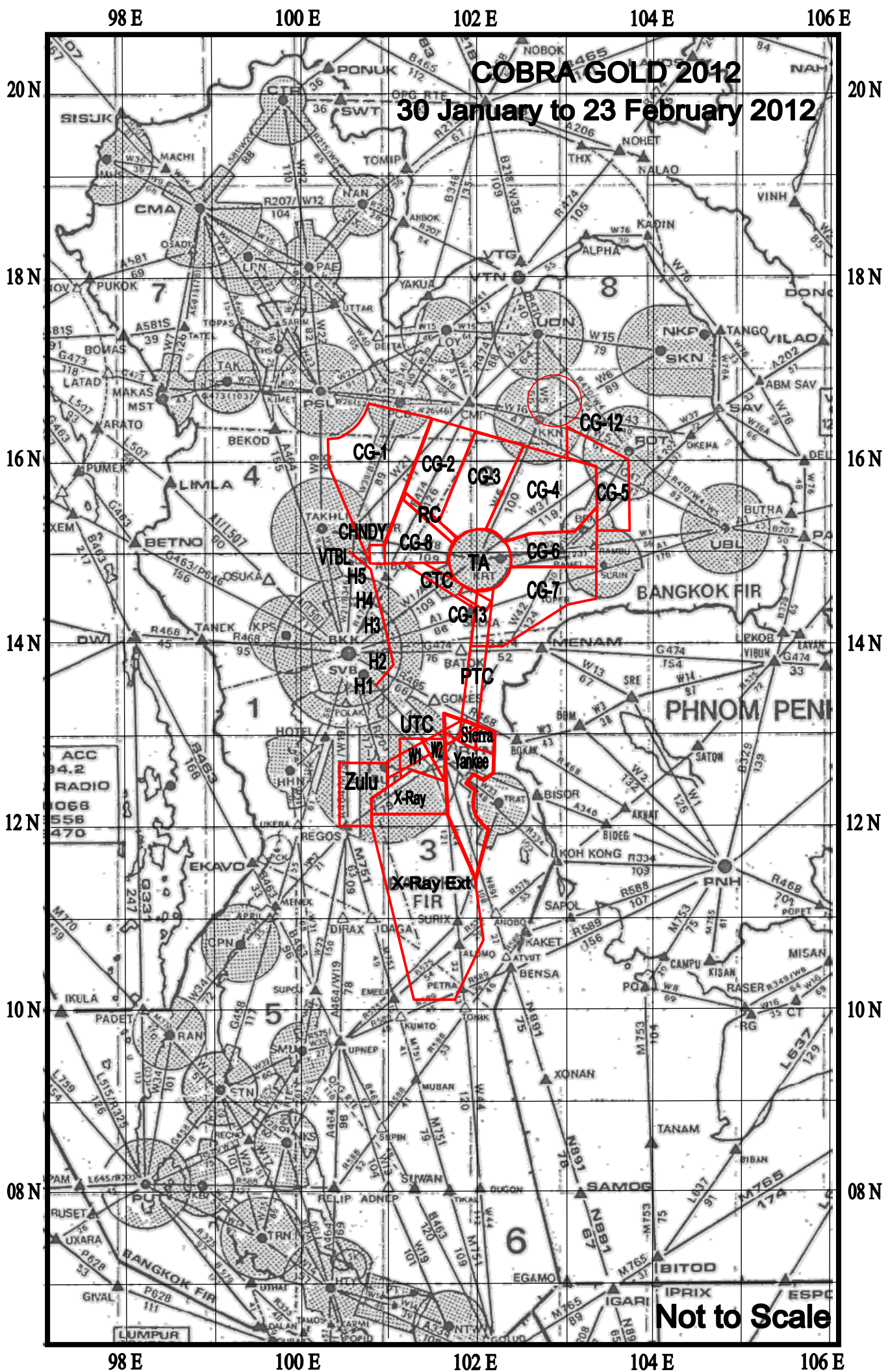
4.9 Aircraft departing or arriving VTBD/VTBS on airway N891 required to cross 70 NM BKK VOR/DME at F190 or above and 80 NM from BKK VOR/DME at F210 or above to avoid U-taphao Transition Corridor (UTC : F160 - F180) and Yankee - Hi area (F180 - F200) or maintain F150 or below, if unable

4.10 Aircraft departing or arriving VTBD/VTBS on airway A464 south ,W19 and M751 required to cross 60 NM from BKK VOR/DME at F140 or above to avoid Zulu High area (6000 ft - F130)

4.11 Aircraft planed to operated on airway A464 south, W19 at F130 or below should be avoid exercise area by using G458 to intercept airway W31 at UKERA and then joint W32 at SUPOJ and vice versa to avoid Zulu High area (6000 ft - F130)

4.12 Civil aircraft planed to enter the exercise area during the operation period shall be contact the Control agency and obtained the clearance before entering.

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COBRA GOLD 2012
30 January to 23 February 2012

Not to Scale