

# HAM FEST INDIA

## ARCCS ★ VU2GIN 2017

16 -17 DECEMBER, 2017

KOLKATA



GECO-HLZS-1

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## Summary of the 2017 India Trip

# G.E.C.O.

## Grassroots Emergency Communications Operations

# FOCUS



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**A GECO-WARC Presentation**  
**Grassroots Emergency Communications Operations-**  
**Wanderers Amateur Radio Club**

# Background Note

This is a report of my trip to India and various presentations given in Mumbai and Kolkata prior to Ham Fest India 2017. Thanks to all the Indian HAMs who made this trip so memorable.



**KI6GIG**  
**Greg Lee**



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[gecoradio@gmail.com](mailto:gecoradio@gmail.com) [wanderersarc@gmail.com](mailto:wanderersarc@gmail.com)

<http://www.neighborhoodlink.com/GECO>

# The presentations in India adapted materials from past programs by G. K. Lee



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E-mail: [gecoradio@gmail.com](mailto:gecoradio@gmail.com) [www.neighborhoodlink.com/GECO](http://www.neighborhoodlink.com/GECO)



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# Advisory Note

This presentation is formatted for viewing on a single computer screen by a few people.



For large group presentations, a narrator should read the slides with text not readily legible to the audience.



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# Trip Goals

This was my first trip to India.

The primary purpose was to present “EchoLink for EmComm” to Ham Fest India 2017.

The secondary purpose was to meet HAM friends:

- Basappa VU2NXM, known for ~6 years;
- Abdul VU2MF, known for 12 years;
- West Bengal Radio Club members, known since Feb 2017



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# The Itinerary

6 Dec: Depart LAX to BOM via AUH

7 Dec: Arr AUH; 7 hr layover

8 Dec: Depart AUH, Arr BOM (Mumbai)

9-12 Dec: Mumbai; meet with HAMs to give 2 presentations  
(MEWS, EchoLink) organized by Basappa VU2NXM

12 Dec: Depart BOM; Arr CCU (Kolkata) for meetings arranged  
by WBRC

13 Dec: St. Augustine Day School presentation

14 Dec: Jadavpur Univ meeting & radio interview; West Bengal  
Police Telecomm. meeting & presentation

15 Dec: F. Harley & Co. meeting and presentation

16-17 Dec: Ham Fest India 2017 (presentation 17 Dec.)

18-20 Dec: touring West Bengal with Chandra VU2ZHJ

21 Dec: Depart CCU to LAX via AUH

21-22 Dec: Arr AUH (7 hr layover); Depart AUH; Arr LAX



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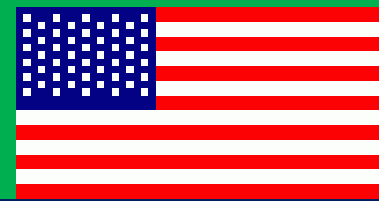
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# LAX



6 Dec



33.942494 N, 118.408046 W, 39 m amsl, UTC-8

Google

## Los Angeles International Airport, California, USA

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# Selected Los Angeles Facts

Area: 502.76 sq mi (1,302.15 km<sup>2</sup>); Population: 13,131,431 (2016)  
 Los Angeles is the second most populous city in the US (after New York). It is the largest city in California by population.

Climate data for Los Angeles (USC, Downtown), 1981–2010 normals, extremes 1877–present													[hide]
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °F (°C)	95 (35)	95 (35)	99 (37)	106 (41)	103 (39)	112 (44)	109 (43)	106 (41)	113 (45)	108 (42)	100 (38)	92 (33)	113 (45)
Mean maximum °F (°C)	83.3 (28.5)	84.3 (29.1)	85.8 (29.9)	91.2 (32.9)	89.7 (32.1)	90.2 (32.3)	94.1 (34.5)	95.3 (35.2)	98.9 (37.2)	95.5 (35.3)	88.0 (31.1)	81.4 (27.4)	102.7 (39.3)
Average high °F (°C)	68.2 (20.1)	68.6 (20.3)	70.2 (21.2)	72.7 (22.6)	74.5 (23.6)	78.1 (25.6)	83.1 (28.4)	84.4 (29.1)	83.1 (28.4)	78.5 (25.8)	72.8 (22.7)	67.7 (19.8)	75.2 (24)
Daily mean °F (°C)	58.0 (14.4)	58.9 (14.9)	60.6 (15.9)	63.1 (17.3)	65.8 (18.8)	69.2 (20.7)	73.3 (22.9)	74.3 (23.5)	73.1 (22.8)	68.6 (20.3)	62.4 (16.9)	57.6 (14.2)	65.4 (18.6)
Average low °F (°C)	47.8 (8.8)	49.3 (9.6)	51.0 (10.6)	53.5 (11.9)	57.1 (13.9)	60.3 (15.7)	63.6 (17.6)	64.1 (17.8)	63.1 (17.3)	58.7 (14.8)	52.0 (11.1)	47.5 (8.6)	55.7 (13.2)
Mean minimum °F (°C)	41.3 (5.2)	42.9 (6.1)	44.9 (7.2)	48.4 (9.1)	53.6 (12)	57.2 (14)	61.2 (16.2)	61.8 (16.6)	59.2 (15.1)	54.1 (12.3)	45.0 (7.2)	40.8 (4.9)	39.1 (3.9)
Record low °F (°C)	28 (−2)	28 (−2)	31 (−1)	36 (2)	40 (4)	46 (8)	49 (9)	49 (9)	44 (7)	40 (4)	34 (1)	30 (−1)	28 (−2)
Average rainfall inches (mm)	3.12 (79.2)	3.80 (96.5)	2.43 (61.7)	0.91 (23.1)	0.26 (6.6)	0.09 (2.3)	0.01 (0.3)	0.04 (1)	0.24 (6.1)	0.66 (16.8)	1.04 (26.4)	2.33 (59.2)	14.93 (379.2)
Average rainy days (≥ 0.01 in)	6.1	6.4	5.5	3.2	1.3	0.6	0.3	0.3	1.0	2.5	3.3	5.2	35.7
Mean monthly sunshine hours	225.3	222.5	267.0	303.5	276.2	275.8	364.1	349.5	278.5	255.1	217.3	219.4	3,254.2
Percent possible sunshine	71	72	72	78	64	64	83	84	75	73	70	71	73
Source: NOAA (sun 1961–1977) <sup>[79][80][81]</sup>													
Climate data for Los Angeles (LAX), 1981–2010 normals, extremes 1944–present													[show]
Climate data for Los Angeles (Canoga Park, in the San Fernando Valley)													[show]



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# Leg 1: LAX-AUH



Etihad Airways

Flt EY 170

Boeing 77L

13,502.4 km /

8,390 mi

15 h 55 m

It was dark when  
we took off at  
16:05, 6 Dec.

The entire flight  
was in darkness.

Arrived AUH  
20:00, 7 Dec.



6-7 Dec



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# AUH



7-8 Dec



24.432972 N, 54.651138 E, 27 m amsl;  
UTC +4

International (Nadia International), United Arab  
Emirates

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# Selected Abu Dhabi Facts

Area: 67,340 km<sup>2</sup> (26,000 sq mi); Population: ~2,784,000 (2017)

Abu Dhabi is the capital and most populous city of the United Arab Emirates.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High °C	24	25	29	33	38	40	42	42	40	36	31	26
High °F	75	77	84	91	100	104	108	108	104	97	88	79
Low °C	12	14	17	20	23	25	28	29	26	22	18	15
Low °F	54	57	63	68	73	77	82	84	79	72	64	59
mm	10	20	10	10	10	10	10	10	10	10	10	10
Days	6	3	6	3	0	0	0	0	0	0	1	3



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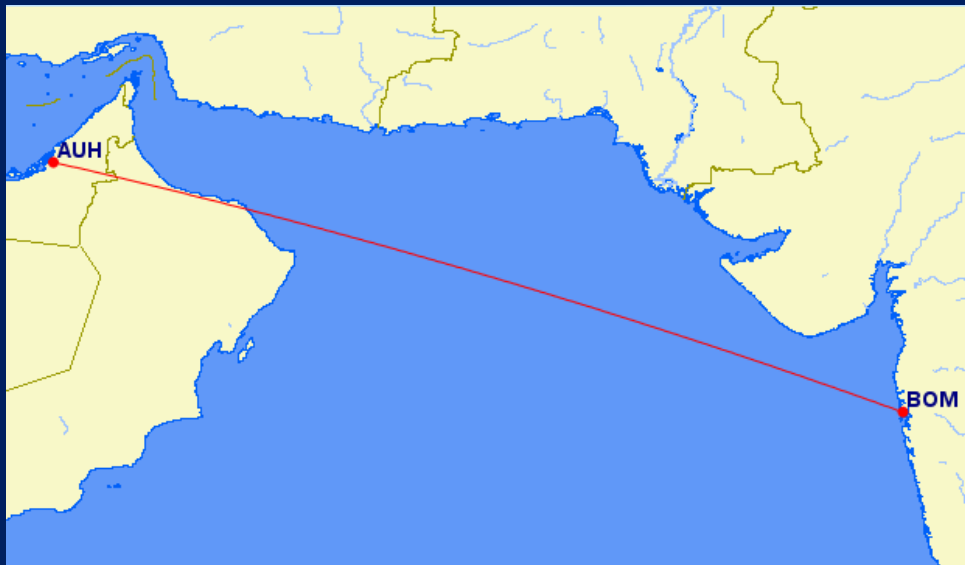
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# Leg 2: AUH-BOM

الإتihad  
ETIHAD  
AIRWAYS

8 Dec



Etihad Airways Flt EY 212, Airbus 321; 1,973 km / 1,226 mi; 3h 25 m

The flight departed AUH, 8 Dec, 03:20 in darkness. We flew Eastward into the dawn. We touched down in Mumbai at 08:15, 8 Dec 2017.



