

RAGE FIVE AX 196A-999 UNCLAS

THE SUBJECT SHOULD NOT BE CONTACTED UNTIL FBI IS NOTIFIED
HERE. THIS WILL TAKE PLACE WHEN LEAD INFORMATION IS EXHAUSTED AND
NO OTHER ALTERNATIVES EXIST, SUCH AS EXECUTION OF A SEARCH WARRANT.
BT
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PAGE THREE SECRET

DISCOVERED NUMEROUS LONG DISTANCE CALLS FROM MODEMS INSIDE
THE MCLEAN FACILITY AND TOOK STEPS TO LOCK OUT THE INTRUDER.
THE INTRUDER WAS ENTERING A MITRE LOCAL AREA NETWORK THROUGH
TYMNET ALSO. MITRE HAS ADVISED THAT THE INTRUDER IS ACCESSING
THE SYSTEM AS FOLLOWS: STEP ONE: THE INTRUDER CALLS TYMNET.
ASKS FOR MITRE, AND TELLS A MODEM IN MITRE TO DIAL A CALIFORNIA
TYMNET NUMBER. THE LONG DISTANCE CALL IS CHARGED TO MITRE.
STEP TWO: ASK TYMNET TO CONNECT TO THE LBL COMPUTERS. STEP
THREE: USE LBL COMPUTERS TO ACCESS OTHER NETWORKS LIKE ARPANET,
OR MFENET AND GAIN ACCESS TO YET OTHER COMPUTER SYSTEMS.

IN LATE NOVEMBER, MITRE LOCKED OUT THE INTRUDER BY ADDING EXTRA PASSWORDS TO THEIR MODEMS IN THE MCLEAN FACILITY. THE LBL INTRUSIONS STOPPED FOR ABOUT THREE WEEKS. DURING THIS TIME A REVIEW OF THE LONG DISTANCE TOLL RECORDS OF MITRE CORPORATION, MADE BY THE OUTGOING MODEMS. REVEALS MANY OTHER COMPUTER SITES DIALED BY THE SAME INTRUDER. SOME OF THE COMPUTERS WERE MILITARY. AND OTHERS WERE DEFENSE CONTRACTORS. IT IS NOT POSSIBLE TO DISCERN ALL OF THE CALLS PLACED BY LEGITIMATE MITRE EMPLOYEES AND THOSE PLACED BY THE INTRUDER. TOLL RECORDS DO SHOW THE INTRUDERS CALLS WHICH MATCH THE LBL INTRUSION TIMES.

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AFTER MITRE SUCCESSFULLY LOCKED OUT THE INTRUDER. HE
REAPPEARED BY CALLING THROUGH TYMNET AGAIN. THESE CALLS WERE
TRACED AND LBL ADVISES THAT THE SOURCE WAS TRACED TO THE HAMBERG,
WEST GERMANY AREA. THE GERMAN PUBLIC TELEPHONE COMPANY HAS
COOPERATED WITH TYMNET, AND TRACED THE INTRUDER TO A UNIVERSITY
COMPUTER SYSTEM IN BREMEN, WEST GERMANY, AND ULTIMATELY TO
A LOCAL ACCESS NUMBER IN BREMEN.

IT IS IN THIS WAY THAT THE INTRUDER STARTS HIS CONNECTION,
WHICH IS MOST LIKELY A LOCAL PHONE CALL FOR HIM. THE LOCAL ACCESS
PORT ALSO REQUIRES A USER NAME AND PASSWORD, AND IS UNKNOWN
WHETHER OR NOT THE INTRUDER IS USING HIS OWN VALID ID OR A STOLEN
ID AND PASSWORD.

LŖL	HAS IN PLACE AN ALARM TO IDE	NTIFY WHEN THE INTRUDER
ACCESSES	THEIR SYSTEM. THEY CAN CONT	ACT THE TYMNET SECURITY
OFFICER.		DIRECTLY AT THE TIME OF
INTRUȘION	HAS CONTACTS IN WES	T GERMANY WHICH HE CAN ALSO
QÚICKLY (CONTACT.	

INITIAL ASSESSMENT SHOWS OVER 20 COMPUTER SYSTEMS HAVE BEEN COMPROMISED. THE AMOUNT AND TYPES OF DATA ARE TO BE REVIEWED BY INVESTIGATORS IN THE ALEXANDRIA FIELD DIVISION. THE MAJORITY.

