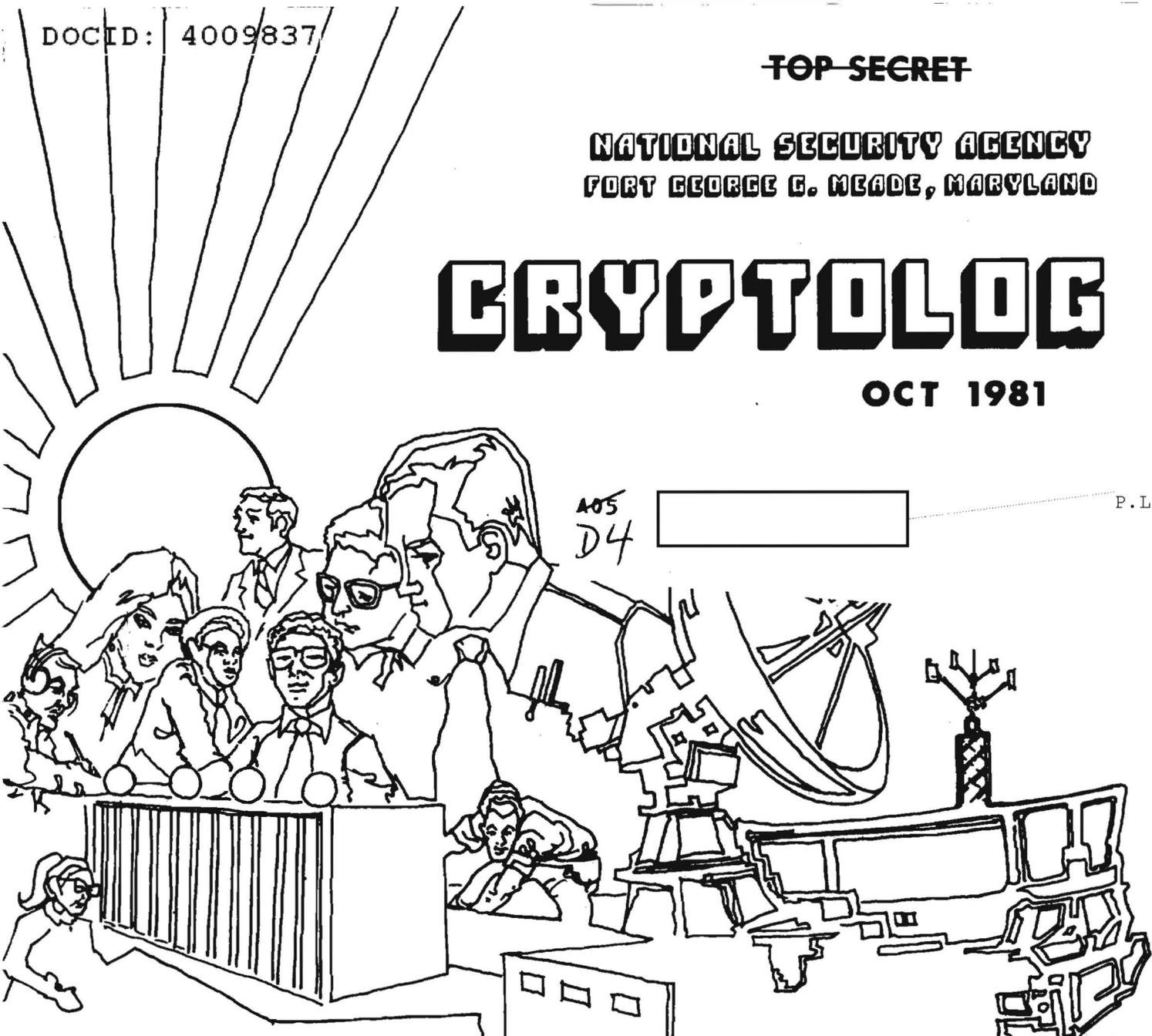


~~TOP SECRET~~

NATIONAL SECURITY AGENCY  
FORT GEORGE G. MEADE, MARYLAND

# CRYPTOLOG

OCT 1981



P.L. 86-36

P.L. 86-36

**ECONOMIC INTELLIGENCE:**

Problems and Prospects (U).....	Derek K. Craig.....	1
TECHNICAL SUPPORT CATALOGS (U).....	[Redacted].....	6
NSA-CROSTIC NO. 35 (U).....	David H. Williams.....	9
THE STAIRWELL SOCIETY (U).....	[Redacted].....	11

~~THIS DOCUMENT CONTAINS CODEWORD MATERIAL~~

~~TOP SECRET~~

~~CLASSIFIED BY NSA/CSSM 123-2~~  
~~REVIEW ON 10 Oct 2011~~

UNCLASSIFIED

# CRYPTOLOG

Published by PL, Techniques and Standards,  
for the Personnel of Operations

EDITORIAL (v)

VOL. VIII, No. 10

OCTOBER 1981

P.L. 86-36

PUBLISHER

[Redacted]

BOARD OF EDITORS

Editor-in-Chief.....	[Redacted]	(8322s)
Collection.....	[Redacted]	(8555s)
Cryptanalysis.....	[Redacted]	(4902s)
Cryptolinguistics.....	[Redacted]	(5981s)
Information Science..	[Redacted]	(3034s)
Language.....	David Cox	(8161s)
Machine Support.	[Redacted]	(5084s)
Mathematics.....	[Redacted]	(8518s)
Puzzles.....	David H. Williams	(1103s)
Special Research.....	Vera R. Filby	(7119s)
Traffic Analysis.....	Don Taurone	(3573s)

We are producing fewer technical reports than we used to. The numbers, for those who like statistics, are given by [Redacted] in his article on Technical Support Catalogs beginning on page 8.

We can remember when there were typists in each analytic shop, whose job it was to produce the technical reports, the Weekly (or Monthly) Technical Notes, and Technical Support Letters, and various other largely extinct or endangered species of technical documentation. But such people are rare these days. The only typists work in the front offices, and since the 'front office' work tends to have a higher priority, they don't often have very much time for typing a lot of technical reports.

Now and then, one finds an analyst who feels so strongly that some technical reporting ought to be done that he will try to type it out himself, if he can find a decent typewriter. Have you ever seen two or three people fighting over a typewriter?

Anyone who has begun to see what can be done in the analytic field with tools like a desk-side terminal connected with a TSS and PLATFORM, can only wonder why we haven't yet provided the analyst with the tools to produce decent technical reports. All those beautiful ads on TV about modern data systems! All those wonderful words in our plans about what we will have "tomorrow"!

We are reminded of an old friend, no longer here in the trenches, who once said, "There they are in the front office, talking about rockets to the moon and planetary probes; and here I am, trying to light this here fire with this piece of flint!"

W.E.S.