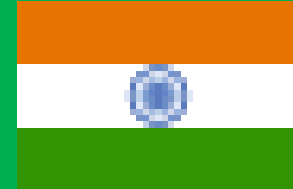
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# BOM



8 Dec



19.088686 N, 72.867919 E, 11m amsl; UTC +5:30

Image © 2017 DigitalGlobe

Chhatrapati Shivaji International (Sahar International),  
Maharashtra, India

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# Selected Mumbai Facts

Area: 4,355 km<sup>2</sup> (1,681.5 sq mi);

Population: 21,690,000 (2017)

Mumbai is the richest city in India with more billionaires and millionaires than any other city in India.

Climate data for Mumbai (Chhatrapati Shivaji International Airport)													[hide]
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	37.1 (98.8)	39.6 (103.3)	41.7 (107.1)	42.2 (108)	41.0 (105.8)	37.1 (98.8)	34.8 (94.6)	33.5 (92.3)	36.4 (97.5)	37.9 (100.2)	37.4 (99.3)	39.8 (103.6)	42.2 (108)
Average high °C (°F)	30.7 (87.3)	31.2 (88.2)	32.5 (90.5)	33.0 (91.4)	33.3 (91.9)	32.1 (89.8)	30.0 (86)	29.6 (85.3)	30.4 (86.7)	33.2 (91.8)	33.5 (92.3)	32.0 (89.6)	31.8 (89.2)
Average low °C (°F)	16.8 (62.2)	17.8 (64)	21.0 (69.8)	23.9 (75)	26.3 (79.3)	26.0 (78.8)	24.9 (76.8)	24.7 (76.5)	24.3 (75.7)	23.4 (74.1)	20.9 (69.6)	18.6 (65.5)	22.4 (72.3)
Record low °C (°F)	7.4 (45.3)	8.5 (47.3)	13.8 (56.8)	16.9 (62.4)	20.2 (68.4)	19.8 (67.6)	21.2 (70.2)	19.4 (66.9)	20.7 (69.3)	16.7 (62.1)	13.3 (55.9)	10.6 (51.1)	7.4 (45.3)
Average rainfall mm (inches)	0.6 (0.024)	1.3 (0.051)	0.2 (0.008)	0.7 (0.028)	12.5 (0.492)	523.1 (20.594)	799.7 (31.484)	529.7 (20.854)	312.3 (12.295)	55.8 (2.197)	16.8 (0.661)	5.3 (0.209)	2,258 (88.898)
Average rainy days	0.1	0.1	0.0	0.1	0.7	14.5	23.2	21.4	14.4	3.0	1.0	0.4	78.9
Average relative humidity (%)	69	67	69	71	70	80	86	86	83	78	71	69	75
Mean monthly sunshine hours	269.5	257.6	274.3	283.7	296.2	148.6	73.4	75.9	165.1	240.2	245.8	253.2	2,583.5
Source #1: India Meteorological Department (Period 1961–1990, record high and low up to 2010) <sup>[161][159]</sup>													
Source #2: NOAA (humidity, sun 1971–1990) <sup>[162]</sup>													

December is a great time of the year for a visit.



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# Welcomed at Mumbai



Dinar VU3NXZ, Aniket VU3LOL, Greg  
KI6GIG, Basappa VU2NXM

8 Dec



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# Bawa Hotel Continental

8 Dec



Home during my stay in Mumbai.



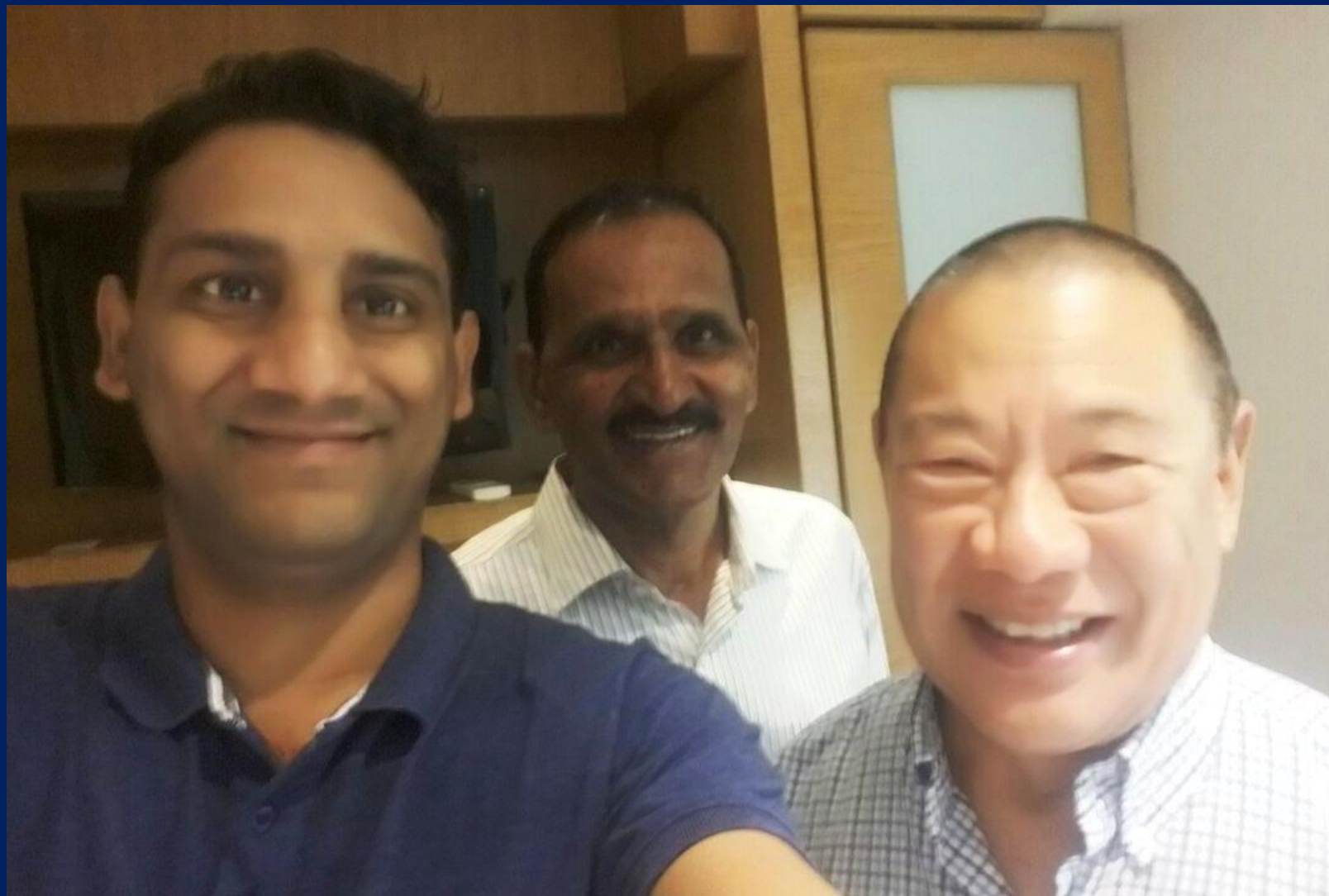
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# Another Mumbai Host