THUE FIVE SECTION	b7E
OF THE INTRUSION ATTEMPTS HAVE BEEN TARGETED AT U.S. GOVERNMENT	₩
AND MILITARY SYSTEMS. IT IS NOT BELIEVED THAT THE INTRUSIONS	
CÓME FROM MULTIPLE PEOPLE PER DR. STOHL AT LEBL.	
FBI ALEXANDRIA WILL FOLLOW UP WITH DETAILS OF WHAT COMPUTER	•
SYSTEMS HAVE BEEN PENETRATED AND WHAT DATA HAS BEEN OBTAINED.	
LEADS: SAN FRANCISCO: AT BERKELEY, CALIFORNIA: CONTACT	
DR. CLIFFORD STOHL, LAWRENCE BERKELEY LABORATORY, HOME	b6 per DOE
WORK AND OBTAIN PRINTOUTS OF INTRUSIONS	
INTO AND THROUGH LBL FOR RETURN TO THE ALEXANDRIA FIELD DIVISION.	
THE DOCUMENTS NUMBER ABOUT 2,000 PAGES. ALSO OBTAIN THE MATEST	
COPY OF STOHE'S NOTES CONCERNING JANUARY, 1987, INTRUSIONS. ALL	•
DOCUMENTS SHOULD BE TREATED AS EVIDENCE IF ORIGINALS. INQUIRE	
AS TO WHETHER ANY DOCUMENTS ARE MORE IMPORTANT FOR REVIEW THAN	
DTHERS.	
BONN: LEGAT: AT BREMEN, WEST GERMANY: RELATE CONTACT FROM	
PREVIOUS AX LEAD WITH BREMEN PUBLIC	
PROSECUTOR.	b3 b6
NOTE CHANGED CHARACTER AND TREAT CASE RELATED RATHER THAN	b7C b7E
FRAUD BY WIRE. MAINTAIN LIAISON TO AX THROUGH FRIHO UNIT CHIEF	_
AND SSA ADVISE AX AS TO WHAT IS	
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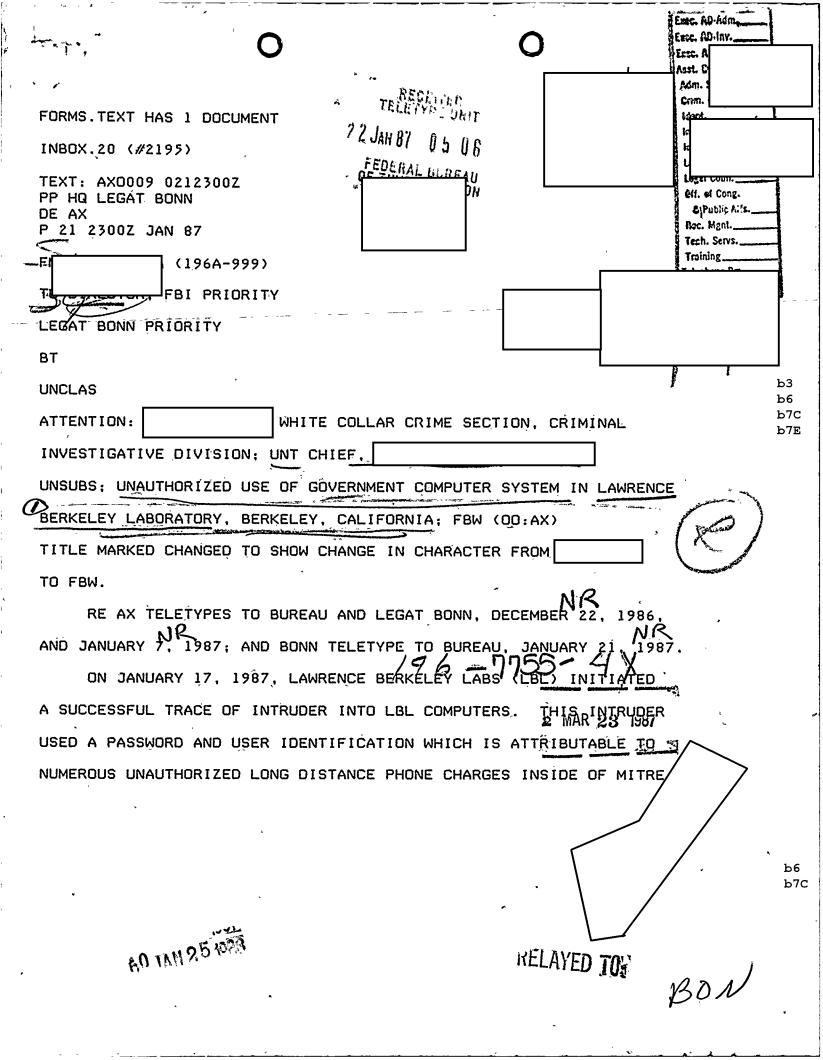
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NEC	ESSARY TO	CONTINU	IE WITH T	TRAP/TRACE	OF	SUBJEÇT (s).	ADVISE
							OF	IMPORTANÇE
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PAGE TWO AX 196A-999 UNCLAS

CORPORATION IN MCLEAN, VIRGINIA. THIS INTRUDER HAS BEEN ACCESSING AND ATTEMPTING TO BREAK INTO NUMEROUS U.S. GOVERNMENT COMPUTER SYSTEMS.