<p>For individual subscriptions send name and organizational designator to: CRYPTOLOG, P1</p>
<p>To submit articles or letters via PLATFORM, address to  cryptolg at barlc05 (note: no '0' in 'log')</p>

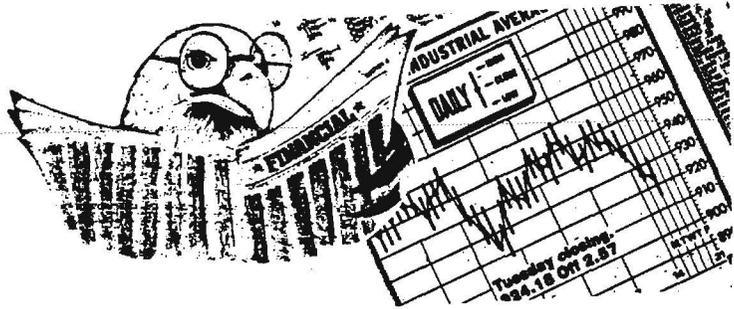
P.L. 86-36

UNCLASSIFIED

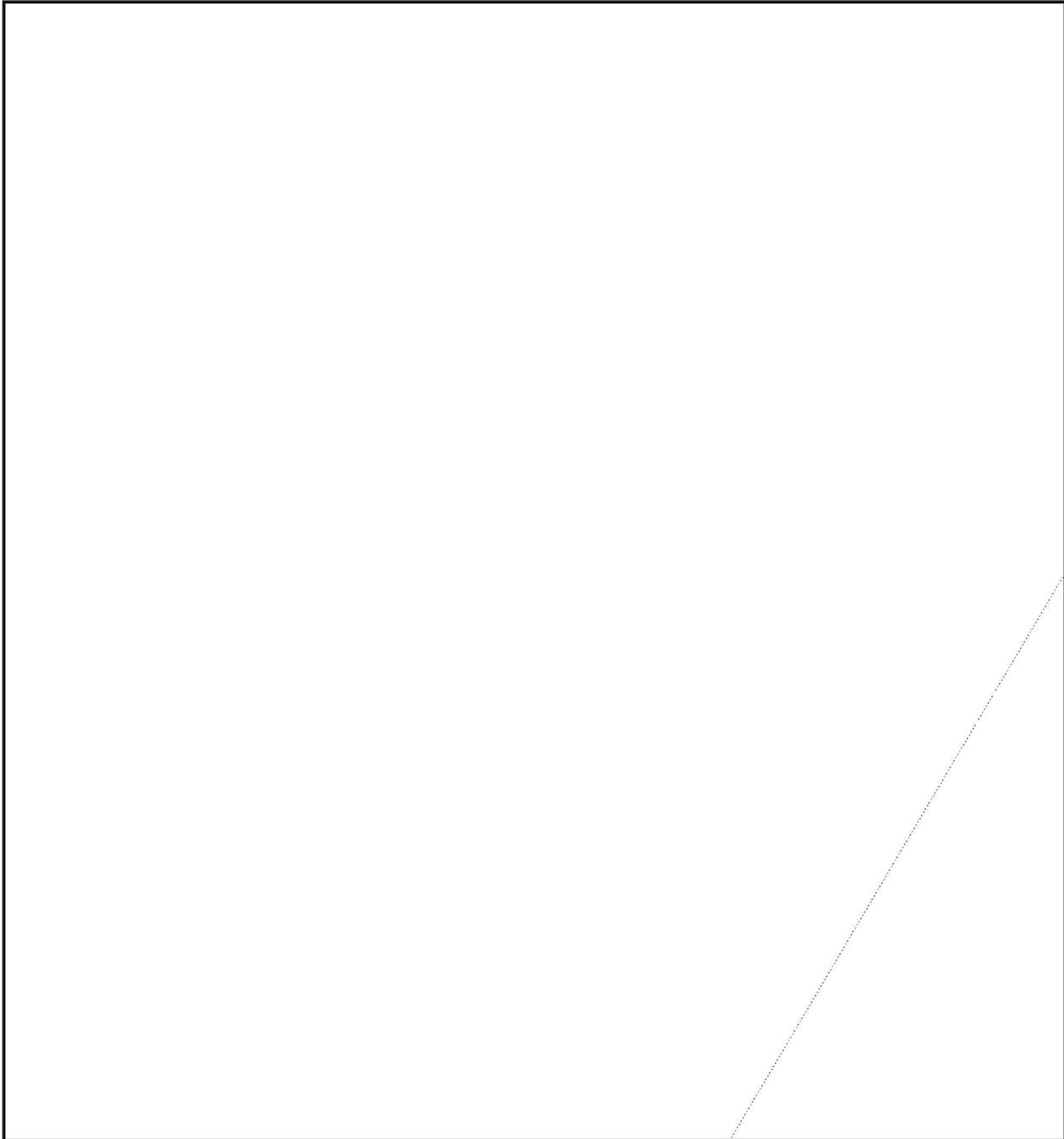
~~SECRET SPOKE~~