9 Dec



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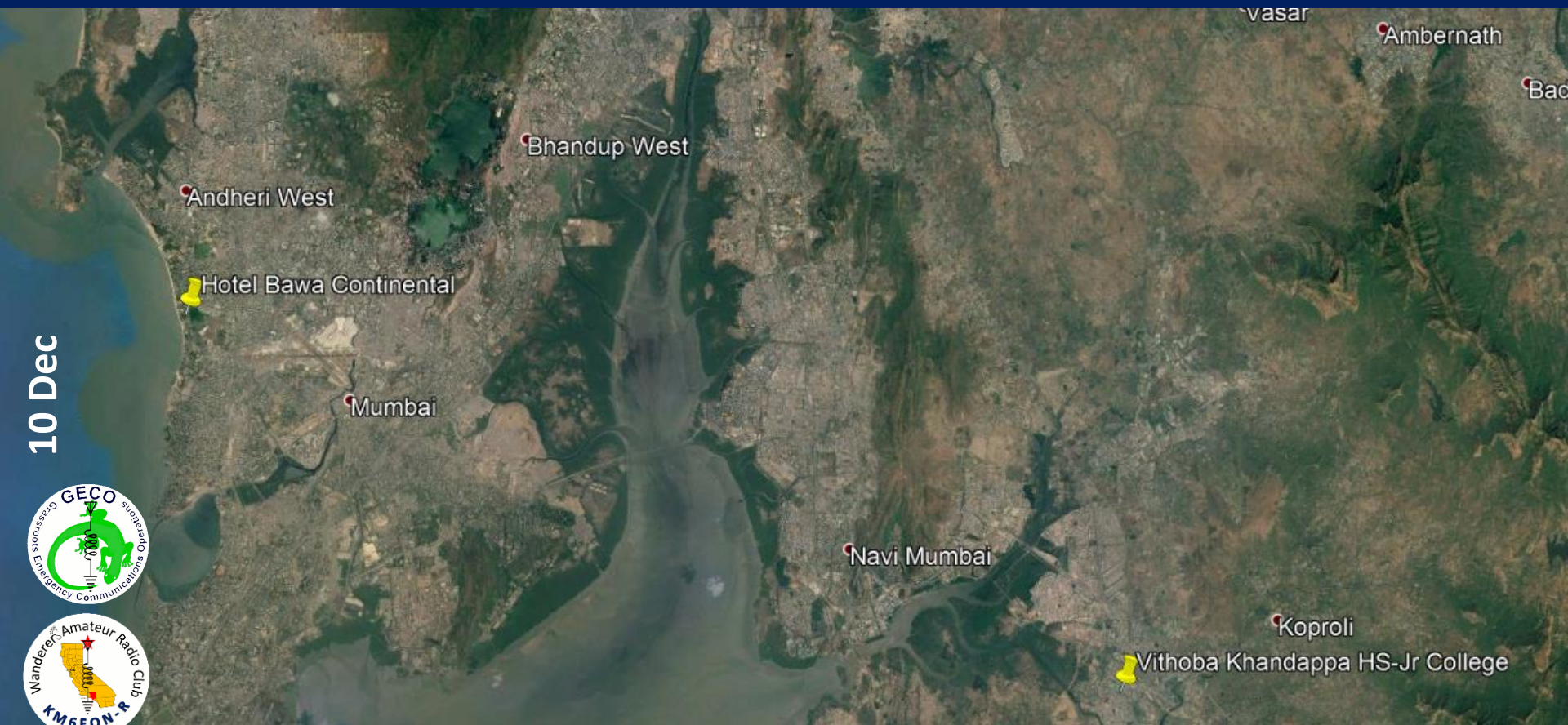
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Sriraj VU3ONE, Basappa VU2NXM, Greg KI6GIG



# Panvel Location Map



Basappa VU2NXM arranged for me to give 2 presentations at the Vithoba Khandappa HS-Jr College where he often does HAM license exam training.



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# Vithoba Khandappa High School



Vithoba Khandappa HS-Jr College where Basappa often does HAM license exam training.

10 Dec



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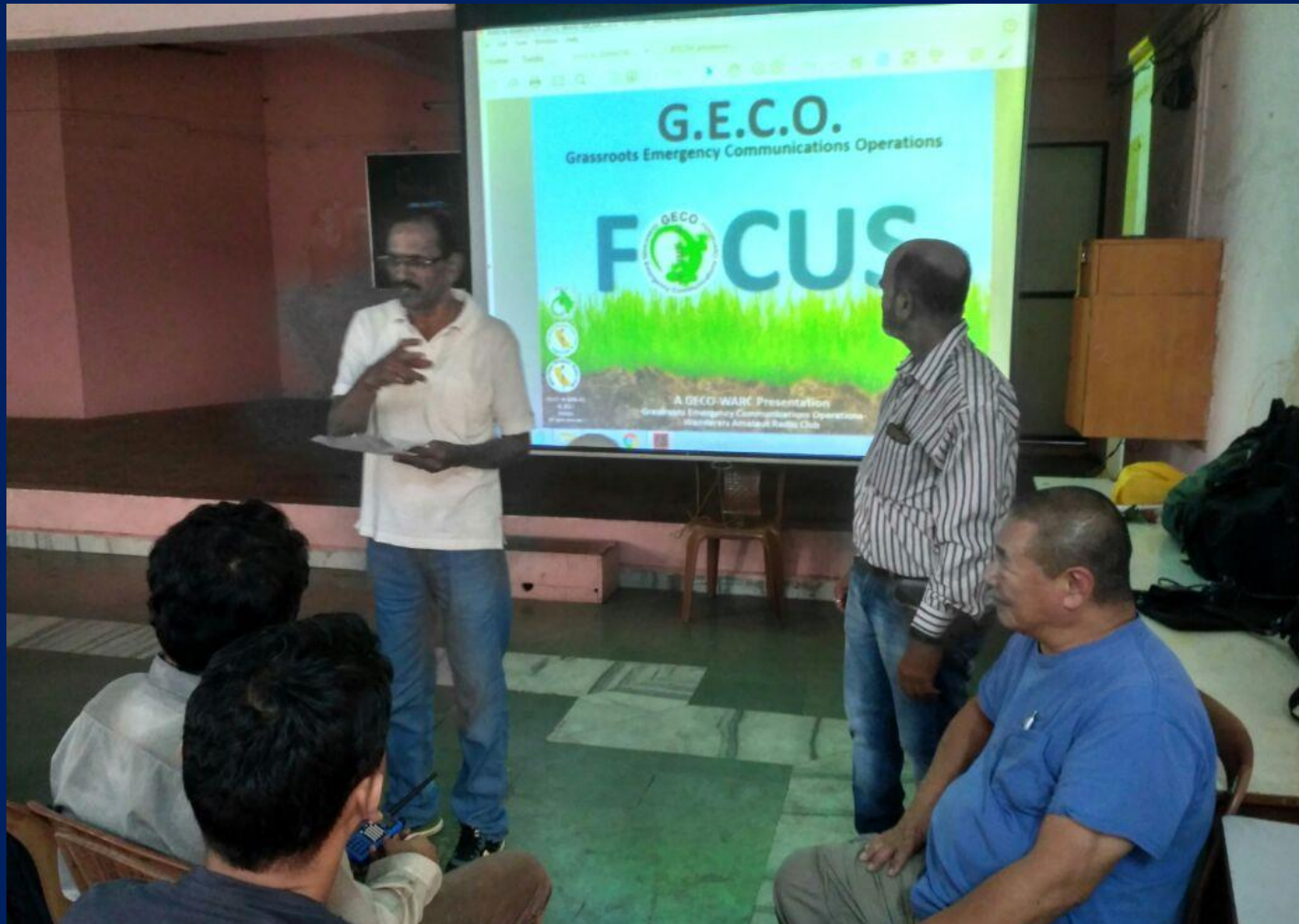
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# HAM Meeting in Panvel



Basappa VU2NXM struggling to summarize my diverse background and activities to introduce me.

10 Dec



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# HAM Meeting in Panvel



Many of these HAMs are long-time CW Dxers.  
However, they were open to learning about  
MEWS and EchoLink.

10 Dec



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# Two Presentations at Panvel

There was interest in MEWS (Mobile Emergency Weather Station) and EchoLink.

10 Dec



## A Brief Introduction to **M.E.W.S.** Mobile Emergency Weather Station



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HS0ZHM

Rural Training Center-Thailand  
Emergency Communications Program

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[www.neighborhoodlink.com/org/rtcth](http://www.neighborhoodlink.com/org/rtcth)

**FFI:** [OA MEWS: A Brief Introduction](#)

## G.E.C.O.

Grassroots Emergency Communications Operations

### *Introduction to EchoLink*

Worldwide Communications



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A GECO-MEWS Presentation

Grassroots Emergency Communications Operations- Mobile Emergency Weather Station

GECO-MEWS #EL-1 - GERC Ed. V3

**FFI:** [Introduction to EchoLink \(GERC V5\)](#)

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# HAM Meeting in Panvel



The attendees were from a variety of HAM clubs and groups in the Mumbai area. Basappa trained many of them.

10 Dec



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# MEWS Training Over Meal



Aniket VU3LOL and Dinar VU3NXZ get more MEWS training before I leave Mumbai.

11 Dec



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# We Depart Mumbai

Basappa's daughter  
sees us off.



12 Dec



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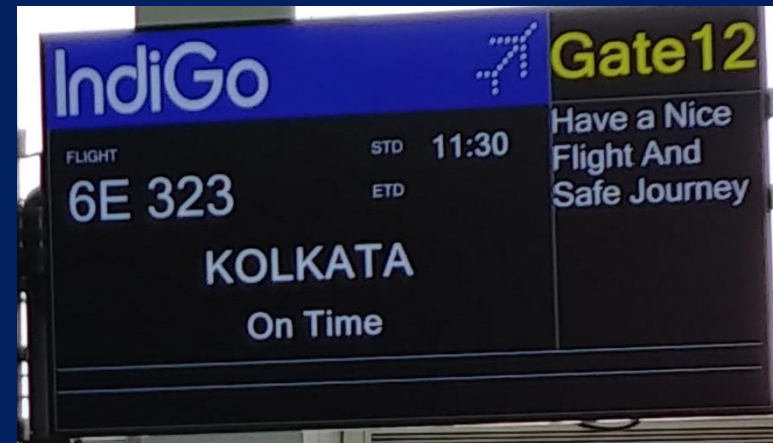
# Leg 3: BOM-CCU

IndiGo™



IndiGo Airlines  
Flt 6E 323  
Airbus 320  
1,669 km / 1,037  
mi  
4 h 20 m

An unusual airport terminal:  
No announcements of flights.  
You have to watch the gate  
signs carefully.



