

PREFACE

THIS BOOK REPRESENTS a journey that began at the end of 2002, after a series of rather animated breakfasts at the Hotel Okura in Tokyo. After well over five years of research and writing, this journey has taught us as much about the state of Japan's space politics, policy, and technology as about what their combination may mean for Japan's security directions. This book surprised us in many ways, the most important of which is that it was not the one we started out to write. As industry analysts, we began very modestly with a focus on the major pillars of Japan's space technology—space launch vehicles, satellites and spacecraft, and emerging technological niches—as well as the set of public and especially private actors who make them.

In connecting the dots for this book, we learned that, as in other countries, space technology in Japan did not proceed in a vacuum. The more we studied the sector's twists and turns, the more we learned to place Japan's space technology in its proper evolutionary context—that is, in the flow of technical and paradigmatic changes worldwide, as well as the currents of political and social changes in Japan. Early on, we came to the joint conclusion that the entire tenor of Japan's space program was shifting from what we could best describe as *the market-to-the-military*. By this we mean that it is no longer commercial but national security paradigms that are ever more critical in driving Japan's space policy forward.

Of course, only the excellence of Japan's civil space program could have brought Japan to consider making such a shift. We are not unmindful of the many criticisms that have been levied against Japan's civilian space program—some of which are well deserved—but there is also much there with which to

be impressed. No matter what the criticisms, we are certainly impressed: with the sheer ingenuity of its engineers, with the stunning technological progress on a dime and with few huge disasters, with the subtle ways in which the legal and institutional structure was stretched to fit the technological realities, and also with the dogged persistence with which its leaders stressed autonomous and independent access to space at every turn.

Because not everybody shares our enthusiasm for the minutiae of Japan's space technology and policy, we also worked to make this a book of wider interest to space analysts, academics, policymakers, Japan and Asia specialists, technology experts, corporations, and businesses. The book is aimed specifically at those seeking to understand the broad contours of Japan's space-related history and trends, those looking to understand the role of Japanese public actors and, especially, private corporations in advancing it, and also those seeking to understand what the discrete components of Japanese space developments may potentially mean for the country's security policy in this new century.

Stripped to its essentials, our point is simple: Japan has the technical wherewithal to be marked as a military space power and now has placed national security as the centerpiece of its space development strategy. Having developed a range of military space technologies that came about in its civilian space program, Japan is actively advancing space as a keystone of its security and diplomatic strategy. This reality will affect the substance and direction of the country's national security in this new century. The militarization of space assets in Japan is not so much a game of numbers as it is an issue of technological realities, and now also the legal and institutional orientations that are beginning to reflect them. The story of how and why these technological realities came about and what they mean concretely for Japan's defense glues our narrative together. There has certainly been news about Japan's space programs in the Japanese media. But much of it has blandly focused on the big successes and failures of Japan's rockets and satellites, as well as the activities of various Japanese astronauts. There has not been much analysis of the military angle, excepting the case of Japan's spy satellites. Most foreign observers also report on Japan's space program much in the same way, saying very little, if anything, about its relation to military and defense realities.

Of course, for most of the postwar period, the Japanese government has itself never even remotely hinted at anything other than a civilian space program—until the spy satellites, until Ballistic Missile Defense, and, more

important but much less well known, until the Kawamura initiative, and, most transformative of all, the new Basic Space Law all came along. To make our case clear, we show how distinct components of Japan's space technology fit historically in the militarized aspects of space technologies in other countries at every turn possible.

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