MOST OF THE INTRUSIONS HAVE BEEN USING THE TYMNET DATA
NETWORK LOCATED IN THE UNITED STATES. TYMNET SECURITY OFFICER
WAS ASKED TO INITIATE, A TRACE THROUGH TYMNET TO LOCATE
THE INTRUDER. TELEPHONICALLY ADVISED THE ALEXANDRIA DIVISION
THAT THE WEST GERMAN DATEX-P NETWORK WAS ACCESSED IN WEST GERMANY
TO CALL THE TYMNET NETWORK IN THE UNITED STATES.
ADVISED HE WAS TOLD BY DATEX-P AUTHORITIES THAT
THE ORIGINATOR OF THE INTRUSIONS WAS TRACED TO A TELEPHONE NUMBER
IN WEST GERMANY. THE INTRUDER IS APPARENTLY USING A VALID ACCESS
NUMBER TO THE DATEX-P NETWORK AND IT IS BELIEVED THE CALLS ARE
ORIGINATED BY AN ADULT.
LEADS:
LEGAT BONN: THROUGH APPROPRIATE
CONTACT AT DATEX-P NETWORK, TELEPHONE
TO ASSIST ALEXANDRÍA IN IDENTIFYING SOURCE OF
INTRUSIONS FOR POSSIBLE INDICTMENT IN THE UNITED STATES.
ADVISE THAT ALEXANDRIA WILL ALSO

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STATUTES BY PROVIDING PHONE TOLL RECORDS AND TIMES OF INTRUSIONS.

ALEXANDRIA REQUESTS ANY PHONE RECORDS OF SUBJECT BE PROVIDED IF

POSSIBLE, AS WELL AS SUBJECT'S IDENTITYING DATA.

ADMINISTRATIVE:

FOR INFORMATION OF LEGAT, BONN, THIS CASE IS BEING RECLASSIFIED

AS A FBW MATTER AND WILL BE HANDLED UNCLASSIFIED AS A CRIMINAL

MATTER. IT IS HOPED THAT THIS WILL AID BONN IN ITS LIAISON EFFORTS

WITH

TO OBTAIN THEIR

COOPERATION IN IDENTIFYING THE SUBJECT AND PROSECUTING UNDER U.S.

LAWS:

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	TO DIRECTOR PRIORITY FEDERAL 33
	FBI, ALEXANDRIA (196A-999) PRIORITY b7c
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	ATTN: WHITE COLLAR CRIME SECTION
0	UNSUBS; UNAUTHORIZED USE OF GOVERNMENT COMPUTER SYSTEM IN LAWRENCE BERKELEY LABORATORY BERKELEY CALLEDONIA FROM
	OO :AX
	REBONCAB DATED JANUARY 30, 1987.
	ON FEBRUARY 3, 1987 ASSISTANT LEGAT MET
	WITH US AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS (AFOSI)
	REPRESENTATIVE TO DISCUSS CAPTIONED MATTER.
·	HE ADVISED THAT HIS HEADQUARTERS DIRECTED HIM TO
L	CONTACT LEGAT AND PROVIDE WHAT TECHNICAL ADVICE AND ASSISTANCE
	MAY BE NEEDED IN THIS INVESTIGATION. b6 per FBI, AFOSI
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ſ	LEGAT WILL ARRANGE ALONG WITH TO MEET WITH
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PAGE TWO BON 196A-221 UNCLAS

