



~~TOP SECRET~~

# CRYPTOLOG

Published Monthly by P1, Techniques and Standards,  
for the Personnel of Operations

---

VOL. VI, No. 2

FEBRUARY 1979

~~TOP SECRET~~

Non - Responsive

FROM THE EDITOR

By DAVID H. WILLIAMS



EO 3.3b(3)  
PL 86-36/50 USC 3605



## and a Little Bit of Luck

One of my first actions after becoming the new editor of CRYPTOLOG was to sit down and read through the back numbers. One of my principal discoveries was finding out that virtually all of the articles could be assigned, by general type, to one or another of a rather small number of categories.

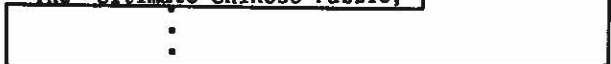
By far the most frequent was the *This is Such-and-such* article, a straightforward description of something: an organization, an analytic technique or skill, a machine program, a new piece of equipment, or whatever. This article is the lifeblood of the publication, and every issue contains at least two examples of the type.

A special sub-category of this article is the *Here's How We Handle (or Handled) Such-and-such* piece, covering one organization's approach to an operational problem. To my mind one of the best of these was "The Iron Thumb," by [redacted] (March 1978) on the subject of MORETOWN, B Group's machine assist to the Chinese language translator.

Another frequent theme is found in the *Cry of Anguish* item, which describes some major injustice, frequently relating to promotions, especially in regard to their inequitable distribution to persons of one COSC (usually linguists) vis-a-vis another (usually engineers). Articles of this sort are often followed by a flurry of rebuttals and counter-rebuttals in subsequent issues. (Interestingly, one subdivision of *Cry of Anguish*, the comment on the performance appraisal, or the performance appraisal system, never receives any response in defense of that system.)

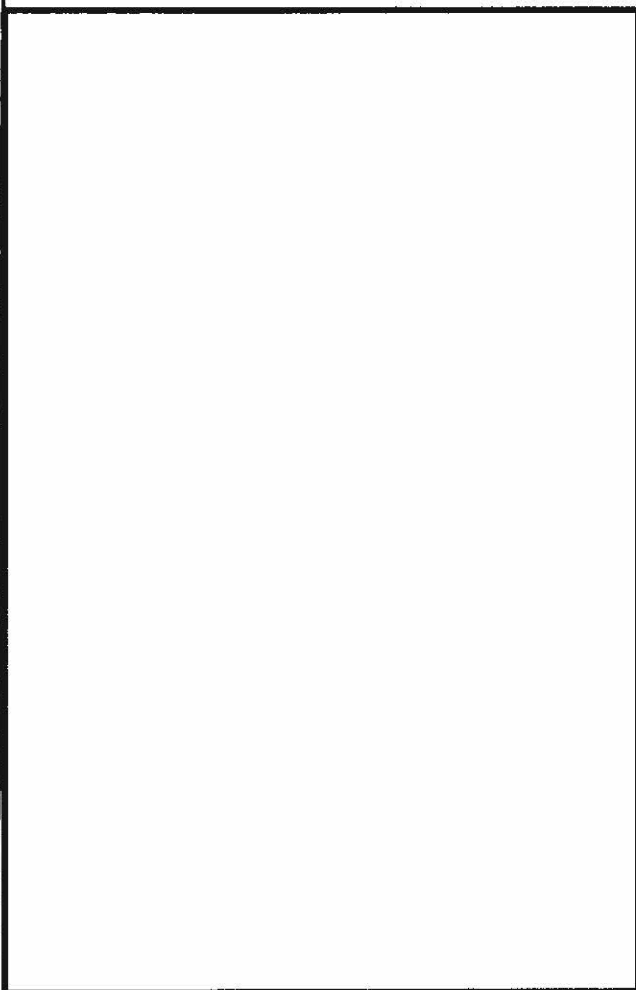
One of my favorite articles is *Oops! We Goofed*. This article, which, understandably, appears relatively infrequently, details some organization's adventures and misadventures in going astray in the handling of some SIGINT phenomenon, and how they eventually coped with it.

