## Solar Bulletin

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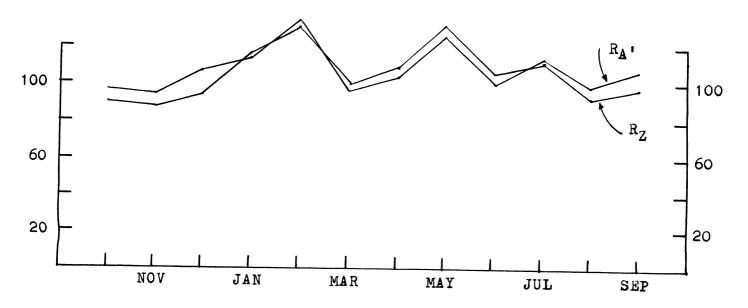
## SOLAR ACTIVITY DURING SEPTEMBER

Six separate ionospheric disturbances were recorded by the Solar Division observers during September. Of these six events, three were of minor importance, that is, -1 importance, and no events over 1+ importance were recorded. This indicates a very significant decrease in ionospheric disturbances from the activity of recent months. This trend of decreasing ionospheric activity does not correlate with the sunspot numbers.

The most widely recorded and largest event of the month is reproduced on page two. This event is shown as recorded by using SEA at 27 kHz and SES, using the Very Low Frequency radio station NBA, Canal Zone operating at 24 kHz. This particular recording was made by "time sharing" or recording both SEA and SES on the same chart by switching the recorder periodically between the SEA and the SES receivers. Also, reproduced on page two is a SEA recorded by observer A-17 on the 15th of August at 1150 UT, an event that was listed in last months issue of the Solar Bulletin as being recorded by several observers located in the northern hemisphere.

Sunspot activity increased somewhat from the level of last month. The September mean of the American sunspot numbers rose to 106.6 from 98.1 in August.

The large naked-eye gamma group located on the central meridian on the 5th of September was a returning group. It was visible this rotation 1 through 8 September to the unaided eye.



DAY	R <sub>A</sub> ,	$R_{\overline{Z}}$		DAY	R <sub>A</sub> 1	$R_{Z}$
1	101	98		16	70	68
2	108	104		17	77	65
3	115	110		18	86	75
4	123	111		19	107	98
5	137	114		20	128	114
6 7 8 9	153 147 145 121 103	133 136 125 116 103	Monthly Means $R_{A} = 106.6$ $R_{Z} = 98.8$	21 22 23 24 25	131 118 117 137 117	129 109 104 129 114
11	93	73		26	114	107
12	75	76		27	93	87
13	80	73		28	89	85
14	79	76		29	89	81
15	78	75		30	68	77

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING SEPTEMBER 1970

DAY MAX. SEA SES DEF. OBSERVERS

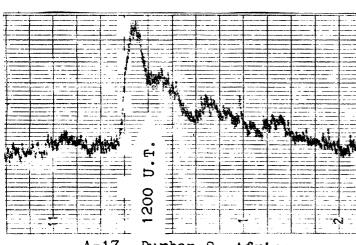
DAY MAX. SEA SES DEF. OBSERVERS

1	2233	-1	-1	5	A-1,19,21,27
4	1632	1	1	5	A-1,6,21,27
5	1539	-1	1		A-1.21.23

8	1234	1+	1+	5	A-1,19,21,22,27
10	1300	-1	-1	5	A-1,21
23	1824	-1	-1	5	A-19,21

The following is a list of SEA's recorded by A-17 during the month of August, but were received too late to be included in last months Solar Bulletin.

DA Y	MAX.
15 15 15 16 16	0859 1150 1417 1151 1438 1120



A-17, Durban S. Africa 15 August 1970