IN ORDER TO OFFER THE

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FD-36 (R	ev. 8-26-82)	O	FBI		C)	**************************************	÷
	TRAÑSMIT VIA: ☐ Teletype ☐ Facsimile ☐		RECEDENCE: Immediate Priority Routine		☐ TOP SECR☐ SECRET☐ CONFIDEN☐ UNCLAS E☐ UNCLAS	ET TIAL		
	FROM:	DIRECTOR, EATTN: CCA	iA	(196	E COLLAR CRI A-999)(P)	ME SECTION	4	ъ6 ъ7С
-	COMPUTER S LABORATORY FBW OO:AX	SYSTEM IN LA BERKELY, OLAI	USE OF GOVE AWRENCE BERK CALIFORNIA; WRENCO B Letypes, 2/4	erk erk	eley L.			
	by Dr. CLI Berkely La	e airtel dir Enclosed for FFORD STOLI boratory.	to WCCS, Freetly to Legar Bon L, U.S. Depa	gat Borren	onn via DHL a 73 page do t of Energy,	courier. cument cre Lawrence		
	document i Lawrence B contain a 4 through intruder a a flow cha	s an explant serkely Labor synopsis of 10 are a chart ccessed the rt showing	nation of the pratory since all the every constant and the every computers. The path of	e compe late ents : list: At tl	outer intrude 1985. Page leading to p ing of the t ne end of th intruder's p	ers into s 1 throws resent. imes the e docume hone cal		ъ6 ъ7с
7	investigat The Alexan document e directed t	ion is tech dria case a nclosed and o telephoni nc. 1)(Attr	ne understoomical to unical to unical to unical to unical in any que cally contact to the call to the cal	dersta tained stions of the	and, but not d a copy of s arise the	impossible the STOLL Legat is	5-7 R 20 1987	b6 b7c
	Approved: 58NUV	16 1987	Transmitted (Number) (Time)	Per		

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The document has been marked in red and blue pen by the case agent with the following directions:

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1. Blue markings show the government computer intrusions for police authorities and the main pertinent investigative data.

2. Red markings for more sensitive information which should not be generally released to non-police or non-phone company officials.

The Legat is directed to use absolute discretion in the dissemination of the documents. They contain in some cases, active passwords, and actual network addresses in the U.S. Military Data Network. These network addresses are not classified nor is any part of the enclosed document.

The document is a perfect case study of international computer intrusions, and should not be disseminated so as to allow individuals to use it as a guide to network intrusion and possible sabotage.

Ongoing investigation has determined that other computer networks other than TYMNET are also being used by persons in West Germany to access U.S. Government computers in violation of United States Federal statutes. During the month of February persons using Datex-P dial-in pads in Hamburg, West Germany, accessed illegally a computer maintained by the Department of Agriculture in Washington, D.C.. The intruders used the TELENET Network, headquartered in Reston, Virginia, which is an alternative service to TYMNET. The Department of Agriculture maintains that no authorized users access their computers from West Germany and the international connections have been rerouted so as to not allow any international connections to their computers.

This is a solution not available to the other networks involved in this matter as it is necessary that our Military sites utilize worldwide connectivity.

Leads: Legat Bonn,

1. Assistant Legat _______ is directed to find out what federal and state prosecutive agencies are involved in the investigation of captioned matter. The names of these agencies should be sent by teletype to Alexandria for the use of Department of Justice attorneys.

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2. Due to the inter-governmental agency attention this matter has drawn it is necessary to quickly discover the identities of the intruders and whether or not the FRG intends their prosecution if US authorities can provide necessary evidence.

3. The Assistant United States Attorney for the Eastern District of Virginia believes that prosecution is in order given most circumstances; either by United States courts, FRG courts, or both.

4. The times and dates of access by the intruder as listed in the enclosed document should be referenced to any times and dates that the West German officials have. It should be possible to show times and dates a person was using his phone or Datex-P account and reference them to the enclosed documents.

Administrative:

Alexandria Field Division is ready to provide assistance to Legat Bonn if necessary. The case agent is ready to explain the activities of the intruders to the Legat and other necessary officials.

Department of Justice Attorneys have high interest in the matter and are also bringing it to the attention of the State Department. It should not be unexpected that the Legat will be contacted by State Department personnel.

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	LEGAT BONN IMMEDIATE	Tech. Ser	
	SAN FRANCISCO RIORITY	Telephone Pm Director's Sec'y	
	BT 10		
•	UNCLAS LAWrence Berkeley Laboratory		
	ATTENTION: WHITE COLLAR CRIME SECTION, CRIMINAL		
ı	INVESTIGATIVE DIVISION.		
	UNSUBS: UNAUTHORIZED USE OF GOVERNMENT COMPUTER SYSTEM IN		
	LAWRENCE BERKELEY LABORATORY, BERKELEY, CALIFORNIA FRANCOCAX		
	RE ALEXANDRIA TELETYPES TO BUREAU AND LEGAT BONN. DECEMBER 196. JANUARY 7. 1987, JANUARY 21, 1987, AND BONNTEL TO BUREAU.	22,	Albert
	FOR THE INFORMATION OF SAN FRANCISCO. TITLE WAS CHANGED	,-	
	PREVIOUS TELETYPE TO SHOW CHANGE IN CHARACTER FROM FCI - GO TO-		6
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	ON JANUARY 28, 1987, ROBERT GREEVES, DIRECTOR OF AUTOMATED		
	DATA PROCESSING FOR THE DEPARTMENT OF ENERGY, ADVISED THE	[UR 08 1137	
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PAGE TWO AX 196A-999 UNCLAS