"The Ultimate Chinese Puzzle,"



There are, however, two types of potentially worthwhile articles which, to my recollection,

have never appeared, and I'm sure there are numerous examples, both current and ancient, of both of them here and there around the Agency.



So both analysts sat at their desks, accumulating further instances of their respective mystery transmissions, getting no closer to a solution.

Then one day, the two analysts, who had never met, were sent to some meeting on some now-forgotten topic. During a coffee break

~~SECRET SPOKE~~

they happened to begin talking about baffling analytic problems in their areas...

If either of these analysts had had some forum in which to publicize his quandary, the two of them might have gotten together a lot sooner.

So if you have any [redacted] piling up in your desk, drop a note to CRYPTOLOG. Maybe we can help you find the other half of your puzzle.

Or if you have any examples of breakthroughs made without the slightest intervention of any "scientific know-how and technical expertise," send them along.

Incidentally, if you have something you think you might want to contribute in either category, or on any other subject for that matter, but you feel a slight lack of self-confidence in your ability to put it down on paper, call or drop in at the CRYPTOLOG office. We're always glad to provide whatever editorial assistance might be needed.

The CRYPTOLOG office is located in P1, Room 2N039; the telephone is 3957s. [redacted]

~~SECRET SPOKE~~

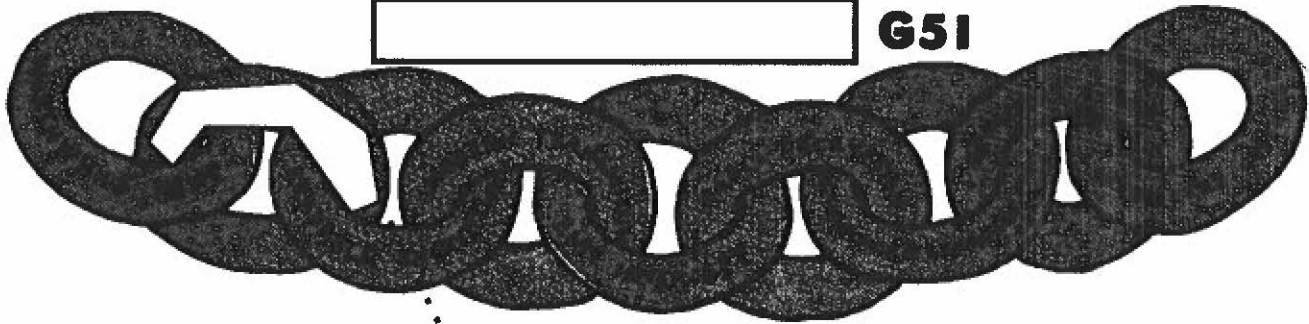
Non - Responsive

~~TOP SECRET UMBRA~~

# THE COMINT CHAIN "GANG"

[Redacted]

G51



I got a glimpse of how far-ranging NSA's activities are at NSA Day 1975, right after I came on board. I got the immediate feeling that there was a lot about the Agency I would never see, ostensibly because I had no need to know. It also became clear quite early that it would often be hard to find someone with sufficient knowledge to answer my questions even when I did have a need to know.

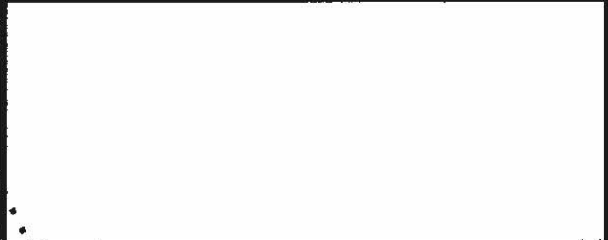
Being inquisitive (that's the word that applies to me -- "nosey" applies to other guys) and being interested in learning what the real career prospects are in the Agency, I began to ask questions about how things work in other offices. I asked my intern friends to compare and contrast what they had seen. I asked my classmates at the training school what their jobs were like. I also happened to hear conversations involving the occasional visitors to my work space (I really *wasn't* trying to eavesdrop). I even went so far as to listen to what was being taught in my professionalization courses!