12 Dec



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# CCU



12 Dec



22.654739 N, 88.446722 E; 5 m amsl; UTC +5:30

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## Netaji Subhash Chandra Bose International Airport, Kolkata, West Bengal, India

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# Selected Kolkata Facts

Area: 1,886.67 km<sup>2</sup> (728.45 sq mi); Population: 5,290,862 (2017)

Kolkata is noted as being the cultural and educational hub of East India. It has the oldest operating port in East India.

Kolkata is the third richest city in India after Mumbai and Delhi.

Climate data for Kolkata (Alipore) 1971–1990													[hide]
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	32.8 (91)	38.4 (101.1)	41.1 (106)	43.3 (109.9)	43.7 (110.7)	43.9 (111)	39.9 (103.8)	38.4 (101.1)	38.9 (102)	39.0 (102.2)	34.9 (94.8)	32.5 (90.5)	43.9 (111)
Average high °C (°F)	26.4 (79.5)	29.1 (84.4)	33.5 (92.3)	35.3 (95.5)	35.4 (95.7)	34.0 (93.2)	32.3 (90.1)	32.1 (89.8)	32.4 (90.3)	32.3 (90.1)	30.3 (86.5)	27.0 (80.6)	31.7 (89.1)
Daily mean °C (°F)	20.1 (68.2)	23.0 (73.4)	27.6 (81.7)	30.2 (86.4)	30.7 (87.3)	30.3 (86.5)	29.2 (84.6)	29.1 (84.4)	29.1 (84.4)	28.2 (82.8)	24.9 (76.8)	20.8 (69.4)	26.9 (80.4)
Average low °C (°F)	13.8 (56.8)	16.9 (62.4)	21.7 (71.1)	25.1 (77.2)	26.0 (78.8)	26.5 (79.7)	26.1 (79)	26.1 (79)	25.8 (78.4)	23.9 (75)	19.6 (67.3)	14.5 (58.1)	22.2 (72)
Record low °C (°F)	6.7 (44.1)	7.2 (45)	10.0 (50)	16.1 (61)	17.9 (64.2)	20.4 (68.7)	20.6 (69.1)	22.6 (72.7)	20.6 (69.1)	17.2 (63)	10.6 (51.1)	7.2 (45)	6.7 (44.1)
Average rainfall mm (inches)	11 (0.43)	30 (1.18)	35 (1.38)	60 (2.36)	142 (5.59)	288 (11.34)	411 (16.18)	349 (13.74)	288 (11.34)	143 (5.63)	26 (1.02)	17 (0.67)	1,800 (70.87)
Average rainy days (≥ 1.0 mm)	1.2	2.2	3.0	4.8	8.7	14.7	20.5	20.2	15.7	8.1	1.5	0.9	101.5
Average relative humidity (%)	66	58	58	66	70	77	83	83	81	73	67	68	71
Mean monthly sunshine hours	203.9	201.2	225.8	235.4	227.1	123.1	93.1	104.9	116.2	182.6	190.6	203.4	2,107.5

Source #1: NOAA<sup>[76]</sup>

Source #2: India Meteorological Department (record high and low up to 2010)<sup>[77]</sup>

December is a great time of the year for a visit.



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# Kolkata: Home of HAM Radio in India



“Kolkata is the City of Joy..... And also the birthplace of Amateur Radio. Shri Acharya Jagadish Chandra Bose, the father of wireless communication, discovered and exhibited the existence of electromagnetic waves in the year 1894 in the Town Hall of Kolkata, in the presence of Lieutenant Governor Sir William Mackenzie. Sir William Mackenzie watched and documented the demonstration by Shri Acharya Jagadish Chandra Bose. This event was three years before the famous wireless experiment

of Marconi in the year 1897. Also mentionable is the fact the first two amateur radio operators in India were from Kolkata. Shri Amarendra Chandra Gooptu (callsign 2JK) and Shri Mukul Bose (2HQ) got their amateur radio operator's licence in 1921 and the first two-way ham radio communication in the country was done in Kolkata. (In 1929, the VU prefix came into effect in India). So Kolkata holds a special place in the history of Amateur Radio.”



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---Hamfest India 2017 website

# Welcomed in Kolkata



Basappa VU2NXM, Chandra VU2ZHJ, Greg  
KI6GIG, Surajit (SWL), Arnab VU3JWN  
(West Bengal Radio Club members)

12 Dec



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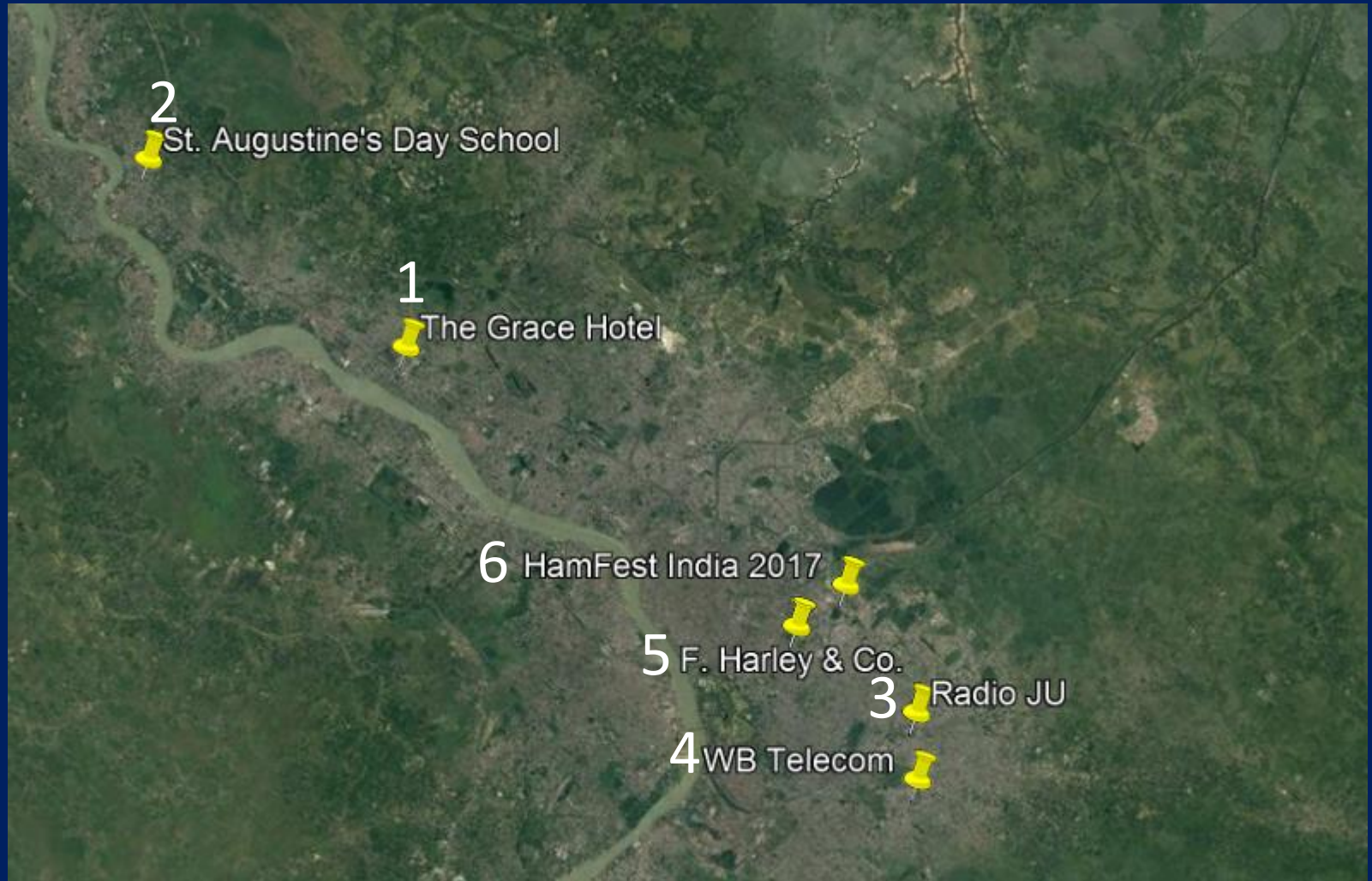
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# Location of Kolkata Activities



Locations for visits arranged by the West Bengal Radio Club.

12 Dec



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# #1: The Grace Hotel

12-18 Dec



Our home during Ham Fest India 2017.  
It's near the WBRC and Chandra VU3ZHJ.



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# We Meet Raju VU2JFA

12 Dec



Greg KI6GIG, Raju VU2JFA (West Bengal Radio Club), Basappa VU2NXM

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# #2: St. Augustine's Day School



13 Dec



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This is Chandra's VU3ZHI Ala Mater



# The Planned Presentation

This presentation was created prior to my departure to India. The topic changed at the last minute, so this was not shown to the students. Instead we gave a general introduction to HAM radio & live demo.

