

the size is asteroidal. And, if it misses Earth at all, it will be a very close shave.

The Post Commander happens to have read the form where large meteorites are concerned. In a matter of two hours—no more—tens of billions of tons may hurtle down upon some unsuspecting metropolis; wherever the target may be, a crater some scores of miles across will be blasted out. A fireball nearly as wide as the crater will shower heat and hard radiation on the area. The district beyond the crater rim will be bombarded by a lighter scattering of debris. Earth tremors more devastating than any natural 'quake will ripple out across the continent. A Nation will be devastated, and any human within a hundred miles of the crater will be triply slain, first by X rays, next by blast, finally by incineration.

For ten seconds, Chiefie is paralyzed by sheer cold panic. Why, oh why must he, of all creatures ever born, be saddled with this load? But the Commander is made to the full measure of a man. Forewarning is his trade. If forewarning, plus modern transport, will save a single life, he will so save it.

The first step is relatively easy. The Commander lifts the hot radiophone. In two minutes he is through to the Inspector General, Federation Arm, in New York. Five minutes later every vital landline and radio channel on Earth is cleared and silent, its operator poised for action. Here, Chiefie is aided by the fact that he is following his normal chain of command, and probing past disciplined superiors who know him and trust each other.

What comes next is harder. The Grimaldi post is admirably equipped for detection and location. What it lacks is a computer which will draw a ballistic trajectory correct to the tenth decimal.

He knows where there is just such an instrument—in Traffic Control at the Copernicus City spaceport. There is now just about one hundred minutes to go before that meteor hits, or misses.

It takes Chiefie thirty-five of those minutes to establish a working link with Traffic Control. You think that is slow? Listen, brother—the speed with which Chiefie moves here is what wins him the Star of Honor in iridium instead of in gold. Did *you* ever try to operate one government department as servant of another? Gross Departures from Approved Chan-

nels and Serious Deviations from Normal Procedures are involved! The Commander has to raise Signals Superintendent at the Spaceport, and disabuse him of the idea that his leg is being pulled. He must then reach and similarly disabuse the Traffic Controller. The Computer Programmer, who just dived into a cup of coffee, has to be pulled out of it and briefed. The buck must be passed at every one of these steps. This sounds comic, but Chiefie finds small joy in the hassle. But he goes through with it, and is finally able to dictate his problem to the computer, several hundred miles away. If, my friend, you consider thirty-five minutes slow for all that, you've spent your life on Easter Island.

An hour to go. The Grimaldi radars do not compute, but they locate nearly to the thickness of the proverbial bee's wing. Smittie has been making them do just this, again, and again, and again, clocking the positions on the record with nano-second accuracy.

By M-minute minus 55, the Copernicus computer is defining the meteor's path with increasing accuracy, using Smittie's data.

A first solution comes through. It is real bad news. There is no doubt about it—the meteor *will* hit Earth.

By M minus 50, plots are coming in from the big lidars and radars up on Earth. They have probed for the intruder, found it, located it. Working together, the ganged instruments are fixing the course with still more precision. The best computers on Earth are now joining in a second extrapolation of the point of impact. This comes through at about M minus 40. The news is better; the new prediction is that the meteor will fall somewhere in the South Pacific.

Perhaps it is going to splash rather than thump. If you wonder why, hold out a stiffish curved wire by one end. Try to keep it rock-steady. At every imperceptible tremor of your hand, the far end of the wire sweeps through a considerable volume of space. This is how a courier capsule which deviates a skillionth of a degree at launch from Earth misses the moon by a hundred thousand miles. This is the reason for uncertainty about the meteor's precise target.

M-minute minus 30. The bolide is much closer now. Successive fixes have become more and more exact. The errors are steadily narrowing, corrections have lined out the trajectory more exactly. The meteor's position and vector are