The upshot of all my investigation was the decision to write a "tunnel vision" overview of COMINT operations, mainly for a friend in the Agency for whom the word "product" has little to do with the publication of intelligence. That term "tunnel vision" is a disclaimer so that if anything inaccurate is said, it can be blamed not on my personal inadequacy but on my limited perspective (one of my original aphorisms states that "what you see depends on where you stand"). With that warning you, the reader, are now ready for a worm's-eye view of the chain of COMINT Production.

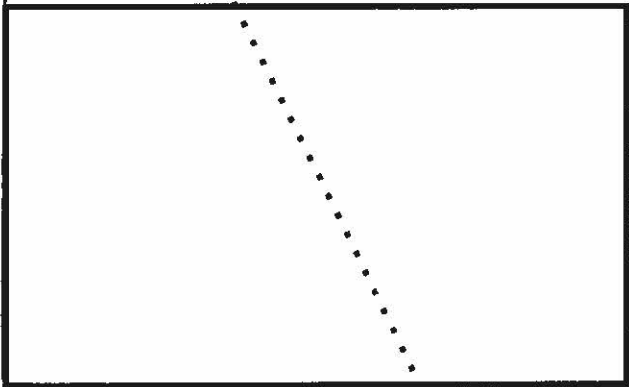
### Worthwhile News

The first link in the chain is a newsworthy event. Actually the newsworthy event is so important to "end product" that a better metaphor might be an anchor or a hook, or some other object on the business end of a chain. In reality, until something important outside the intelligence system occurs, the system has no function, no reason for being. If all threats to national security (military and economic) evaporated once and for all, those of

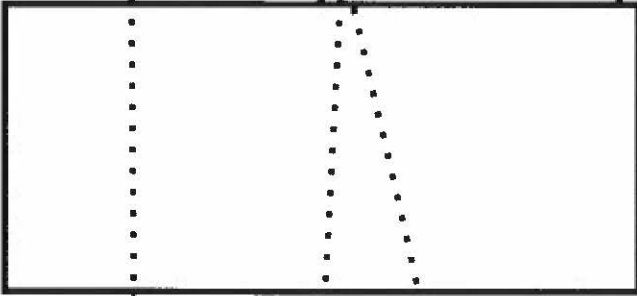
us who have veteran's preferences might have to exercise them to get jobs in HEW or DOE or maybe even forget the preferences and scramble for jobs in productive enterprises. Because we must wait for something to happen, the best the Agency can do is to try to plan to be in the right place at the right time with the right equipment.



