

The Kai Tak Checkerboard Approach – Charter Flight 001-11

Hong Kong's Kai Tak airport closed in 1998. But while it was open it had the most challenging approach in the world for airline pilots. ***The Checkerboard Approach to Runway 13.***

An Instrument Guidance System (IGS), an ILS-type signal, defined the final approach path. But it was offset from the runway heading by 47 degrees! One then had to follow a curving light path to the runway.

More daunting, a hill directly in the IGS approach path awaited those who did not turn onto final soon enough!

A checkerboard marked that hill.

This charter will take you through the entire approach to Kai Tak's Runway 13. It is suitable for fs9 and FSX. The included document **vhhx-3.pdf** illustrates this charter flight. You should print it before starting the flight since it will increase your understanding of Kai Tak's Checkerboard Approach. You can also download a video from FlightSim.com of this approach. The filename is **vhhx_chw.zip**. Please note, though, that this flight description supersedes the one included with that video.

Before you can fly this charter, though, you must install Kai Tak scenery. At the time of this writing there is only one option available for FSX, but it is a good one. That is Jim Vile's **vhhx_ils_jv.zip**. A small patch is also required to correct the IGS frequency. That file is **vhhx_ils_jv_v1.1.zip**. Both are available on AVSIM only. To check availability of other FSX Kai Tak scenery packages, go to Mark Beaumont's website: <http://www.swiremariners.com/cxhkg.html> ... Scroll past the textures.

FS9 users will find many Kai Tak scenery options available. All have good points. I recommend that you go to Mark Beaumont's fs9 Kai Tak page, <http://www.swiremariners.com/cathayhk.html>. Again, scroll past the textures. It is the best single-source resource on the Internet for all things Kai Tak. There Mark has a screen shot and a paragraph on each of the fs9 Scenery Options available, with a link to the download. All install easily.

The flight instructions, along with vhhx-3.pdf, are pretty straightforward and thus no FSNV or .PLN files are needed.

Charles Wood, DC3-001, July 2008

001-11 Kai Tak Checkerboard Approach

From - To	Flight Description. "Allocated runways and related information may change when flying online or using Real Weather"				NM (Leg)	Time (Leg) Minutes	Total Time Minutes
	Dep. Rwy - 13	Init. Hdg - 136	Init. Alt - 8000	Apt Elev. – 15ft			
Kai Tak (VHHX) Hong Kong To Kai Tak (VHHX) Hong Kong	<p>Print document VHHX-3.pdf which graphically illustrates your flight.</p> <p>Tune ADF TO CC NDB 360.0, Tune NAV-1 to 111.90, and Turn On your Mkr Bcn receiver if it is an option.</p> <p>NOTE: Maintain 105 kts IAS for the entire flight until reaching the Outer Marker on the IGS (Instrument Guidance System).</p> <p>Pre-Departure.</p> <ul style="list-style-type: none"> You must have installed a Kai Tak scenery file in either fs9 or FSX before flying this charter. If you haven't, see details in the introduction. Move your DC-3 to Rwy 13 of Kai Tak Airport, VHHX Set your Weather Theme to "Clear" Set time to "Day" Set Season to "Summer" Set the fuel level in each tank at 50% to prevent an over-weight aircraft. <p>Departure: <u>To CC NDB 360.0.</u> After takeoff maintain runway heading. Climb out at 700 fpm and 105 kts IAS. Maintain this rate of climb until reaching your cruise altitude of 8000ft. During your climb you will cross your ultimate bearing of 270° to CC NDB. At 6500ft turn right to 300° and level off at 8000ft. Continue on course 300° to intercept 270° bearing to station. Fly the 270° bearing to CC NDB.....</p> <p>En-Route. <u>Left Holding Pattern</u> ... At CC NDB enter a Left Holding pattern for one circuit. Begin descent to 6000ft. (Turn left to 090° – on reaching 090° fly for one-minute then turn left to 270° – Return to CC NDB making whatever course adjustments are needed to arrive on the 270° bearing)</p>				38	22	22
					7	4	26

	<u>To GOLF Waypoint</u> ...Maintain course 270° as you depart CC NDB. Tune your ADF to 268.0. You have reached GOLF Waypoint when your ADF Needle points to 360°.	7	3	29		
	<u>To SL NDB 268.0</u> ... At GOLF Waypoint, turn right to about 008° and fly direct to SL NDB, 268.0. Begin descent at GOLF to 4500ft	6	4	33		
	<u>Intercept and Fly the IGS</u> ... At SL NDB turn right to 045° and begin descent to 3500ft. Intercept and join the IGS. (The IGS Course is 088° so anticipate an intercept angle of 43°) Capture and fly the IGS as you would an ILS. Maintain 105 kts IAS until reaching the Outer Marker.	8	4	37		
	NOTE: I recommend that you temporarily stop your flight at the OM. Record your total flight time and save the flight. This allows you to refly just the latter part of this approach in case you are not totally pleased with your performance in following the Curved Light Path in to the Runway.					
	<u>Enter the Curved Light Path</u> ... At the Outer Marker drop two notches of flaps and lower your landing gear. Slow to 85 kts IAS. Stay on the IGS until reaching the <u>third light in</u> of the Curved Light Path.....	4	4	41		
	<u>Fly the Curved Light Path and Land</u> ... Turn off your Autopilot, and turn right to follow the curved light path. Closely monitor your ASI to maintain 85 kts and your VOR indicator to keep the Glide Slope needle centered. You will be high on lining up with Rwy 13 so adjust your rate of descent as necessary. Finish configuring your aircraft for landing and note the displaced landing threshold.....	2	2	43		
	<u>Taxi to the gate</u> ... Turn left off the runway and then another left to taxi to the gate of your choice. After the engines are shut down and you have recorded your flight time pat yourself on the back for completing a very difficult approach.		3	46		
	Once you are satisfied with your daytime VFR approaches you may wish to fly a night-time or IFR flight. Mixing in some crosswind will also add to the challenge.					
Flight No. 001-11	Arrival Airport Elev. - 15ft	Estimated totals for flight>>>		72nm		46 min