**ECONOMIC INTELLIGENCE:  
Problems and Prospects (U)**

by

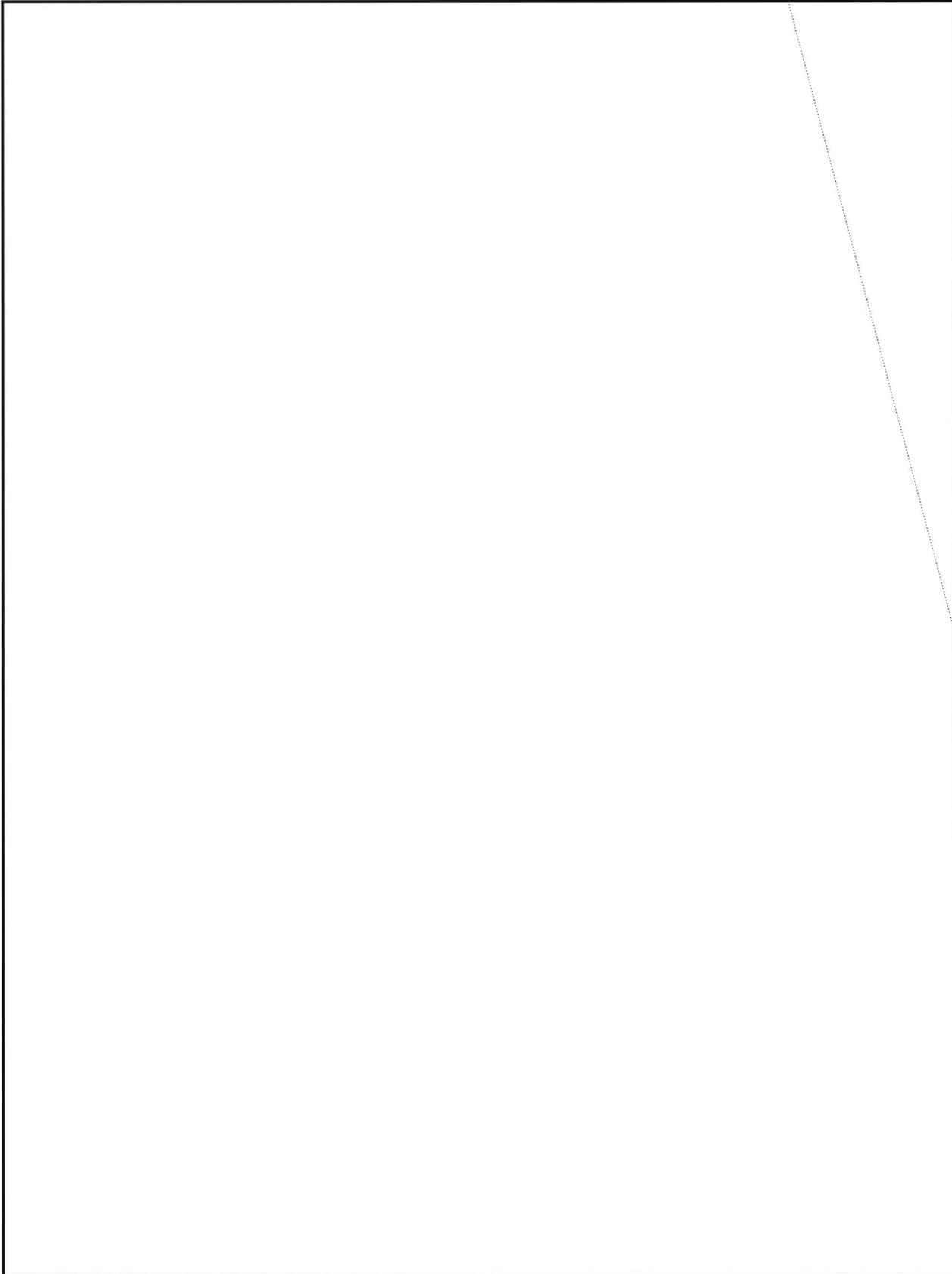


P.L. 86-36



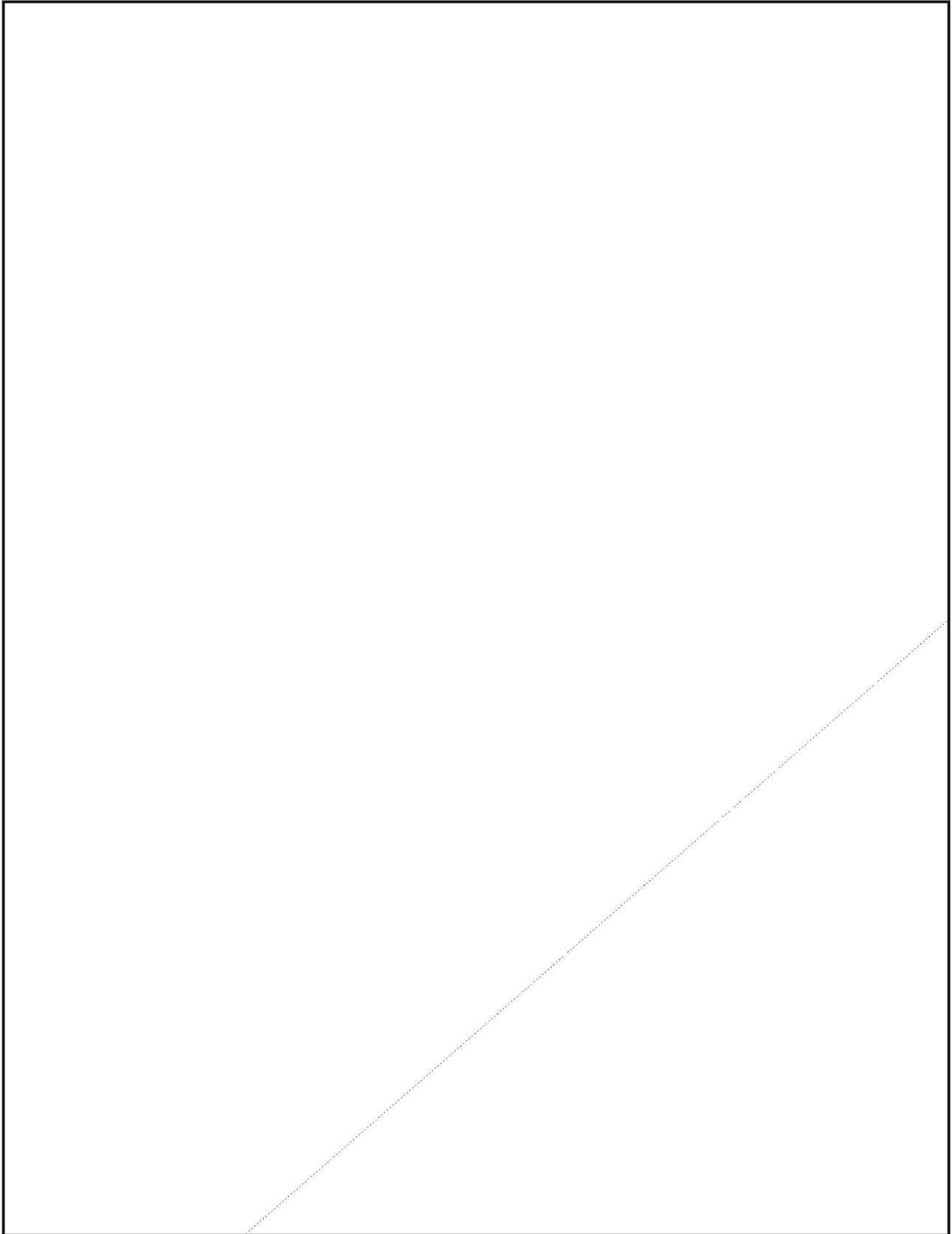
~~SECRET SPOKE~~

~~SECRET SPOKE~~



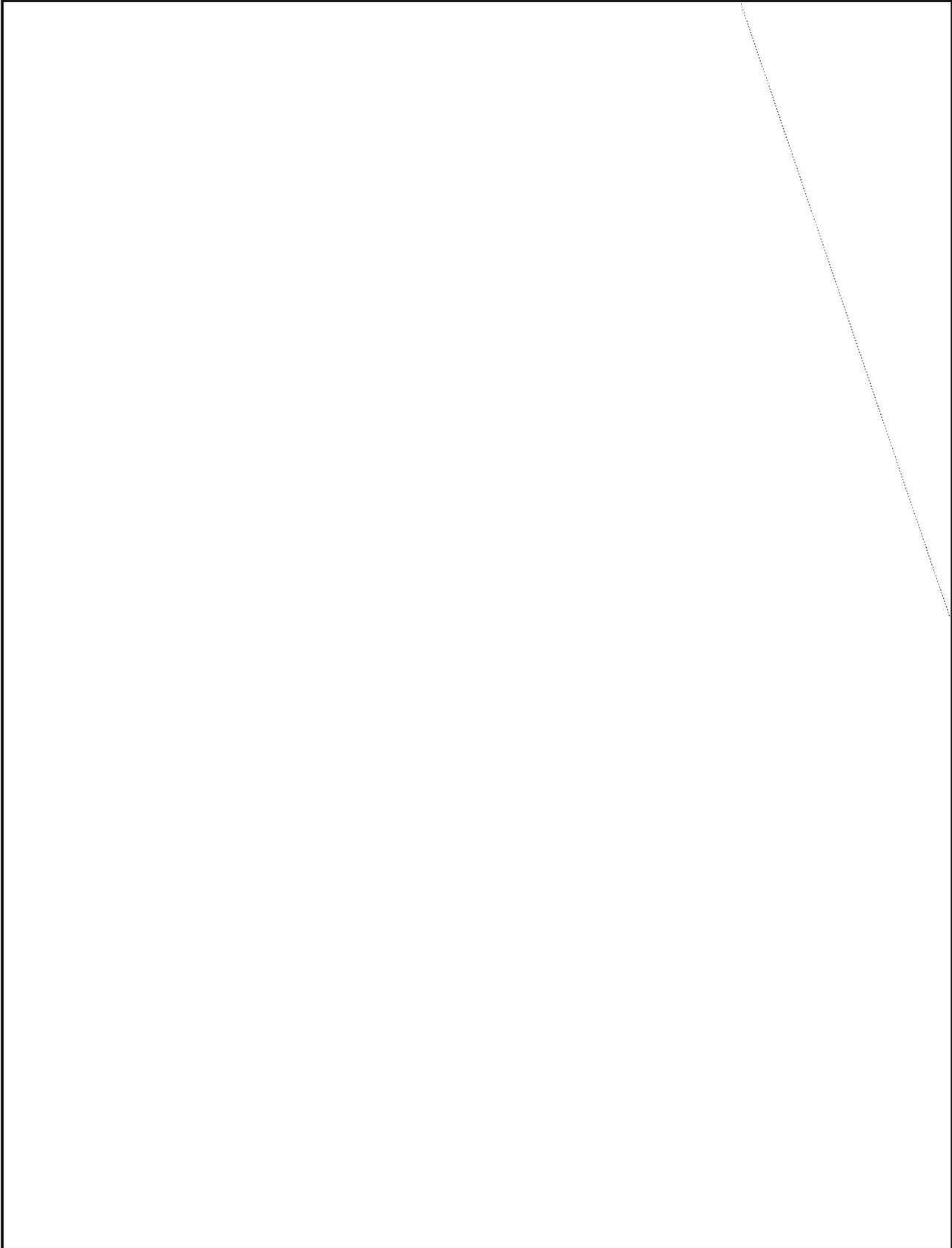
~~SECRET SPOKE~~

~~SECRET SPOKE~~



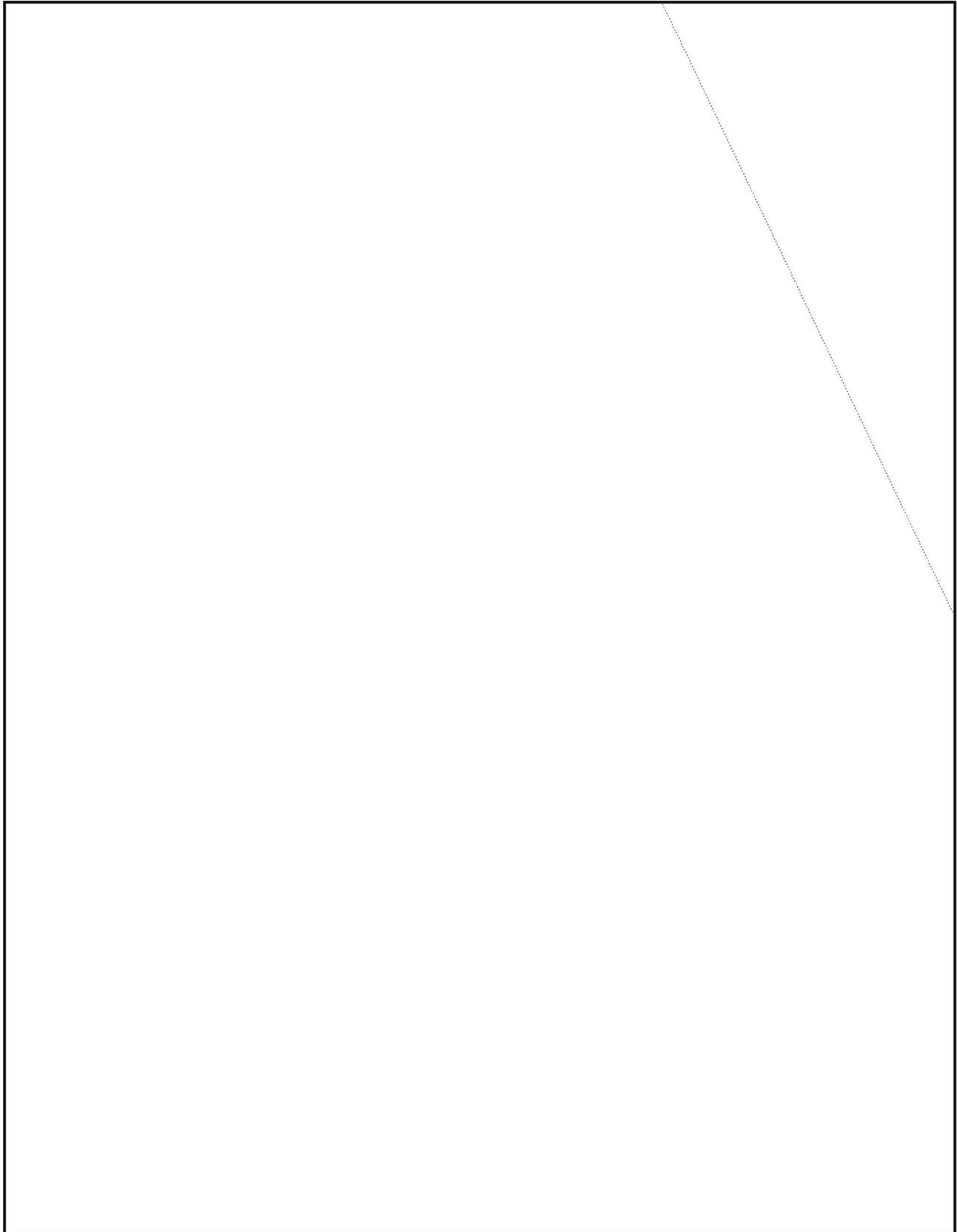
~~SECRET SPOKE~~

~~SECRET SPOKE~~



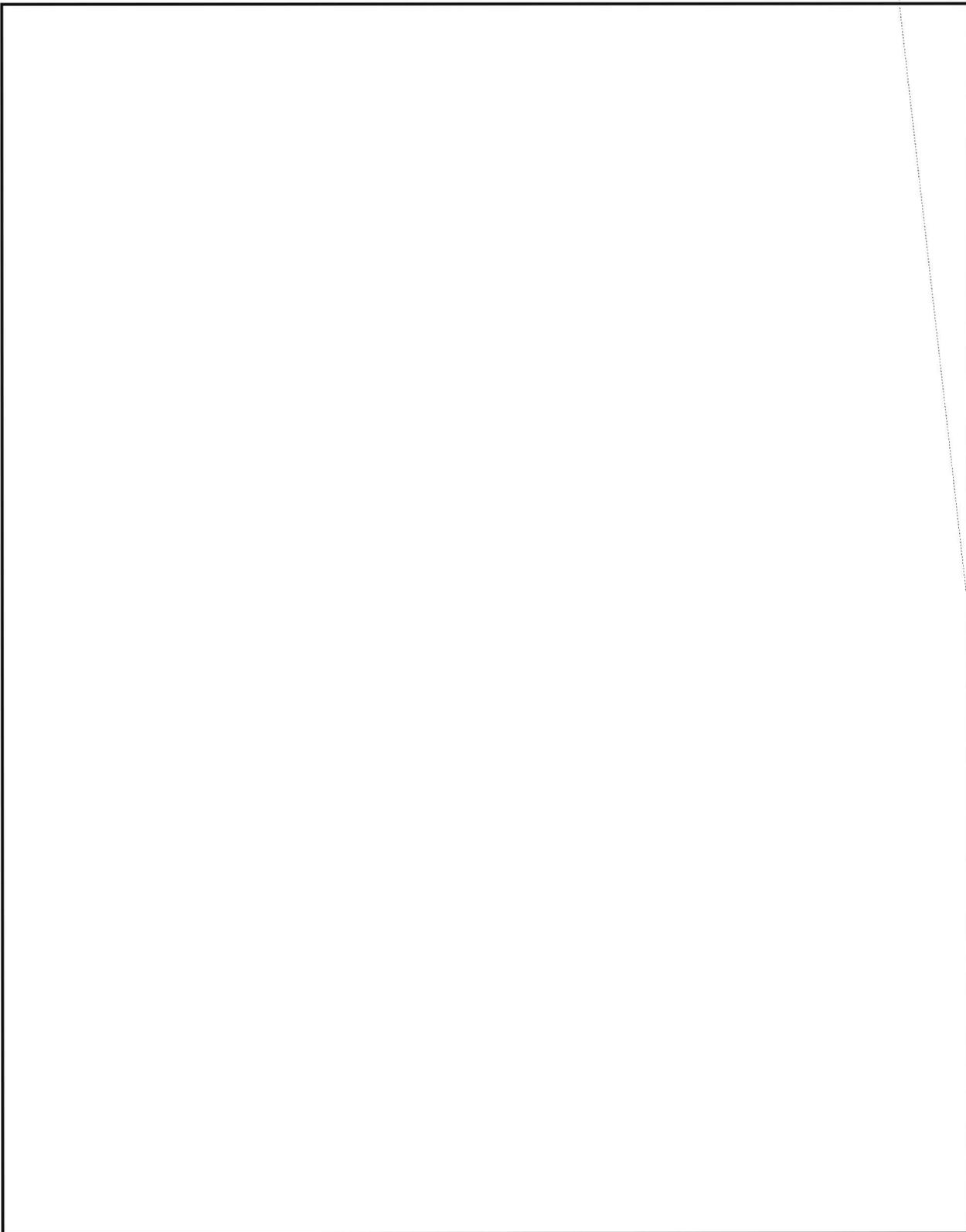