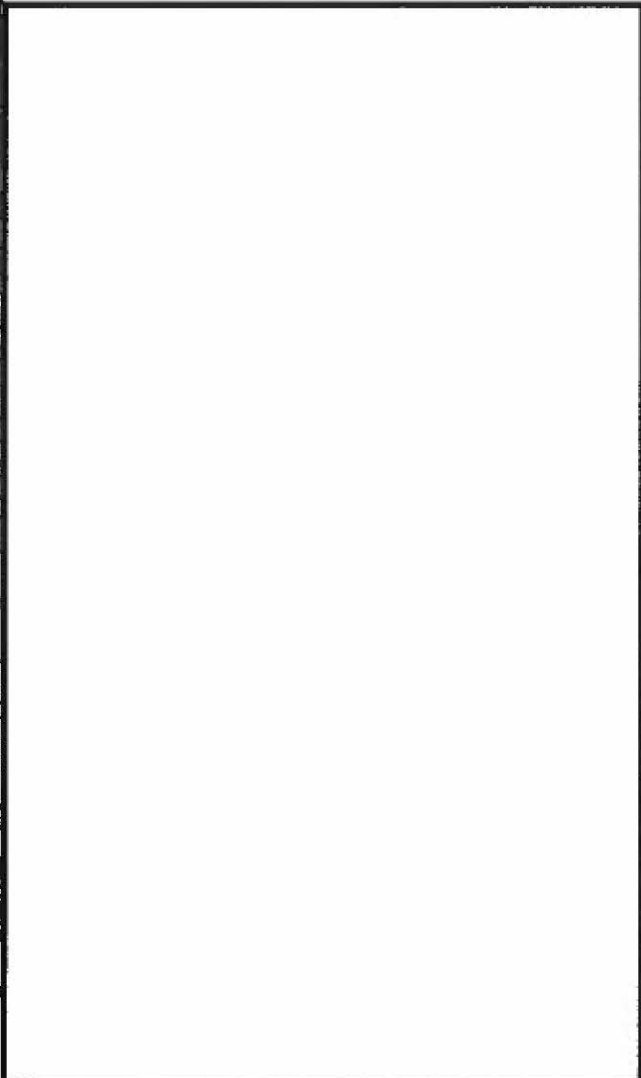
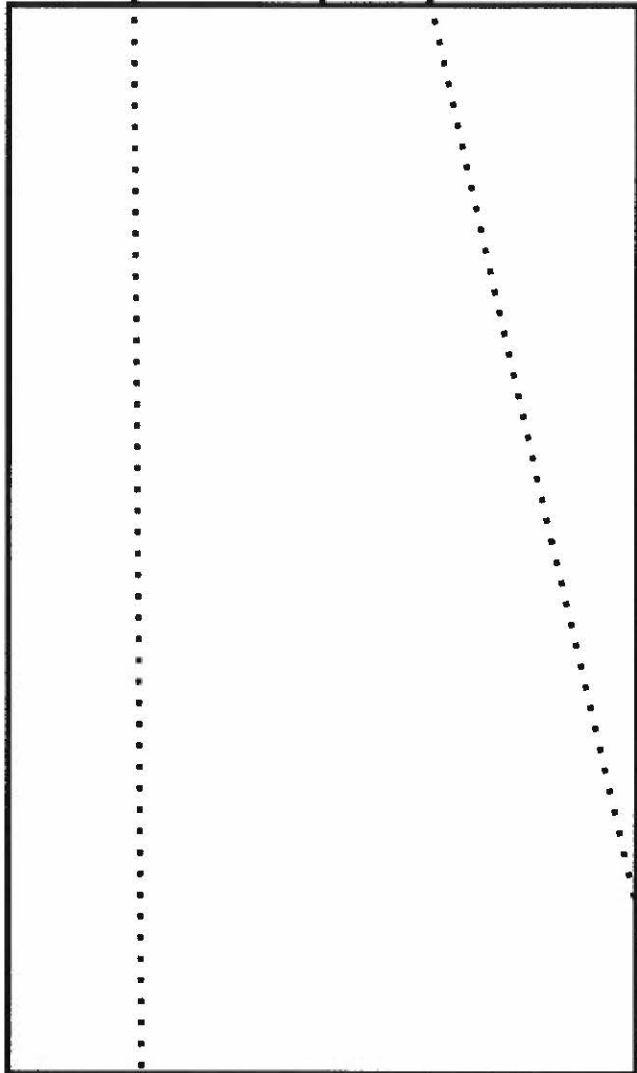
Fast-breaking events are in an entirely different league. Because of the limitations of money, politics, and technology, NSA simply cannot have a finger in every possible pie. For that reason, private newspaper reporters are occasionally much better equipped for gathering information in remote places than we are, or, for that matter, better adapted than anyone inside the intelligence community. The Agency subscribes to three wire services to take advantage of the mobility of their reporters. Right in the first link, then, we depend on factors largely beyond our control in order to get needed information into the hands of our decision makers.