ALEXANDRIA DIVISION THAT ON FEBRUARY 10. 1987. HE INTENDED TO STOP MONITORING PENETRATIONS INTO LAWRENCE BERKELEY LAB (LBL) COMPUTERS. INVESTIGATION TO DATE HAS STEMMED FROM LBL ALLOWING UNSUBS TO ACCESS LBL COMPUTERS AND MONITOR THEIR ACTIVITIES AS THE INTRUDER(S) THEN ATTEMPTED TO PENETRATE VARIOUS U.S. GOVERNMENT COMPUTER SYSTEMS.

THE DEPARTMENT OF	ENERGY IS WILLING	TO COOPERATE IN ANY WAY
NECESSARY TO AID ONGOI	NG INVESTIGATION.	ALEXANDRIA RECEIVED
INFORMATION FROM TYMNE	T SECURITY OFFICER	ON
JANUARY 27, 1987, THAT		

IT IS IMPORTANT THAT LIAISON BE MAINTAINED SO THAT THE POSSIBILITY OF RETAINING THE LBL MONITORING CAPABILITY CAN BE ESTABLISHED. AFTER THE FEBRUARY 10, 1987, CUTOFF DATE, THE INTRUDERS WILL NOT HAVE ACCESS TO THE LBL COMPUTERS, BUT IT HAS ALREADY BEEN SHOWN THAT THIS WILL NOT PRECLUDE THE UNSUB FROM ACCESSING OTHER GOVERNMENT COMPUTER SYSTEMS.

FOR THE INFORMATION OF LEGAT BONN, AIR FORCE OFFICE OF
SPECIAL INVESTIGATIONS (AFOSI) IS ALSO INVESTIGATING CAPTIONED
MATTER, AS A NUMBER OF AIR FORCE COMPUTERS HAVE BEEN PENETRATED

b6 b70 b71 PAGE THREE AX 196A-999 UNCLAS

BY THE LBL INTRUDER. IT IS NOT UNEXPECTED THAT LEGAT MAY DISCOVER

PARALLEL EFFORTS BY AFOSI PERSONNEL IN WEST GERMANY.

ALEXANDRIA DESTRES TO IDENTIFY

TO ASSIST LEGAT IN LIAISON EFFORTS

LEGAT BONN: CONTINUE EFFORTS AS SET FORT IN JANUARY 21, 1987

TELETYPE. WHEN

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SUTEL RESULTS AS SOON AS

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TRANSMIT VIA: Teletype Tacsimile X Airt		PRECEDENCE: Immediate Priority Routine	CLASSIFICATOP SECRET CONFIDE UNCLAS	ENTIAL	***	,
			☐ UNCLAS Date	5/4/87		
TO:	DIRECTOR, 1 ATTN: FBIHO SECTION FBIHQ, SSA	Q, SSA	WHITE COL		ь6 ь7с	
FROM:	ACTING SAC	, ALEXANDRIA (196A-999) (P)			
COMPUTER	SYSTEM_IN_L	USE OF GOVERN AWRENCE BERKEL CALIFORNIA;				
	This docum	ent is unclass	ified unless ot	herwise noted	ı .	
CLIFFORD LBL has h was disco lock out intruders a gateway	tion is pred STOLL, lawred and unauthors overed in Aud the intrudes STOLL dis to the DEF	dicated upon i ence Berkeley ized persons u gust 1986. Af rs, LBL starte scovered that ENSE DATA NETW	ittsburgh, the information rece Laboratory (LBL sing their comp ter unsuccessful d monitoring the the intruders we ORK (DDN), and overnment compu	ived from DR.). Since 198 uters, and th l attempts to e actions of ere using LBI they were	is is the	ь6 ь7С
Division the intrucompany. from the data network based Tyres	virginia, ing was brought iders were of It was late Federal Repropersion. The ing met Network	side of MITRE into the mattriginating from er determined ublic of Germantruders were , after placin	olice agencies corporation. A er when it was menth this Northern that the calls may, specifically entering LBL from 16-7155-	lexandria Fiebelieved that Virginia Were originat Were The Datex-Fom the Americ West Germany	eld :: :ing ::an	
	rancisco. Lnatti					ь6 ь70
Approved:		CEASSIFIE	Number) (Time) D BY G-3 FY ON OADR	_ Per		-
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DR. STOLL kept Alexandria informed on the matter and on January 1, 1987, a sensitive data base inside the Pentagon was accessed by the same West German intruder. No classified data to date has been compromised, but very sensitive data, such as an indices and abstracts of classified documents have been searched.