~~SECRET SPOKE~~

~~SECRET SPOKE~~

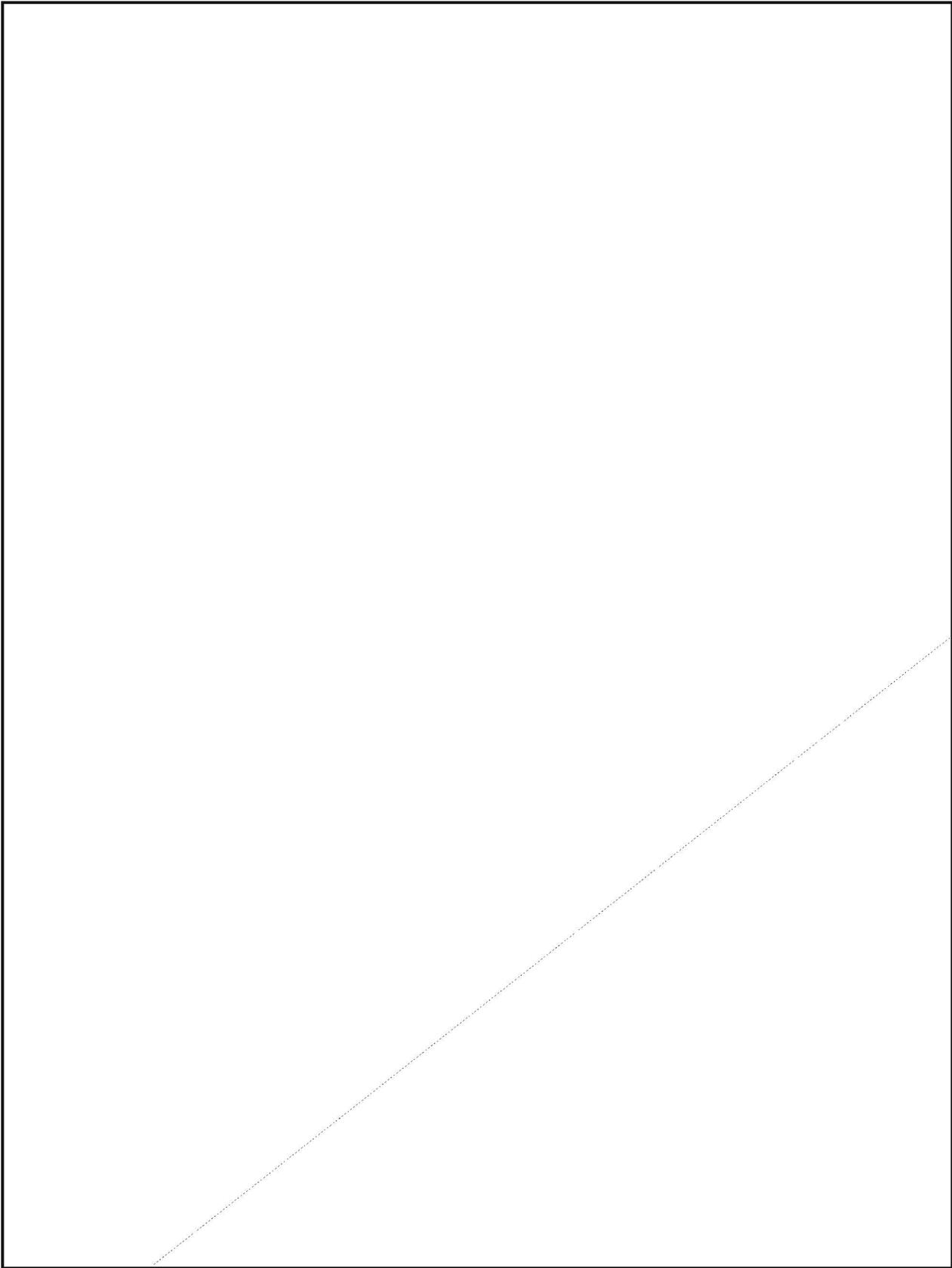


~~SECRET SPOKE~~

**NSA-Croctic No. 35** by DHW



UNCLASSIFIED

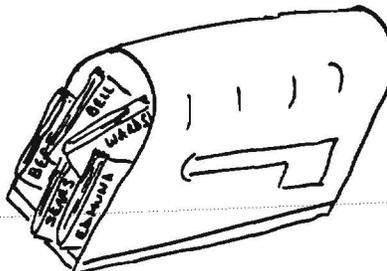


UNCLASSIFIED

~~SECRET~~

# TECHNICAL SUPPORT CATALOGS (U)

by



P.L. 86-36



Providing adequate sustaining field support is one of those abstract concepts that is difficult to define and even more difficult to accomplish. DDO's Analytic Technical Health Group (ATHG) is attempting to improve that situation and to plan for future comprehensive initiatives. This article is intended to acquaint the reader with the Technical Support Catalog - one modest current step towards achieving those goals.