~~TOP SECRET UMBRA~~

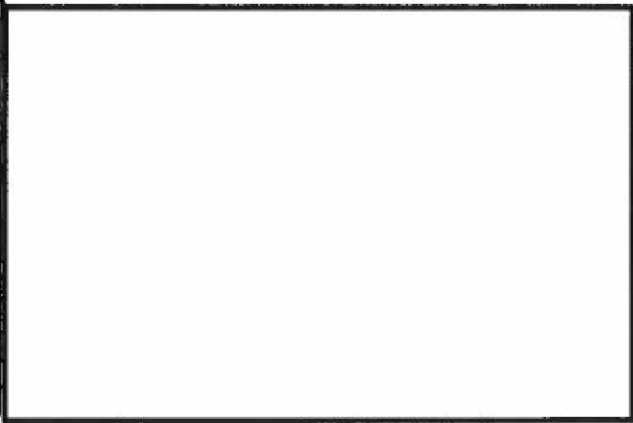


Readable Encryption



These first four links are all outside of NSA and the intelligence community. The rest of the chain is directly controlled by the community.

Easy Intercept



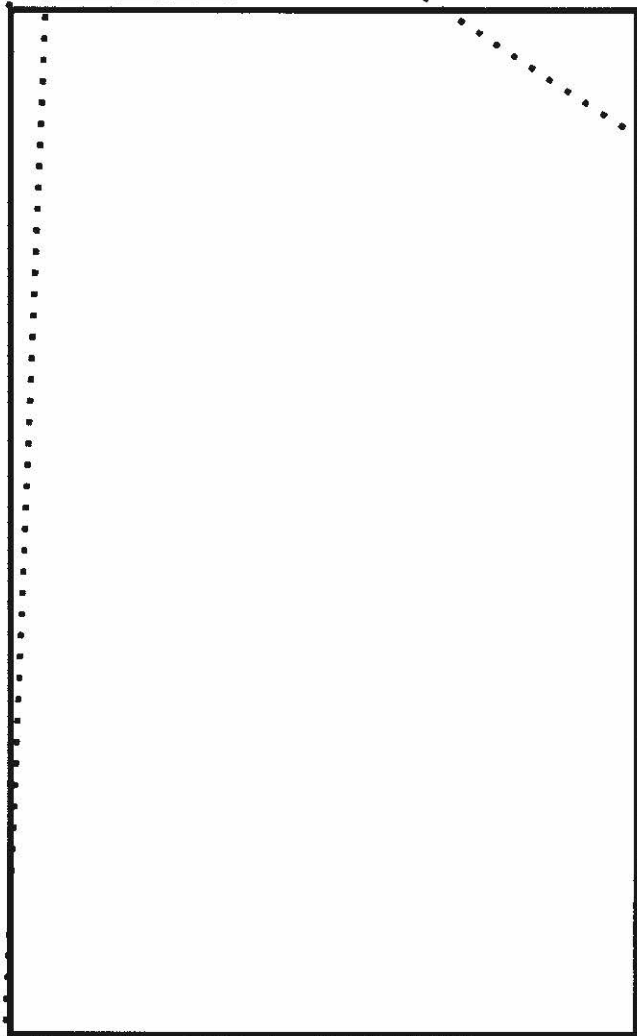
Modern Transmission

After a message is encrypted, the next step is to transmit it. In this fourth link of the chain there are still some factors over which the Agency has no control. The way a message

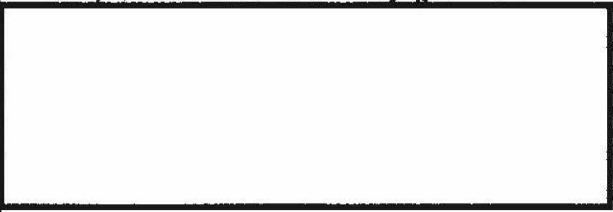
\*For a fuller discussion of the translation problems  see "Thanks for the Attaboy!" (CRYPTOLOG, January 1978).