13 Dec



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The planned presentation is available at  
<http://www.neighborhoodlink.com/GECO/pages>

# Meeting Our Hosts



Saborni VU2JFC, Mr. S. J. Mishra (school Vice-Principal), Greg KI6GIG, and Basappa VU2NXM

13 Dec



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# Introducing HAM radio



These high school students are experienced English speakers and an attentive audience.

13 Dec



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# Q & A After the Presentation



Their questions showed curiosity and good comprehension.

13 Dec



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# Hands-on VHF Radio Demonstration



Amazingly more girls than boys were brave enough to try talking on the radio.

13 Dec



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# A Chance to Stimulate Young Minds



We presented the idea of setting up a HAM radio station on campus.

13 Dec



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# West Bengal Radio Club HAMs at St. Augustine's Day School



13 Dec



The WBRC hopes to recruit new HAMs and set up an amateur radio station at the school.

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# Night Visit to WBRC Station



13 Dec



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This is VU2MQT-L using a ICOM 2300H



# Night Visit to WBRC Station



Raju VU2JFA, Jayanta VU3YJB and Chandra VU2ZHJ working on the EchoLink interface trying to have it ready for the West Bengal Police Telecom presentation.

13 Dec



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# #3: Jadavpur University



We met Prof. Suranjan Das, JU Vice-Chancellor to encourage JU to set up a HAM radio station and HAM training linked to Disaster Management Training.

14 Dec



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# Radio JU 90.8 MHz FM Station Interview

Participated in a taped interview for a multi-part radio series about HAM radio. It would be broadcast over the next few weeks locally.



14 Dec



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# Radio JU 90.8 MHz FM Station Calendar

14 Dec

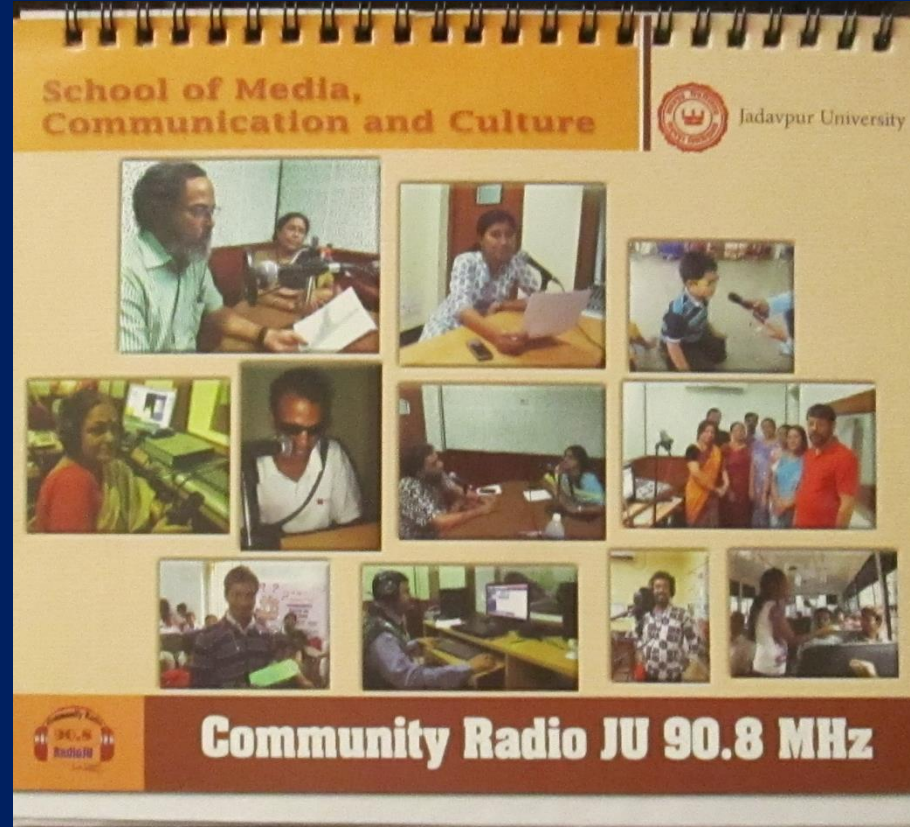


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We received a Radio JU souvenir calendar

# #4: West Bengal Police Telecom Dept.



The West Bengal Radio Club delegation with Dr.  
B. Roy, ISP

14 Dec



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# Meeting with Dr. B. Roy, ISP

Additional Director General & Inspector General of Police



We discussed HAM radio and EchoLink for emergency communications relative to West Bengal Police communications.

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# West Bengal Police Telecommunications Meeting

We presented an introduction to HAM radio, EchoLink, and selected topics requested by the WBP Telecom department.

This is a partial presentation does not include the part done by the West Bengal Radio Club.



14 Dec



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It is available at

<http://www.neighborhoodlink.com/GECO/pages>



# #5: F. Harley & Co. Meeting



Introduced HAM radio and discussing S.E.E.D.S. and education with Mr. Alok Baran Patra, Mr. Debpratim Sen, Subir VU3ZSD, Mr. Nirav Shah, Greg KI6GIG, and Chandra VU3ZHJ.

15 Dec



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# #6: Ham Fest India 2017



Welcoming performance of traditional West Bengal music performed by college students

16 Dec



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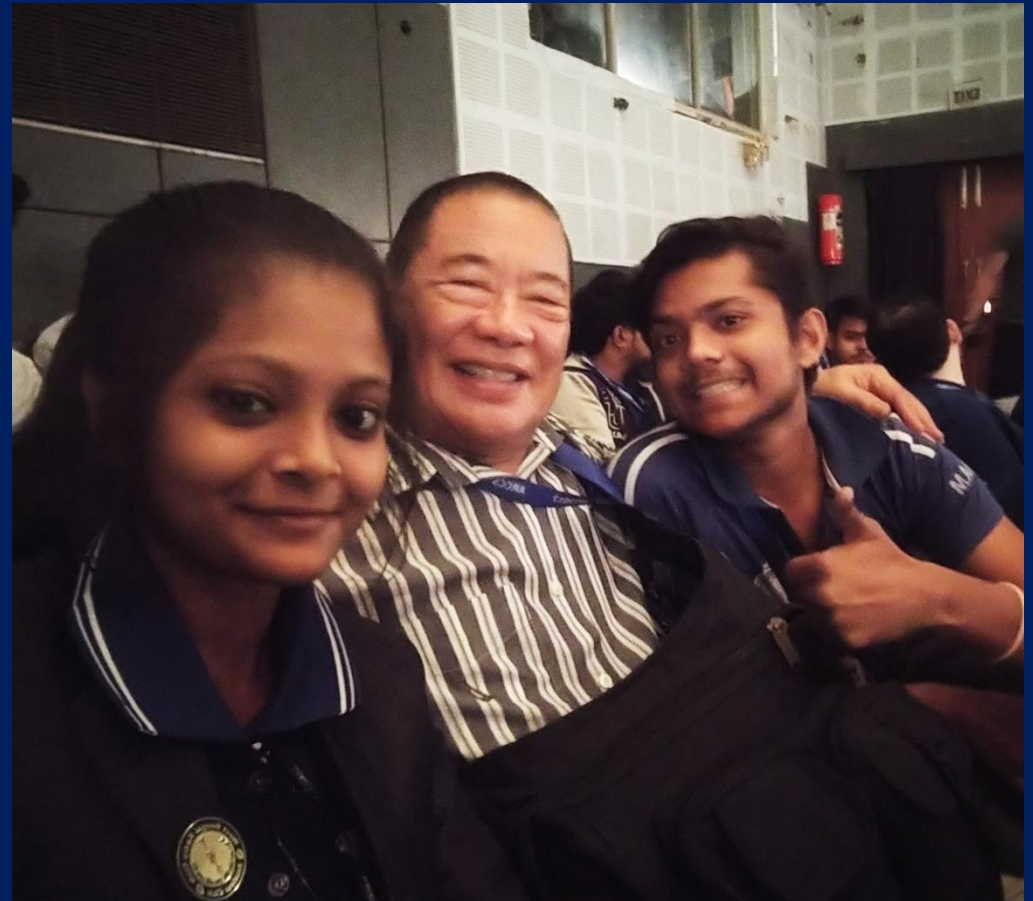
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# Ham Fest India 2017



Saborni VU2JFC, Greg KI6GIG, Chandra  
VU3ZHJ in the main auditorium.

16 Dec



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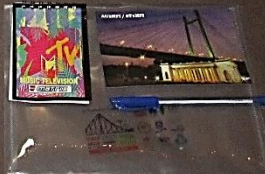
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# Ham Fest India 2017

16 Dec



Included but not shown in the photo above: HFI 2017 T-shirt and cap.