~~(S)~~ Technical Support Catalogs are not new; they have been produced since the early 1950's. Originally, they consisted of lists of available technical documents and publications available on a particular subject entity. They were often produced by hand, typed out from file cards maintained on each technical report produced. In some areas, producing the Technical Support Catalogs often kept one person busy full time. More recently, Technical Support Catalogs have virtually disappeared and, as a result of personnel cutbacks, the published technical reports themselves have been reduced in number and periodicity. This situation was emphasized in a DDF study of field support, based upon Field Visitation Team Reports for 1976 and 1977. The primary field complaint, according to that study, concerned the lack of technical support and timely feedback by NSA. The ATHG, formed by DDO to study the problem and find solutions to it, supported the DDF findings: there had indeed been a diminution of the flow of traditional technical support (i.e., Technical SIGINT Reports and Working Aids) from NSA, as is illustrated in the chart below (based on information provided by T512).

(U) While DDO cannot magically conjure up additional technical support, SIGINT analytic groups can, and must, ensure that appropriate field and in-house elements -

- are provided with the latest information to support their missions (including Alternate Intercept Coverage Plan) and
- are alerted to the availability of any information for which they have a legitimate support requirement.

DDO Technical Report Production  
1968 - 1979

Year	A	B	G	W	DDO
1968	993	876	579	-	2448
1969	1215	879	265	-	2359
1970	914	636	274	1	1825
1971	691	723	204	67	1685
1972	602	458	181	51	1292
1973	459	289	100	51	899
1974	591	219	125	31	966
1975	540	197	112	21	900
1976	454	200	81	21	756
1977	471	130	123	65	789
1978	464	177	155	59	855
1979	199	133	100	76	508

(U) On 12 April, 1978, in its first report to DDO, the ATHG emphasized the purposes of Technical Support and Feedback as a means of improving the efficiency of the collection effort by -

- strengthening the motivation of field personnel,
- increasing their target knowledge,
- improving their understanding of Agency goals,
- enhancing skills and training, and
- encouraging the development of a spirit of teamwork between station personnel and the analytic workforce at NSA.

One of the ATHG recommendations, which were subsequently approved by DDO, called for the creation of two sub-groups, one for feedback and one for Technical Support Catalogs.

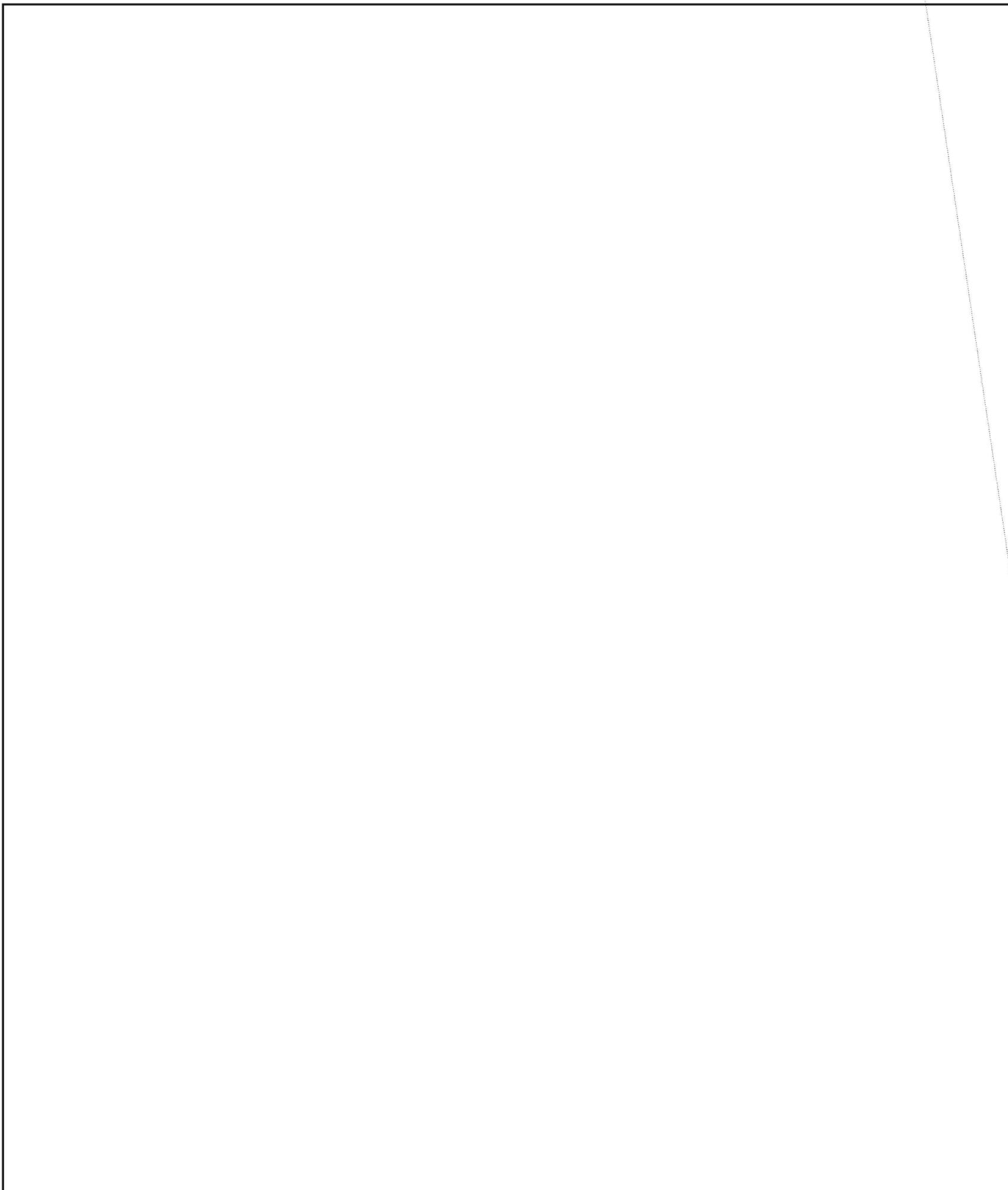
~~(S)~~ The Feedback Sub-group chairman,  P13, working with elements of DDO and DDT, is addressing methods of improving the production by computers (especially Terminal Sub-systems) of quick turn-around information for transmission to field sites. In addition, in order to heighten management awareness of various aspects of this data flow,  working with T131, has incorporated additional displays of "Incoming/Outgoing" data, into DDT's Quarterly Management Information Bulletin. This publication provides management information

P.L. 86-36

~~SECRET~~

~~HANDLE VIA COMINT CHANNELS ONLY~~

~~TOP SECRET UMBRA~~



~~TOP SECRET UMBRA~~

~~CONFIDENTIAL~~

reports, in numeric and graphic form, on the receipt and distribution of data; it includes incoming and outgoing volumes, general patterns of feedback to the sites, and data exchanges with Second and Third Parties.

(U) The Technical Support Catalog Sub-group, chaired by the author, sought a general solution to the problem of regular production of Technical Support Catalogs, and thanks to much assistance from T5 (particularly Ms.

[redacted] was able to focus on a solution based upon the existing NSA/CSS Technical Document Collection. The result, with some minor adjustments, and with room for potential future add-ons, has been instituted as a DDO approved Technical Support Catalog.