~~TOP SECRET UMBRA~~

Rapid Decryption

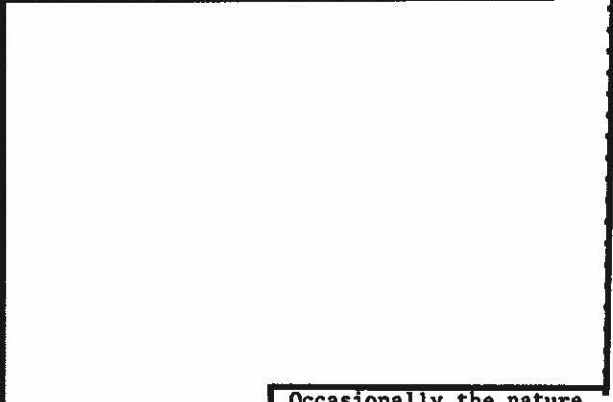


formed by linguists is called dispositioning or scanning. To perform that task the scanner must not only keep abreast of a fluid set of "requirements" imposed by those who oversee the Agency, but also stay on top of what has already been published and what the consumers of our product think is hot any given time.



Efficient Staff

Once a message has been translated, it still must run a gauntlet before it gets sent to the consumer; usually it only gets a little bruised; sometimes, though, it get killed.

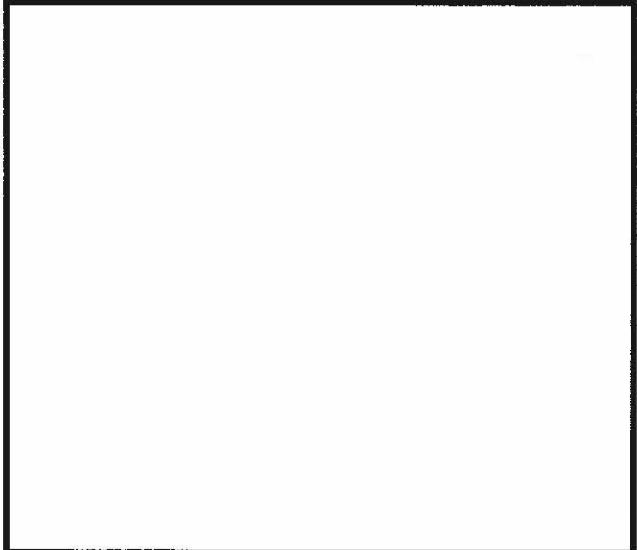


Occasionally the nature of the comments merits restricting the distribution to an extremely small number of people. After all the appropriate "coordination" is finished, the edited translator's copy is submitted to the Flex Room, where the message is entered as data into the computer. The people in the Flex Room have the unenviable task of reading the handwriting of a huge number of translators and reporters, properly copying names of people from all over the world, and coping with a large vocabulary -- all of this under periodically high pressure (Friday afternoon is the worst). In addition they have to put up with the angry remonstrations of those who feel that their masterpieces are butchered by the misspellings that turn up in the final copy.



The linguist, in reading the feedback of his or her own product, often just has to grin and bear it. "There's many a slip 'twixt the cup and the lip" (*Do prato a boca se perde a sopa*).