## Participant Packet



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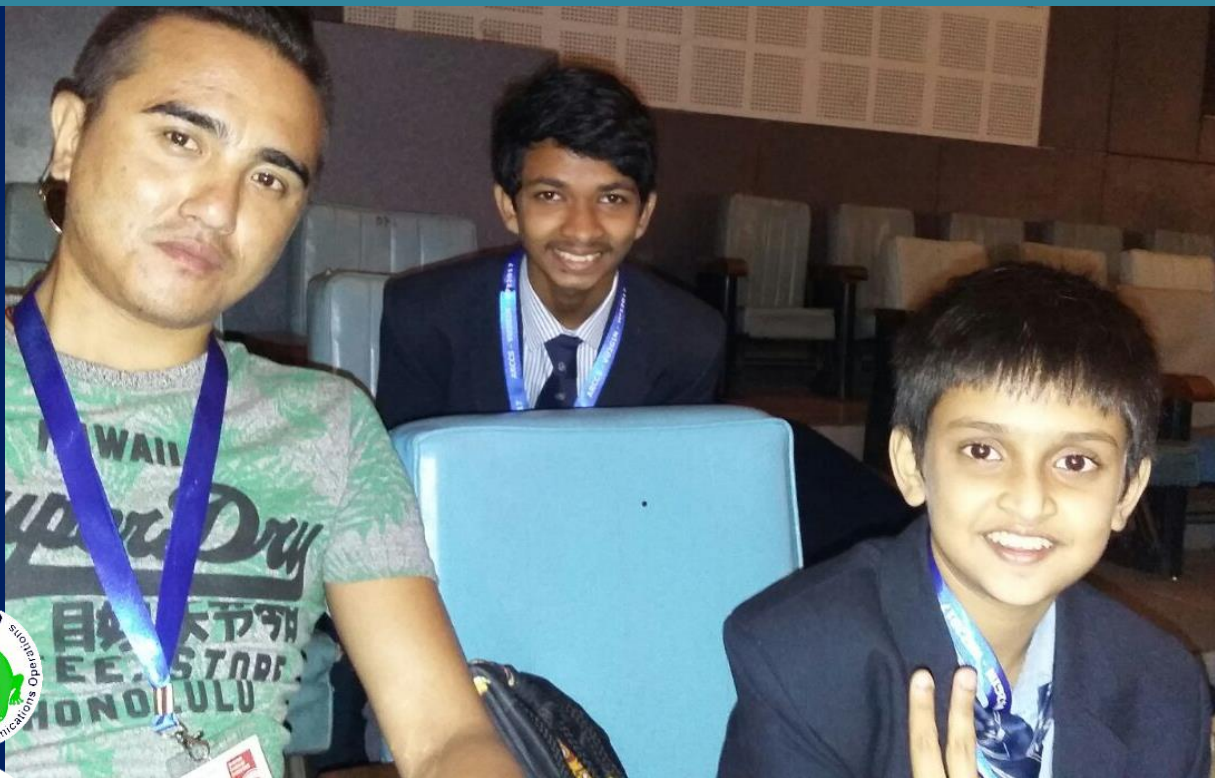
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# Live Streaming Video Team

16 Dec



These young students  
streamed live video of HFI  
2017 supervised by Ritez Tam.



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# Ham Fest India 2017



Old friends Basappa VU2NXM, Abdul VU2MF  
and new West Bengal Radio Club friends

16 Dec



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# Ham Fest India 2017



West Bengal Radio Club and their assorted  
HAM radio friends



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# Observing the FCC Licensing Exams

16 Dec



The VEs are (L to R): Peter AB1QH/VU2EPT, Ganesh KJ4VMC, Sudesh KD2ART/VU2, Greg KI6GIG, Basappa VU2NXM, Suresh AB9US/VU2IPL

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# Some WBRC Members at HFI 2017



Surajit (SWL), , Gourav VU3JXG, Chandra VU3ZHJ, Greg KI6GIG, Deb VU3JXA, Arnab VU3JWN

16 Dec



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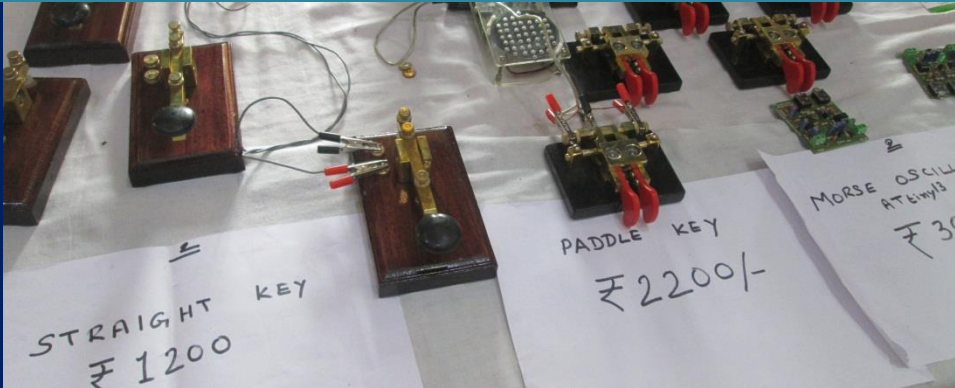
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# Exhibitors

There were a handful of exhibitors. Most were homebrewed equipment (Morse keys, antennas, and even radios).



16 Dec



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# West Bengal Radio Club Meeting

16 Dec



I received numerous mementos for supporting WBRC activities.

- A ceremonial shawl of respect
- Life-time WBRC membership
- WBRC Member ID card
- WBRC pin
- WBRC plaque
- WBRC key chain



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# Club to Club Donations

The Mid-Cities Amateur Radio Club & Wanderers Amateur Radio Club donated an N9TAX roll-up emergency dual band Slim Jim antenna, 2 Easy Digi kits, and a sound card interface proto-type by Joe N6WZK to the WBRC.

We hope VU2MQT-L will be up and running soon!

15 Dec



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# Appreciation / Recognition

17 Dec



In appreciation and recognition for their WBRC efforts, both Raju VU2JFA and Chandra VU3ZHJ were each presented with certificates and Ed Fong DBJ1 roll-up emergency dual band antennas for the HTs.



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# Recognition of WBRC Women Hams

Women in India  
buck a lot of  
tradition to get  
out of the home  
and serve the  
community with  
HAM radio. Joe  
N6WZK & I

decided to recognize the WBRC women HAMs  
with a Certificate and customized key ring from  
the Mid-Cities Amateur Radio Club and the  
Wanderers Amateur Radio Club.



*Rinku VU3JFB, XYL of Raju VU2JFA*

15 Dec



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# WBRC Women Hams



VU2JFC



VU3JFB



VU3JXC



VU3YSQ



VU3ZHH



VU3ZHM

The custom key ring featured their call sign in a unique HAM radio diamond design.

15 Dec



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# VU2JFC Special Recognition



The Mid-Cities ARC and Wanderers ARC presented Saborni VU2JFC with a ball cap and T-shirt customized with her new VU2JFC call sign. At 17, Saborni is the youngest WBRC member and youngest WBRC General class license

holder and the youngest General class license holder in India.

17 Dec



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# Members Draw for Prizes

The Mid-Cities ARC and Wanderers ARC donated 4 Multi-meters and several KI6GIG Eyeball QSO key rings through random drawings. Some of the winners:



HAM  
Helping All  
Mankind



Eyeball QSO  
KI6GIG Kolkata  
2017 Dec



“Deep” VU3YDA won a  
function multi-meter.



Arunava VU3XRY won an  
Eyeball QSO key ring.

15 Dec



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# West Bengal Radio Club Meeting

Unfortunately, there was not enough time to show the presentation on the KI6GIG QTH

16 Dec



I left a copy with Chandra VU2ZHJ for the WBRC to view at a future meeting.



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It is available at

<http://www.neighborhoodlink.com/GECO/pages>



# Getting Ready for the Presentation

17 Dec



We are slated as the first presentation for the second day of Ham Fest India 2017



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# Ham Fest India 2017 Presentation



17 Dec



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# Ham Fest India 2017 Presentation



The presentation was the first session held on the second day of HFI 2017. Thanks to Basappa's efforts, it was standing room only.

17 Dec



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# Ham Fest India 2017



Greg KI6GIG, Sara VU3RSB, and Gopal VU2GMN.  
VU3RSB gave a presentation introducing EchoLink at HFI  
2003.



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# New & Old HAM Friends



Greg KI6GIG, Rama VU2MYL, Munny VU3GWM,  
and Abudl VU2MF

17 Dec



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# Meeting Some Top Gun Indian HAMs



Balu VU3EXB, Joshi VU2BRJ, Greg KI6GIG,  
Basappa VU2NXM, Om VU2KOC, Rama VU2MYL

17 Dec



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# Post HFI 2017 India Media Coverage



Nationally televised interview in English a few days after HFI 2017.



Interview in English recorded at HFI 2017 was aired on nationally All India Radio about a week later.



Interview in English recorded 14 Dec was aired on locally JU community radio about a week later.

17 Dec



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# Leg 4: CCU-AUH



Etihad Airways

Flt EY 225

Airbus 320

3,449 km /

2,143 mi

5 h 40 m

21 Dec



This was a night flight. It took off from CCU at 20:50, 21 Dec and landed at AUH at 01:00, 22 Dec. I had a window seat mainly to lean on the bulkhead and try to sleep.