(e) STINFO (Scientific and Technical Information) is maintained by T5112, one of the elements of the Library at FANX. The material includes RDT&E reports prepared by NSA or its contractors, DDO technical SIGINT publications, software acquisition documents, and other relevant Agency documents. Every technical publication sent to T5112 is filed according to an S-prefixed one-up number assigned by the STINFO indexers. Prior to a recent change, T5112 prepared bibliographic descriptions of each document using the Report Document Page (DD Form 1473, 1 Jan 73); abstracts of the document were included (if provided by the author) and key words were selected from the text. This procedure, as it applies to the ATHG efforts, has been changed so that the DDO author or the OPC (Office of Primary Concern) of a given technical report must now prepare the DD Form 1473, and must enter the required pertinent information (particularly the abstract and the key word entries).

(U) The data from these bibliographic descriptions are typed by T5 personnel on a Delta Data 7000 terminal, and computer tapes are created. These tapes are processed on CARILLON to add the data to the existing off-line data base. Retrievals of information can be made by key word, author, originating organization, report number, date, etc., and all these elements make up the components of the Technical Support Catalog.

(e) The Technical Support Catalog is now a formal Agency publication included (with instructions) in the Technical SIGINT Publications Manual (USSID 200). It contains a compendium and abstracts of either general or tailored technical documents and publications on a given subject area. All of the material in the Technical Support Catalog is derived from formal records of selected technical SIGINT publications filed in STINFO.

(U) In order for the requisite information to be entered into STINFO, the OPC should forward a copy of each report to T5112, along with the Report Documentation Page (DD Form 1473). The OPC should ensure that the following blocks on the form are completed:

1. Report Number,
2. Title,
7. Author(s) (when applicable),
12. Report Date,
13. Number of pages,
15. Security Classification,
- 15a. Declassification/Downgrading Schedule,
19. Key Words, and
20. Abstract.

EO 1.4.(c)  
P.L. 86-36

(U) Under current procedures, requests for information about reports, or the reports themselves, that come from outside the production group which produced the reports, must be receive formal approval from the group which produced the reports. Therefore, requests from field units for a particular Technical Support Catalog should be sent to the OPC, who will in turn forward the request to T5112.

(U) A variety of production techniques for Technical Support Catalogs are being experimented with by the ATHG and various DDO/DDT elements, using various terminals and Terminal Sub-systems.

(U) Future upgrades of the Technical Support Catalog system include such possibilities as on-line bibliographic sorts, and full-text document retrievals for those subscribers with appropriate system or RJE (Remote Job Entry) terminals.

(U) No amount of sophisticated equipment and software will make the system work effectively unless the humans in the system are committed to making the system work. No matter what further developments and changes are made to the system, those who produce the reports will have to properly participate in the program, and those who need the support will have to properly exercise the system, in order to make technical support all it can be - an accurate, meaningful, and effective contribution to the overall SIGINT effort.

~~CONFIDENTIAL~~~~HANDLE VIA COMINT CHANNELS ONLY~~

# The Stairwell Society



I have always had a deathly fear of elevators. You may have seen me on occasion, braced in the corner, hands wrapped white-knuckled around the side rails, waiting for that twang which would announce the snapping of the cable and the inevitable plunge to follow. I've often wondered whether you could avoid destruction by jumping just as the elevator hit bottom, but this would require precision which I doubt I possess and anyway, everyone knows that in the bottom of the elevator shaft is a giant spring which would bounce the elevator right back at you in mid-jump. And even if you survive the drop, once the elevator starts bouncing off the spring, would it ever stop? Imagine being trapped for weeks in a bouncing elevator! It's enough to make one's palms sweat.

When I related this concern to another ninth floor dweller one day, he mildly asked why I didn't walk up the stairs. That, unfortunately, crunched right into a second of my deathly fears - physical exertion. But I had to do something. The elevator thing was getting to me, so the next morning I walked up . . . and nearly died. As I was lying on the floor next to my desk, wheezing and gasping and waiting for the shooting pains in my left arm to subside and my legs to unknot, my mentor showed up. "You're not supposed to do it all at once!" he railed. "There's an art to this. You must work up to it. I'll coach you." I managed a weak "Thanks."

"For openers," my new coach offered, "I'll let you in on a technique developed by one of the greats in the field - it's called the 'Bloom arc'. You take a wide turn on each landing. This allows your legs a chance to recover. Ideal for the long distance climber."

The next morning I tried this technique. I found it to be somewhat overrated, however, since the landings are just too short for much recovery; and I discovered a distinct risk with this procedure. On the fourth floor landing, as I was doing my 'Bloom arc', I walked right into a girl coming down the stairs carrying two cups of coffee. She was not at all impressed with my 'Bloom arc'

explanation and treated me to some very unladylike observations on my general being. "Sorry" I muttered, amidst wheezes.

My coach set me straight almost immediately. "Of course there are risks. We wouldn't do this if there was no danger! You must learn to accept these and for your information, people who go down the stairs are a blight on our good name. Spurn them! By the way, you'd better get that coffee off your coat before it stains."

A few days later my coach observed that I should be ready to do the complete climb. I protested, but he was adamant and offered another inside hint. "It's called the '6th floor gambol'," he confided. "You leave the stairwell at the 6th floor and go the the staircase at the end of the hall, where you complete the climb. Great chance for a rest. Try it!"

Apparently this is a favorite practice of many of the dedicated stairwell climbers. I noted that when I stumbled through the door on the sixth floor, legs wobbly and out of breath, people politely turned their heads, snickering softly as I passed by. But they are compassionate people, those sixth floor inhabitants. The card table with small cups of gatorade located near the men's room is a nice touch.

After several days of the climb, my coach approached me, put his arm around my shoulder, and talking in a subdued voice said, "I'm proud of the progress you're making; Keep it up and you may make THE SOCIETY." "The what?" I asked. "Well, I really shouldn't tell you about this, but you are a serious person and I think I can trust you. We have, here in NSA, a secret organization of stairwell climbers." "No kidding!" I whispered. "Yup. A secret society. Only the members know who is in it. Won't see our name on the board or in the newsletter or any of that sort of stuff. We don't want any joiners in our group. You know, there are folks around who join anything just to say they are in it. Think it looks good on their record, or whatever. I, for instance, know three guys in the bridge club who absolutely hate the game but wouldn't quit

UNCLASSIFIED

for anything. Terrible thing, this status business. We have none of that!"

"Very interesting" I replied, "but what's the sense of being in a club if you can't talk about it?" "A society!" my coach hissed. "It's not a club. It's a society! Don't make that mistake again!" "I'm sorry" I responded remorsefully. "Our enjoyment comes from association with each other and the sharing of our stairwell. And once each year we even have an outing - just society members. No family or friends with beer and buckets of fried chicken, or any of the tacky stuff. Last year we did the Washington monument. Great fun. Even the tragedy of Harry passing away on the three hundred and fortieth step couldn't mar the enjoyment of that climb. This year we are thinking about the Empire State building, although they are giving us fits. Seems like they make money on their elevators and they hate to pass up potential revenue, but they don't know what to charge for the stairs. No matter, there are other giants for us to assail. Think of it - The Eiffel Tower . . ." His eyes glazed over and his voice broke. "Could I join?" I asked naively. "Absolutely not!" He had his composure back. "We'll have no joiners. I told you that. The elders review all potential members. Only they can choose. When your time comes, you'll know. But never, NEVER ask." "Gotcha." I responded, overwhelmed by the enormity of it all.