Recognition and Language Processing

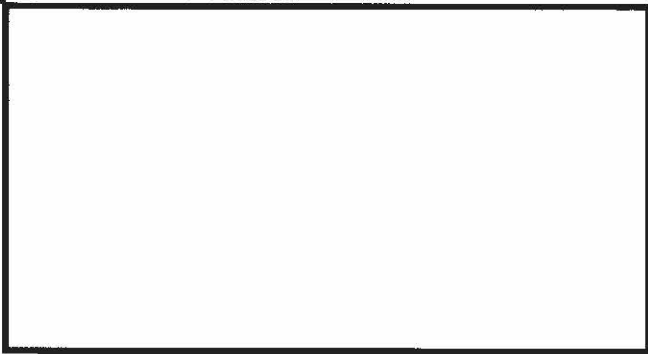


One of the most important functions per-

~~TOP SECRET UMBRA~~

~~TOP SECRET UMBRA~~

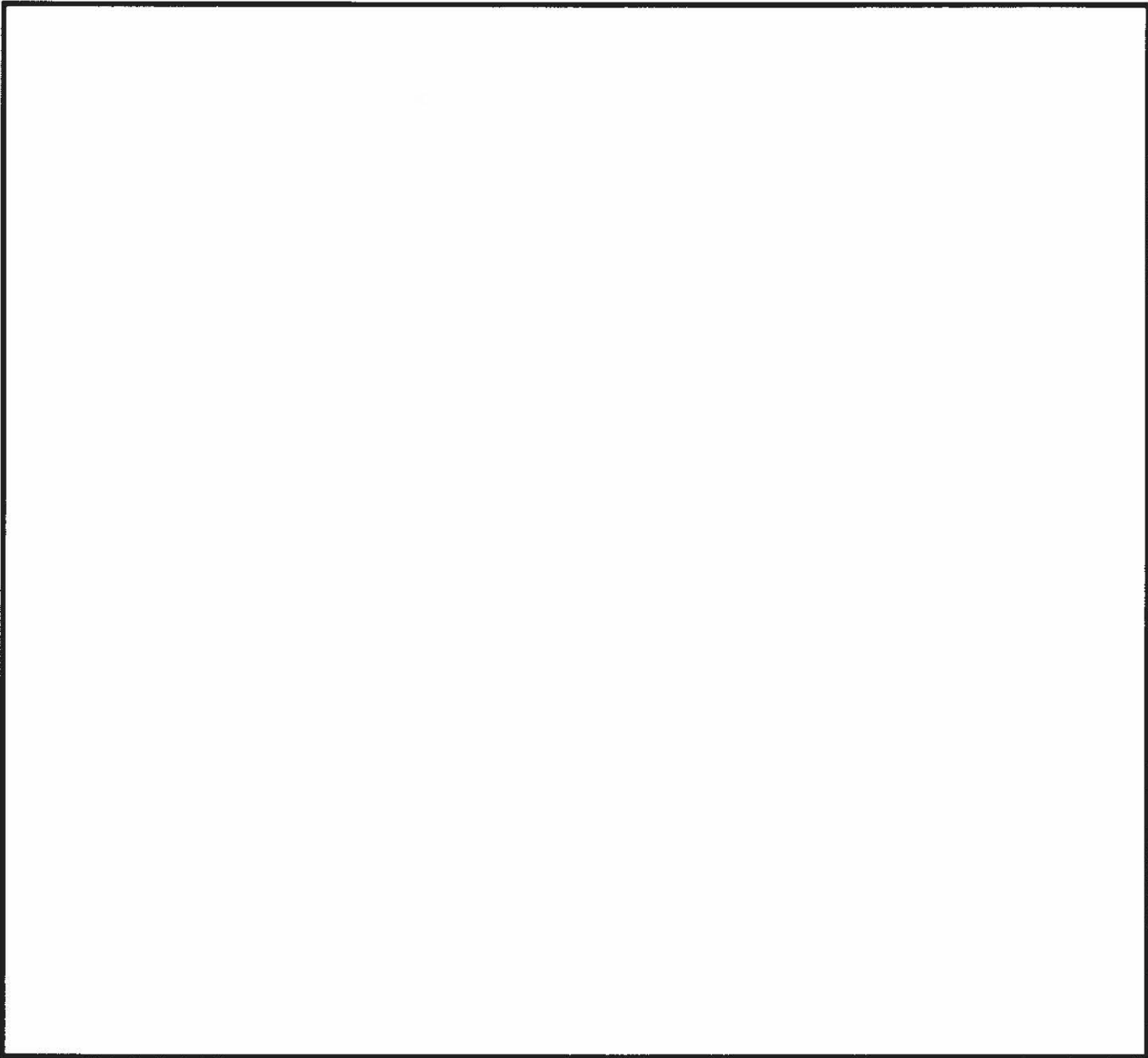
Interested Customers



Casting Off

Well, there you have it, folks! Everything you never needed to know about "production." Obviously, in such a short space many things had to be glossed over or skipped altogether. Anyone whose career field was slighted will just have to expand my horizons through an article in this magazine.

~~(TSC)~~



Non - Responsive

~~TOP SECRET UMBRA~~