Table 2 Comparison of optimised predicted backscatter response R_I with response R_{II} evaluated independently using physical parameters derived from the optimisation

WAVELENGTH λ CM	R_I db LOSS	R_{II} db LOSS
10	8·0	7·9
8	13·1	10·9
6	23·8	14·9*
5	17·0	14·9
4·5	17·2	13·5
3	14·9	12·1
2·4	13·1	12·1

Coated, metal surface; $\lambda_0 = 6$ cm; zero incidence angle.
*21·4 db at 50° incidence.

suitable results for evaluation take 11·3K and then 6·2K words (48 bits) of core store in succession on a Honeywell H-1800 (cycle time 2 μsec., tape transfer rate 88,000 characters/second) and any one case of the 20 studied in any one run took 145 seconds for the optimised response to be produced ready for inspection, prior to the manual operations needed to separate the associated D, μ and ε values ready for independent evaluation of response if required.

It should be noted that the evaluation program simply used the parameters derived from the optimisation program to evaluate the response which would actually be obtained in practice so that this could be compared with the response predicted by the optimisation program.

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Book review

Proceedings of the Princeton Symposium on Mathematical Programming, by Harold W. Kuhn (editor), 1971; 620 pages. (*Oxford University Press*, £6·00)

This book forms the proceedings of the Princeton Symposium on Mathematical Programming which was held during 1967, and some of its impact may be lost because of the fact that proceedings of other more recent related symposia have already been published. While it is certainly true that other papers by several of the authors whose work appears here have been included in recent books, and that these represent in some instances advances on the work described at this Symposium, there are still a large number of papers in these proceedings which are worthy of attention.

In reviewing a book like this it is impossible to discuss the very varied individual papers, and it will have to be sufficient to remark that there are 30 papers in all, divided among the following eight sections: large scale systems, programming under uncertainty integer programming, algorithms, applications, theory, non-linear programming, and pivotal methods. There is also a section containing abstracts of other papers presented at the Symposium.

It is always advantageous if a book of this type contains review papers setting out the state of the art, and these are to a great extent lacking here. Two notable exceptions are papers by Balinski dealing with integer programming. However, the second of these, a review of recent developments, must lose much of its value because of the time which has elapsed since its presentation.

In such a rapidly developing subject as this it is useful to have single volume sources of reference to the work of many individuals, and these proceedings should therefore be a worthwhile addition to a library. They would perhaps have been of greater interest had some of the discussion on the papers been recorded.

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