In early January, 1987, DR. STOLL placed documents on his LBL computer that he thought would be of interest to the intruder. This was an attempt to keep the hacker interested and online long enough to complete an international trap-and-trace. STOLL placed convincing documents on his computer concerning a fictitious new network named SDINET. On January 16th the intruder at LBL far exceeded normal user capabilities, and read about the new network in a private area of the computer. STOLL advised that this intruder was the only person other than himself to have read this document on the LBL computer.

Numerous difficulties in communications between West Germany and Alexandria have slowed the investigation. The main problem consisted of two sources of information to Alexandria. Tymnet Data Network Security person, advised that West German Datex-P authorities had indeed traced the LBL call on January 16, 1987. The Legat sent a communication to FBI Alexandria asking about access times of the intruder almost 3 weeks after Alexandria sent a document containing them to Bonn. The document sent to the Legat was a 75 page condensed diary of everything that has occurred at LBL. The document included times of access, dates of access and the user name that the intruder used. Legat has determined that

and have been waiting for the intruder to re-establish a connection with LBL. The intruder has logged on to the LBL computer in April, 1987, but he has not stayed on longer than five minutes at any given time. Also the frequency of calls has diminished to about one logon every three weeks.

On April 27, 1987, STOLL telephonically contacted SA in the Alexandria Division. STOLL had received a request in the mail for information concerning SDINET. The information that the person had requested had only been known by the intruder and DR. STOLL. It is assumed that the person requesting the information has some connection to the intruder.

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what the hacker received while online with the LBL computer. It requests various documents and is signed by The letterhead features the name envelope is postmarked April 22, 1987, and bears postage meter number Alexandria indices showed a record check for the same person requested by Pittsburgh in 1982. checks were negative regarding The address of the person in the record check is the same as the requestor of information, PITTSBURGH, PA, 15236. The Pittsburgh file number was and requestor of the record check was Pertinent biographic data is shown as:	1
search revealed an entry of another person with the same name, possibly pertinent information as:	
(SX)	
Due to the sensitivity of the investigation it is requested that all logical investigation be conducted in a non-alerting manner. No contact is to made with Subjects are considered a flight risk due to their status as An online Dunn and Bradstreet request is not to be done due to the possibility discovering that this check had been requested. REQUEST OF THE BUREAU	
FBI HQ: Conduct all logical indices and database inquiries to provide biographic and substanative data regarding	
LEADS	
Pittsburgh at Pittsburgh: Conduct necessary biographic investigation, including reviews of existing subject file data. If any subpoenas are necessary to obtain information, Alexandria will forward them. All indices checks are requested as well as logical local record checks. It is requested that the postal inspectors be contacted to obtain the location of meter number For any necessary subpoenas contact SA in the Alexandria FBI office, FTS 967-1200.	
Cincinnati at Columbus: Search Records of Defense Industrial Security Clearance Office (DISCO). for any information on	
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May 7, 1987

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JUDGE:

RE:

UNAUTHORIZED USE OF GOVERNMENT COMPUTER SYSTEM IN LAWRENCE BERKELEY LABORATORY,

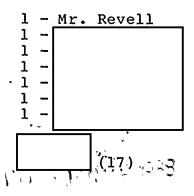
BERKELEY, GALIFORNIA;

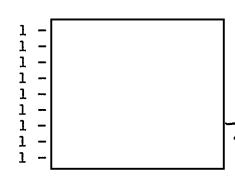
FRAUD BY WIRE; 00: **ALEXANDRIA**

A computer system, housing government information in Berkeley, California, has repeatedly been intruded by a sophisticated user in West Germany. The creation of a fictitious computer file_has_resulted_in_the_identification_of_a_possible co-conspirator in Pittsburgh, Pennsylvania. Both a criminal investigation and a foreign counterintelligence preliminary inquiry have been initiated in an effort to identify the scope and identities of those responsible for the intrusions.

