

MICROWAVE SYSTEMS - THEN AND NOW - EXAMPLES
AT THE 50TH REUNION OF THE M.I.T. RADIATION LABORATORY

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The delivery by the British in 1940 of a cavity magnetron operating at S-band (10cm) sparked an intensive effort in the US in response to three urgent wartime system requests. The MIT Radiation Laboratory was established by NDRC; and from this sprang an intense and successful program in microwave components and systems. Because of space restraints, this paper briefly describes the successes attained in two of the three projects; "firecontrol" and "navigation". The paper then skips to the current situation, the impact of advances in technology, both in the microwave field and in complementary fields essential to the design of modern "microwave systems". Three examples are briefly reviewed: the Army Patriot, the Navy Aegis, and the AF Navstar or GPS navigation system.