

THIS SPECIAL ISSUE of the *Lincoln Laboratory Journal* commemorates fifty years of radar development at Lincoln Laboratory. We hope you enjoy it. It is not a history—it lacks the detailed chronology and completeness necessary to be a history. Instead it is a recollection of some of the major radar developments at the Laboratory, and it is a celebration of that work, the people who did it, and the fun we had doing it.



A special issue was prompted, in part, by suggestions from two prominent Lincoln Laboratory radar alumni: Dr. Merrill Skolnik and professor Irving Reed. Both commented that “everything I learned about radar I learned at Lincoln.” Both urged that we capture some of Lincoln Laboratory’s radar history before it was too late and no one could remember that far back.

We made difficult choices in what to write about and what to leave out, since we could not include it all. Our approach is to provide a broad overview article on the major Laboratory program areas that have involved radar, followed by articles on the “top ten” radar developments that we judge to be of major significance and that have a unique Lincoln Laboratory “fingerprint” on them. This list of the top ten grew to the top dozen, then to a baker’s dozen.

We include in the issue a photo collage of radars and radar devices that have populated the fifty years of radar development at the Laboratory. Missing are some truly outstanding radar developments that remain classified.

As we start the new millennium, Lincoln Laboratory continues to have vibrant radar-development activities underway. Every day we witness startling advances in radar capability, driven largely by the dramatic progress in solid state devices and digital circuits. These innovations allow all manner of exotic radar techniques and signal processing that surely exceed the wildest dreams of our radar developers and innovators of the 1950s and 1960s who pioneered the introduction of digital techniques into radar. We know these pioneers are pleased to see the continuation of this tradition of innovation that they started.

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