DETAILS: Since 1985, the Lawrence Berkeley Laboratory (LBL) has experienced numerous occasions wherein unauthorized persons gained access to their computers. This was not discovered until 1986 when unsuccessful attempts to lock out the intruder were discontinued in favor of monitoring the intrusions. monitoring showed the intruder utilized LBL as a gateway to the Defense Data Network (DDN) which linked numerous computer The LBL was able to determine the calls originated in West Germany and utilized the Tymnet Network which routed the connections through the MITRE Corporation in McLean, Virginia, then into the LBL computer.

In an effort to identify the intruder, Dr. Clifford Stoll established a fictitious file in the LBL computer titled SDI Network Project. That file indicated numerous documents on file and a form letter indicating an individual and an address from whom copies of the documents could be obtained. On January 16, 1987, the intruder gained access to the LBL computer and to the fictitious file. By utilizing advanced computer technology far greater than that normally associated with a computer hacker, the intruder was able to become a master user and review subfiles within the fictitious SDI file. This intrusion was traced back to a specific West German location, and information has been furnished to Legat Bonn in an effort to identify the intruder.





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On April 27, 1987, Dr. Stoll received a letter from	
of the documents from the fictitious SDI file at LBL. The	
request was a near verbatim rendition of the information accessed	
by the intruder on January 16, 1987.	
It appears that there is some connection between and the West German intruder.	
CURRENT DEVELOPMENTS: In view of the scope and nature of this matter, both a criminal investigation	b3 b6 b7c
have been initiated and supported as needed by the Technical Services Division.	b7D b7E
This matter is being coordinated by the Criminal Investigative Division with support by Legal Attache Bonn, Alexandria Field Office, the Pittsburgh Field Office and the San Francisco Field Office. Members of the intelligence gathering community have expressed extreme concern over this matter.	
Executive Assistant Director Oliver B. Revell was briefed on this matter on April 30, 1987.	
You will be kept advised of developments.	
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BERKELEY LABORATORY, BERKELEY, CA	I TEODNIA. EDIL. (CO.AV)	Action of the Control
DETINALLY CHARACTER CONTROLLERY CH	EIT ONITH, TOWN CODERNY	7
RE TELCALL TO BONN, ASST. LE	GAT MAY 20, 19	87, /
AL TELCALL TO SSA FBIHQ, MA	V 20. 1987	
		Y Y
ALEXANDRIA HAS BEEN CONDUCTI	NG AN INVESTIGATION OF UNAUT	HORI
ACCESSES OF DEPARTMENT OF ENERGY	COMPUTER SYSTEMS AT LAWRENCE	•
BERKELEY LABORATORY (LBL), BERKEL	EY, CALIFORNIA. BURING THIS	
INVESTIGATION, NUMEROUS ACCESSES	HAVE BEEN RECORDED WHICH HAV	E BEEN
ATTIBUTABLE TO A SINGLE SOURCE.	THE FOLLOWING SET OF CONCLUS	IONS
CÂN BE DRAWN CONCERNING THIS INVE	19/2-175	5-13×1
CHÚ DE DÚHMIA COMCENIATIÁO TÚTE TIAAE	STIGATION. A. THE SAME'STO	LEN
USER ACCOUNTS OF THE LBL COMPUTER	ARE BEING USED, THE PASSWOR	DS ON
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RELAYED TO:

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THESE ACCOUNTS HAVE BEEN CHANGED FREQUENTLY AND ONLY THE PERSON CHANGING THEM WOULD BE ABLE TO HAVE REPEATED ACCESS. B. THE PERSON MUST KEEP NOTES SINCE SO MANY DIFFERENT ACCOUNTS AND PASSWORDS ARE BEING USED. IT WOULD BE EXTREMELY DIFFICULT TO KEEP TRACK OF THE METHODS BEING USED WITHOUT WRITTEN OR ELECTRONICALLY RECORDED NOTES.

- C. THE PERSON HAS DISSEMINATED INFORMATION CONTAINED IN A GOVERNMENT COMPUTER SYSTEM. THIS INFORMATION WAS NEARLY IDENTICAL TO THE INFORMATION THAT WAS READ BY THE INTRUDER ON JANUARY 16, 1987.
- D. THE PERSON IS CONTINUING HIS INTRUSIONS FOR VERY LIMITED PERIODS OF TIME, DEFEATING TRAP AND TRACE ATTEMPTS.