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# CCU



21 Dec



22.654739 N, 88.446722 E; 5 m amsl; UTC +5:30

Image © 2017 DigitalGlobe



## Netaji Subhash Chandra Bose International Airport, Kolkata, West Bengal, India

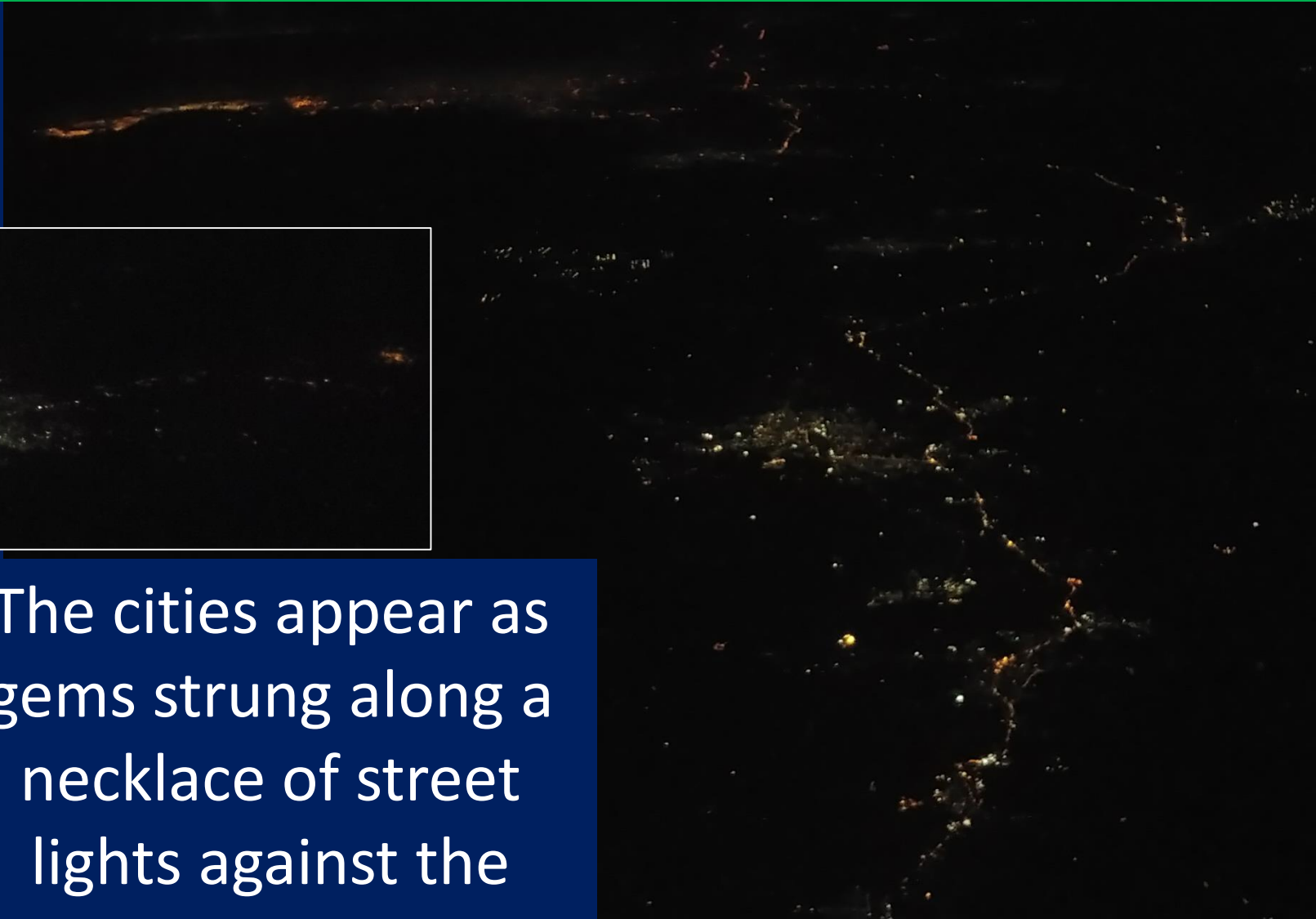
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# An Unexpected View of India at Night



The cities appear as  
gems strung along a  
necklace of street  
lights against the  
darkened landscape.

21 Dec



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# An Unexpected View of Oman at Night

Low pressure sodium street lights seem like gold chains linking jeweled cities suggesting the desert riches of Oman.



21 Dec



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# An Unexpected View of AUH at Night



The night lights approaching AUH hint at the  
wealth of gold and silver here.

21 Dec



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# AUH



7-8 Dec



24.432972 N, 54.651138 E, 27 m amsl;  
UTC +4

International (Nadia International), United Arab  
Emirates

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# The 7 Hr Layover Made Longer

05:47

1 of 1

DEPARTURES

Sched.	Est.	Airline	Flight No.	Partner	To / Via	Term.	Gate	Status
08:30		9W	585	AB 9004	Mumbai	T3		Gate shown at 07:00
08:40		EY	278	9W 6649	Male	T3		Gate shown at 07:10
08:45		EY	171	9W 6537	Los Angeles	T3	59	Gate shown at 07:15
08:45		EY	321	AT 5521	Dammam	T2		Gate shown at 07:15
08:50		EY	097	9W 6395	Istanbul	T1		Gate shown at 07:20
08:50		EY	382	JU 8605	Muscat	T3		Gate shown at 07:20
08:50		EY	641	JU 8124	Nairobi	T1		Gate shown at 07:20
08:55		EY	029	AB 4237	Duesseldorf	T3		Gate shown at 07:25
08:55		EY	408	HX 1408	Bangkok	T1		Gate shown at 07:25
08:55		EY	622	KE 7985	Seychelles	T3		Gate shown at 07:25
09:00		EY	007	OK 3243	Frankfurt	T3		Gate shown at 07:30
09:00		EY	051	NZ 4241	Geneve	T3		Gate shown at 07:30
09:05		EY	037	HM 5018	Paris	T3		Gate shown at 07:35
09:05		EY	430	S7 4581	Phuket	T1		Gate shown at 07:35

Bad weather delayed the 22 Dec 08:45 departure by 2:30 hrs!!

22 Dec



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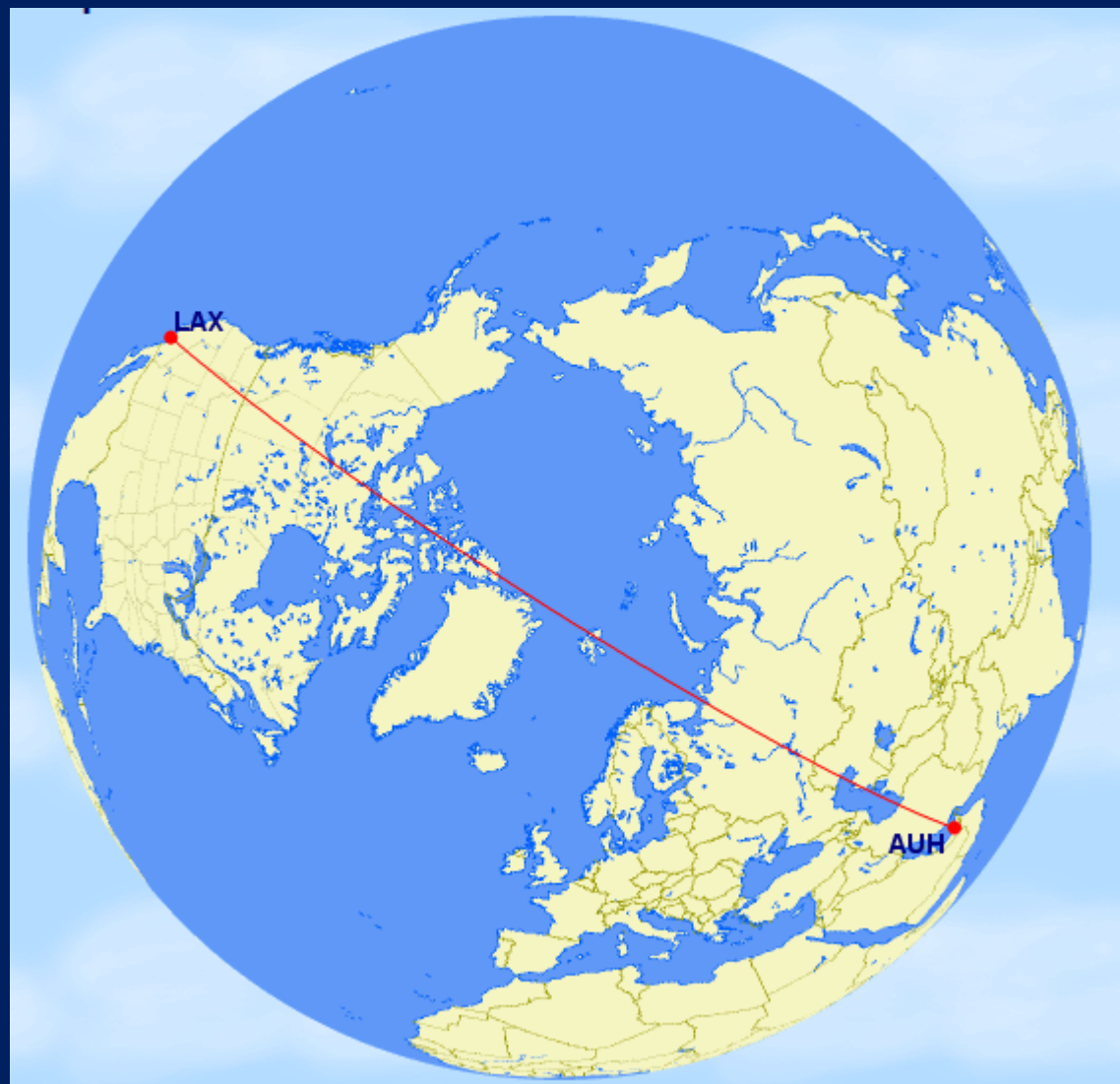
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# Leg 5: LAX-AUH

الإتihad  
ETIHAD  
AIRWAYS



Etihad Airways

Flt EY 171

Boeing 77L

13,502.4 km /

8390 mi

15 h 55 m

The flight was  
delayed by

2:30 hrs.

