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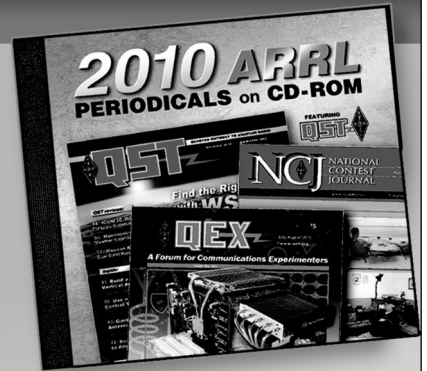
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QST Issue: Mar 1973

Title: Using the Heath SB650 with other than Heath Transceivers

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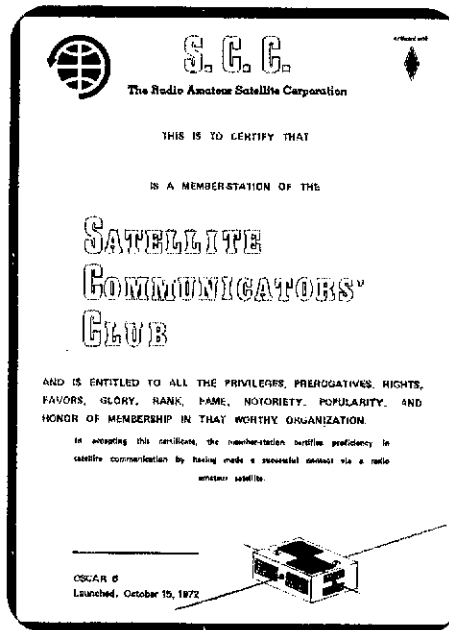
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Are you a member of the Satellite Communicators' Club? If you have been successful in making a two-way contact via Oscar 6 you can qualify. Just send (with s.a.s.e) the date and time of contact and call sign of the station worked to Amsat, P.O. Box 27, Washington, DC 20044.

recharge. In early January, the 435.1 MHz beacon began to exhibit extremely reduced performance. The signals are now copied only by stations especially well-equipped on this band. Amsat ground command stations have now begun using the 29.45 MHz beacon in order to continue to receive high-quality telemetry data. Oscar users are urged to avoid transmitting to the satellite in the 145.9 to 146.0 MHz uplink band from Monday through Thursday GMT. This is the battery recharge period and the time when command stations must receive spacecraft telemetry. This important activity is impaired if stations are simultaneously using the repeater. If you find the satellite ON during OFF days, please do not use the translator. Friday through Sunday GMT, when the repeater is available for communication, amateurs are requested to avoid having their signals repeated on or near the 29.45 MHz beacon frequency. - K1ZND and WA2INB



Oscar 6 Equator Crossings

Orbit	Date	Time (GMT)	Longitude (degrees W)
1720	March 2	0100	62.4
1733	March 3	0155	76.1
1745	March 4	0055	61.1
1808	March 9	0139	72.2
1820	March 10	0039	57.2
1833	March 11	0134	71.0
1895	March 16	0024	53.3
1908	March 17	0119	67.1
1920	March 18	0019	52.1
1983	March 23	0103	63.2
1995	March 24	0003	48.2
2008	March 25	0058	61.9
2071	March 30	0143	73.1
2083	March 31	0043	58.0
2096	April 1	0137	71.8
2158	April 6	0027	54.2
2171	April 7	0122	67.9
2183	April 8	0022	52.9
2246	April 13	0107	64.0
2258	April 14	0007	49.0
2271	April 15	0101	62.7
2334	April 20	0146	73.9
2346	April 21	0046	58.8
2359	April 22	0141	72.6
2421	April 27	0031	55.0
2434	April 28	0125	68.7
2446	April 29	0025	53.7
2509	May 4	0110	64.8
2521	May 5	0010	49.8
2534	May 6	0105	63.5
2597	May 11	0150	74.7
2609	May 12	0049	59.6
2622	May 13	0144	73.4
2684	May 18	0034	55.8
2697	May 19	0129	69.5
2709	May 20	0029	54.5
2772	May 25	0113	65.6
2784	May 26	0013	50.6
2797	May 27	0108	64.3

Technical Correspondence

(Continued from page 47)

To use the formula, one estimates the square root as accurately as possible, and then applies the formula. If the estimate is close to being correct, the answer, *B*, will actually be the true value of the square root (a fact which can be verified quickly by squaring the result on the machine). If you are off in your initial estimate (even by a wide margin), repeated applications of the formula (which take only a few seconds on the electronic calculator) will quickly bring you to the correct answer.

Example: Find the square root of 539. Assume that your first estimate is 20 (which is obviously a very poor estimate). Application of the formula yields a second estimate (*B*) of 23.475. Square the second estimate and you get 551.076, so it is evident that you do not yet have the correct root. Apply the formula again, substituting the value of the second estimate for *A*, and you get a third estimate of 23.2178. Square that and you have 539.066. Thus, you have almost the exact root. Further refinement would not be necessary in most instances, but if desired, the formula could be applied again for a precise result. - Lauren A. Colby, K4RFC, P. O. Box 19335, 20th St. Station, Washington, DC 20036.

FEEDBACK

On page 52 of January 1973 QST, in the drawing for "Using the Heath SB650 with other than Heath Transceivers," the connections for the transistor Q1 are improperly labeled. "D" should be "G," "S" should be "D," and "G" should be "S."