Orbit

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Published by AMSAT — The Radio Amateur Satellite Corporation

Multimode Mobile Magic

IC-290H & IC-490A

ICOM's latest state of the art 2 meter and 440MHz multimode transceivers.

IC-290H

25 Watts of Power. A full 25 watts in all modes gives extra communication range in the IC-290H.

Green LED Readout. For improved readability in bright sunlight.

Dual VFO's. Provide ease in marking frequencies. Tuning rates are 5KHz in FM, 100Hz in CW and SSB, and 1KHz with the tuning speed button pushed.

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Touchtone® Microphone Supplied. Each unit comes with a touchtone® microphone as the standard unit microphone.

IC-490A

The operational characteristics of the IC-490A are the same as the IC-290H except for the features outlined in the following chart.

		IC-290H	IC-490A
Freq. Range (MHz)		143.8-148.199	430.0-439.999
Power	Hi	25	10
	Lo	1	1
Memories		5	4
Initial Offset		600KHz	5MHz
1MHz Up Button		Not Req'd	Yes
Normal Tuning Rates (KHz)	FM1	5	5
	FM2	Not used	25
	SSB	0.1	0.1
	CW	0.1	0.1

ICOM

The World System

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CONTENTS:

Our Cover: Konrad Mueller of AMSAT-DL prepares to mate Phase IIIB and attach fitting to shake table test facility in West Germany, October, 1982. The solar panels have protective covers in place.

LET'S TALK OSCAR

AT HENRY RADIO
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Ellipsis...

An Editorial By Vern Riportella, WA2LQQ*

North American amateurs recently witnessed a milestone in amateur radio communications. On the evening of March 3, ARRL President Victor C. Clark, W4KFC, sat in his modest home in rural Clifton, Virginia. But the rural setting would only bely the fact that at that moment Vic sat at the nucleus of an unprecedented amateur radio communications network.

Amateurs had established around Vic a network of terrestrial repeaters and hf links that would bring W4KFC into contact with tens of thousands of amateurs across 39 states and the Province of Ontario. The scope of this undertaking was breathtaking and its implementation by WØTN and his colleagues at the Honeywell Amateur Radio Club in Minneapolis was satisfying.

"Why," you might well ask, "is *Orbit* and AMSAT interested in the goings-on on those 'pedestrian' repeaters?"

Besides the fact that ARRL's Mr. Clark is an articulate individual with both mission AND message, *Orbit* believes there are other aspects that should not be overlooked. We are especially stimulated to look beyond the bedazzling technology and the polish of W4KFC's presentation to find a rich symbolism and the spectre of enormously powerful forces lurking.

It should seem apparent to those who've followed the evolution of amateur satellites that the day would come when OSCAR would cross the threshold to maturity. After an extended adolescence OSCAR appears ready for the rites of Spring to be played out in the jungles of French Guiana this June. The mature bird will offer the amateur world a communications tool unprecedented in history. In fact, there exists today no parallel nor does the commercial segment even offer the prospect of a communications tool so powerful as will be OSCAR 10. It is in the realm of communications power that we see parallels between W4KFC's presentation and the new OSCAR.

While with considerable skill and preparation WØTN and crew contrived the network which reached out to tens of thousands, it took coordination, consultation and consternation to pull it together. With Phase IIIB, within a few months of the time you are reading this, a network of thousands could be pulled together very quickly indeed! The new OSCAR will view more than half the world's amateur population much of the time and up to 80% on occasion. The potential for great good is enormous. Unfortunately the potential for disruption also exists.

Every day that the new OSCAR orbits the earth will open new opportunities for amateurs to pull together to overcome the inherent problems that absence of reliable communications inevitably promote. Every day can mean an upgrade in the speed and accuracy with which important issues can be brought before the entire amateur radio community. Every hour can mean new inroads to easing the logjams of communications present in today's crowded hf bands.

How will amateurs respond to the challenge and potential of this new, powerful resource—this magnificent new communications tool? We are very optimistic about it. If we weren't we would have rolled belly-up when Phase IIIA took a bath. Surely there will be new problems to counter. Language problems and claims of "eminent domain" may arise. But given a spirit of cooperation by all combined with a healthy respect for the medium itself, we believe startup problems can be minimized. All it takes is a willingness to listen and cooperate in this new adventure we enter together.

The symbolism we saw in W4KFC's presentation was that of bringing technology to bear on a specific problem: getting across the ARRL message to amateurs. The result was certainly the high water mark for amateur radio communications power. But power comes in many "flavors". It is constituted of various forces. Throughout history the ability to inspire has universally led to power. The new OSCAR has built into it the potential for great power for good. With the inspiration of the greatest communication tool ever fielded by amateurs filling our sails, let us ply the ether for great good in what will always be recalled as the dawning of amateur radio's greatest age.

**Editor-In-Chief*