Finally got to  
LAX 16:15, 22

Dec.

22 Dec



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# View Over AUH



22 Dec



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Some of the fog that delayed our departure.



# Some Notable Landmarks

22 Dec



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# Arriving in Los Angeles

22 Dec



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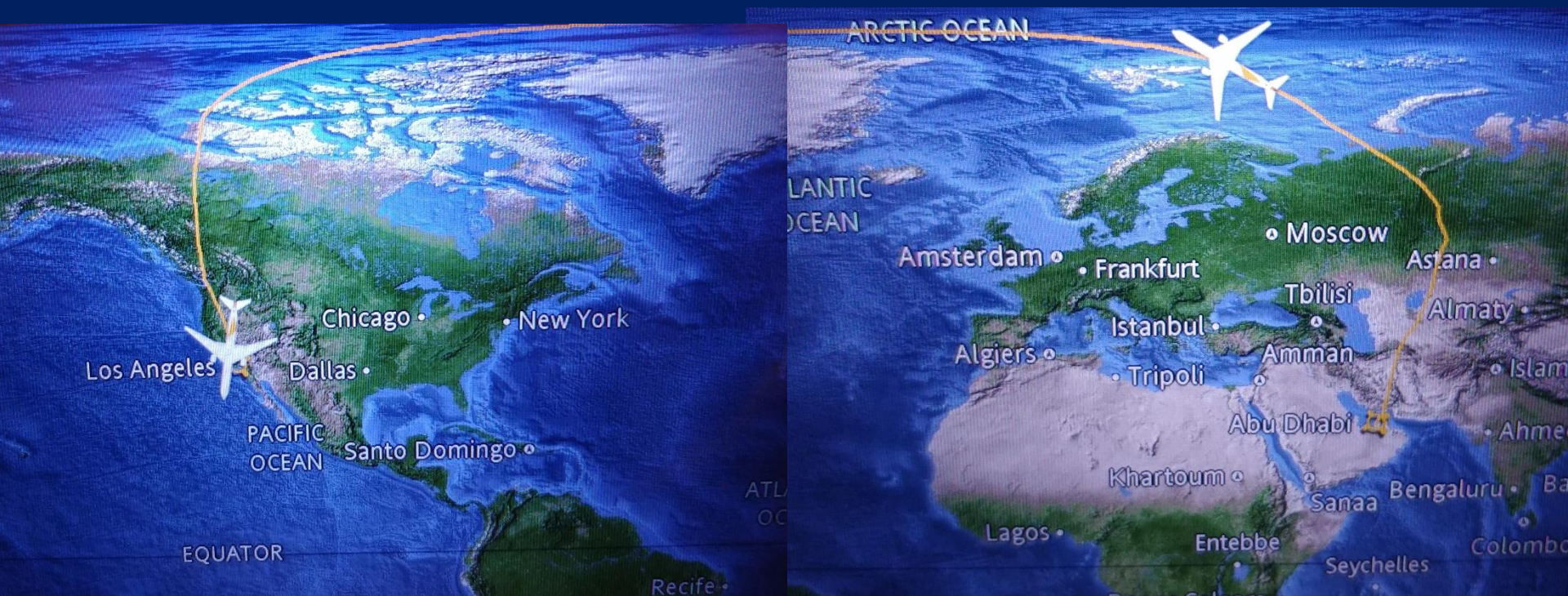
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A view of downtown LA on final for LAX.



# Homeward Route



This particular route was a new one for me. It was interesting to fly over Iran and to see some of the geology I worked with via remotes sensing in the mid-1970s. (The outbound flight was in darkness, so I didn't get to see the terrain.)



GECCO-HLZS-1

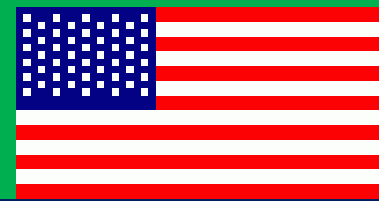
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# LAX



22 Dec



33.942494 N, 118.408046 W, 39 m amsl, UTC-8

Google

## Los Angeles International Airport, California, USA

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# Presentations Summary

## MUMBAI

- Intro to EchoLink
- Intro to MEWS

## KOLKATA

- Intro to Ham Radio-St. Augustine's Day School
- Intro to Ham Radio for EmComm-West Bengal Police Telecommunications Dept.
- Intro to Ham Radio-F. Harley & Co.
- EchoLink for EmComm-Ham Fest India 2017



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# Special Thanks to My Mumbai Hosts



Basappa VU2NXM

I collaborated with Basappa on a presentation given at Ham Fest India 2013.

## Basappa's Students & Fellow HAMs



Aniket VU3LOL



Sriraj VU3ONE



Dinar VU3NXZ



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# Special Thanks to My Kolkata Hosts



Ambarish "Raju" Nag Biswas VU2JFA  
Secretary / Custodian, West Bengal  
Radio Club.



Chandra  
VU3ZHJ  
primary  
visit  
coordinator



And some WBRC members.



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# Other EmComm Lessons: Basic MEWS



2012 Ed

Be sure to check [www.neighborhoodlink.com/RTC-TH\\_Tech/pages](http://www.neighborhoodlink.com/RTC-TH_Tech/pages) Note:  
Any revisions or updates after 2012 will be posted to  
<http://www.neighborhoodlink.com/GECO>



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# Other EmComm Lessons: Advanced MEWS

2012 Ed

## Advanced MEWS Weather Observing Lesson A1: Measuring Relative Humidity and Heat Stress



## Advanced MEWS Weather Observing Lesson A2: Measuring Wind Speed and Wind Chill



## Advanced MEWS Weather Observing Lesson A3: Using Dew Point Temperature to Calculate Cloud Base Height



## Advanced MEWS Weather Observing Lesson A4: Measuring Rainfall



## Advanced MEWS Weather Observing Lesson A5: Reporting Severe Weather



## Advanced MEWS Weather Observing Lesson A6: Weather Forecasting



Be sure to check [www.neighborhoodlink.com/RTC-TH\\_Tech/pages](http://www.neighborhoodlink.com/RTC-TH_Tech/pages) **Note:**  
Any revisions or updates after 2012 will be posted to  
<http://www.neighborhoodlink.com/GECO>



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# Other Emergency Preparedness Lessons

Available

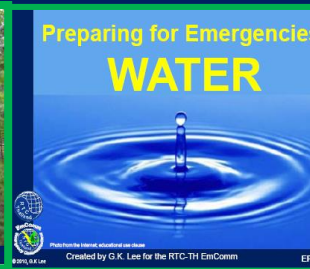
In Progress



EP-1



EP-2



EP-3



EP-4



EP-5



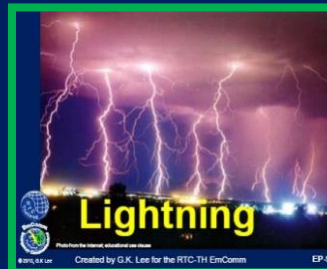
EP-6



EP-7



EP-8



EP-9



EP-10



EP-11



EP-12

Be sure to check [www.neighborhoodlink.com/RTC-TH\\_Tech/pages](http://www.neighborhoodlink.com/RTC-TH_Tech/pages) Note:  
Any revisions or updates after 2012 will be posted to  
<http://www.neighborhoodlink.com/GECO>







“Ready to serve  
and sustain our  
community.”



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# For More Information

Using HAM radio  
for education,  
emergency  
preparedness &  
communication,  
international  
understanding  
and friendship.



Greg,  
KI6GIG  
GECO Founder  
Author / Mentor

[gecoradio@gmail.com](mailto:gecoradio@gmail.com)

<http://www.neighborhoodlink.com/GECO>

# Community-based Education for

The



End



[gecoradio@gmail.com](mailto:gecoradio@gmail.com)

[wanderersarc@gmail.com](mailto:wanderersarc@gmail.com)

<http://www.neighborhoodlink.com/GECON>

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