"You've got to learn to climb with pain" my coach offered a few weeks later, when I mentioned that my knees were bulging. "Leg cramps are common in this business and must be ignored. Likewise for arm pains. We do recommend, however, that if you experience massive chest pains, you stop for awhile. There are climber aid stations on the odd-numbered floors for emergencies, but a dedicated climber scorns such embellishments. In fact, one of the past greats was stricken early in his climb, but he made it to the ninth floor before collapsing. A heroic effort. Really fantastic. We are thinking of giving an annual award in his memory." "Gosh," I uttered, "what guts!"

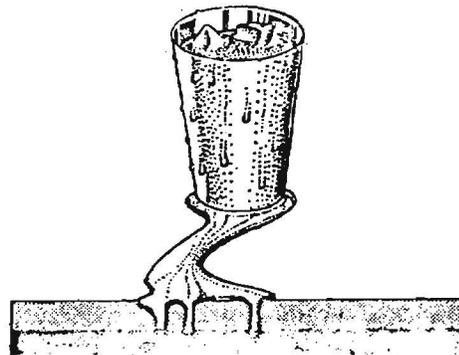
"And there is the matter of dress," my coach continued. "You need climbing shoes if you are really serious about this. And loose clothing. Need to let the body move freely for maximum effort." I took this to heart, got some double-soled tennis shoes, and borrowed a suit from my neighbor, who is three sizes larger than I am. The climb went all right the next day, but I got awfully tired of the caustic comments about my attire, so I opted against "proper dress," even if it is part of the program.

"You might be interested to know that the

seniors in the Stairwell Society," my coach offered one day, "are able to take the stairs two at a time." "I'll never achieve executive status," I replied. "Don't despair," my coach responded. "Some of those people have spent years training to achieve their status. You're still a novice. Give it time. Dedicated people, the Stairwell executives. There is even a story," he confided, as he moved closer and lowered his voice, "of one person in this building who can take the stairs THREE at a time, and do the whole climb holding his breath!" "Fantastic" I replied, with true awe. "Who is he?" "Don't know. Don't even know anyone who has seen him. It's very tightly held." "Wow!" I responded, feeling very 'in'.

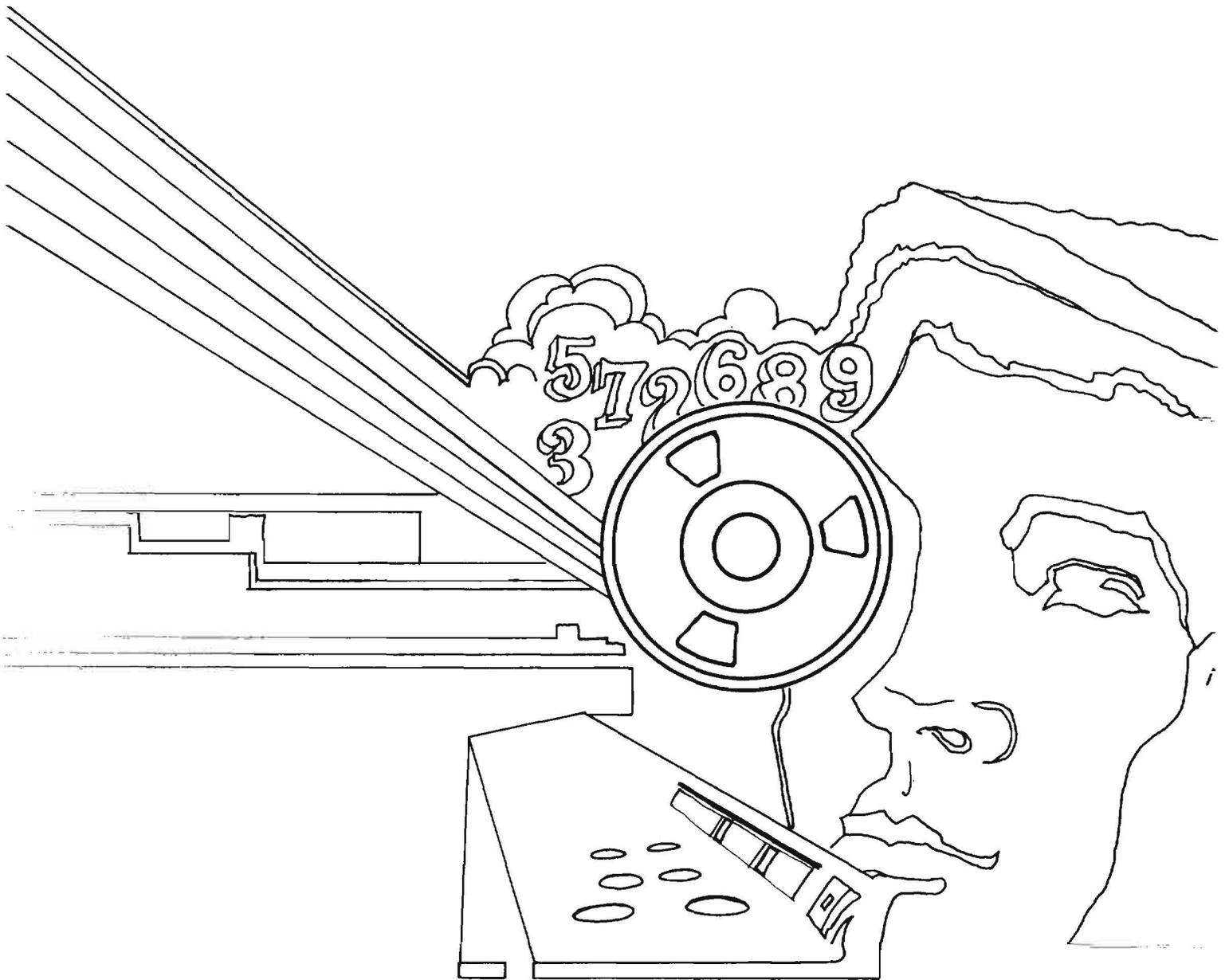
One day I approached my coach with what I felt was a very significant observation. "Did you know," I asked, "that there are two less stairs per flight in the end well than in the center?" "Yeah," my coach replied, "'it's well known within the society. True climbers avoid the end staircase at all costs. World class is the center well." "But does that mean that the building sags?" I asked incredulously. "Of course. That is the end of the building which supports the Director's office. Heavy decisions and all that." "I understand fully," I replied sagely.

I am now a devoted climber. I shun the elevators, avoid the back stairwell, am a master of the 'Bloom arc', have overcome the 6th floor gambol, and look with scorn on those who go down the stairs. My coach thinks I may be welcomed into the society in the near future and he talks with pride about his contributions to my advancement. One would never have expected that a simple fear could lead to a whole new way of life. And the other day a most amazing thing happened. As I was climbing, I heard a whoosing noise behind me, and when I turned to look, a figure passed me taking the stairs three at a time. I could not identify him, but his face was very red and it's possible, just possible, that he was holding his breath!



UNCLASSIFIED

~~TOP SECRET~~



~~THIS DOCUMENT CONTAINS CODEWORD MATERIAL~~

~~TOP SECRET~~