ON MAY 19, 1987, THE INTRUDER WAS ON THE LBL COMPUTER AT 06:54 TO 06:56 AND 07:12 TO 07:19 PACIFIC DAYLIGHT TIME (PDT). ON MAY 20, 1987, THE INTRUDER WAS ON THE LBL COMPUTER FROM 05:48 TO 06:01 AND AT 09:49 TO 09:52 PDT. UNSUBS TERMINAL MALFUNCTIONED AT 05:57 A.M., AND HE ACTUALLY CALLED BACK FROM 05:58 TO 06:01. THESE CALLS WERE TRACED BY TYMNET DATA NETWORK TO THE UNIVERSITY OF BREMEN. THE DATEX-P NETWORK ADDRESS OF THE ORIGINATING CALLS WAS 2624-5421-0421. THIS IS IMPORTANT LEAD INFORMATION AND COULD ESTABLISH A CRIME BEING COMMITTED IN THE FRG.

HTIW.	DATEX-P	CONTD	ESTABLISH	THE	EXACT	LOCATION:	OF

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THE COMPUTER USED IN THESE ATTEMPTS. THE SYSTEM OPERATORS OF THE COMPUTER AT THE UNIVERSITY OF BREMEN COULD TELL THE INVESTIGATOR WHAT USER ID WAS USED TO AT THESE TIMES AND DATES TO CALL THE DATEX-P NETWORK, OR SIMPLY THE USER ID'S USING THE COMPUTER AT THESE TIMES. THIS COMPUTER IS BEING REGULARLY USED BY THE INTRUDER.

THE INTRUDER IS EITHER USING A UNIVERSITY TERMINAL OR IS CALLING INTO THE UNIVERSITY COMPUTER FROM A COMPUTER IN HIS HOME OR OFFICE. THE USER ID UNSUB IS USING IS EITHER VALID OR STOLEN. IF THE INVESTIGATOR IS ABLE TO DETERMINE FROM THE UNIVERSITY OF BREMEN THE OWNER OF THE ID BEING USED, THEN HE WILL BE ABLE TO FIND OUT IF THE INTRUDER IS USING HIS OWN OR SOMEONE ELSES CODE. IF UNSUB IS USING HIS OWN CODE, THEN WE WILL HAVE THE TRUE IDENTITY OF THE INTRUDER. IF HE IS USING A STOLEN CODE, THE UNDOUBTEDLY THE POLICE IN WEST GERMANY HAVE A LOCAL VIOLATION OF THEIR LAWS. THE INTRUDER IS CHARGING NUMEROUS INTERNATIONAL DATA CONNECTIONS TO THE STOLEN PERSON'S ID. ALSO THE DATEX-P MAY BE ABLE TO TELL WHAT USER ID WAS USED AT THAT TIME TO GAIN ACCESS TO THE NETWORK.

SINCE THE INTRUDER IS CALLING A UNIVERSITY OF BREMEN COMPUTER, OR A DATEX-P DIAL-IN PAD NUMBER, THERE ARE ONLY A FEW NUMBERS THE INTRUDER IS CALLING FROM HIS HOME OR PLACE OF BUSINESS. IT IS

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IF A DIALED NUMBER RECORDER WAS USED,

SUGGESTED THAT A DIALED NUMBER RECORDER, (PEN REGISTER), BE USED TO SEE IF THE KNOWN SUBJECT IS DIALING INTO ANY OF THESE NUMBERS OF ACCESS PORTS, SO THE FBI CAN MATCH THESE TIMES TO TIMES OF ACCESS OF THE LBL COMPUTERS.

THIS MATTER COULD ALSO TELL IF THE SUBJECT IS USING A
COMPUTER AND AT WHAT TIMES, DUE TO HIS DIALING COMPUTER ACCESS PORT
NUMBERS. THE INFORMTION FROM A DIALED NUMBER RECORDER IN THE UNITED
STATES HAS PROVEN A STRONG SOURCE OF TIMELY INFORMATION FOR SEARCH
WARRANT AFFIDAVITS.
LEAD. LEGAT BONN AT BREMEN, FRG: CONTACT LEGAT BONN AT BREMEN:
PROVIDE RECENT INFORMATION CONCERNING ACCESSES OF LBL COMPUTER
THROUGH THE UNIVERSITY OF BREMEN COMPUTER TO
IDENTIFY THE OWNER OF RECENT NETWORK ID USED TO GAIN
ACCESS TO THE TYMNET NETWORKD AND THEN LBL, AT TIMES AND DATES
INDICATED ABOVE. AT DATEX-P IS LOGICAL SOURCE OF
INFORMATION. ALSO ESTABLISH
IF A STOLEN
NETWORK IN NUMBER IS BEING USED THEN THE SUBJECT IS CERTAINLY

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NETWORK ID NUMBER IS BEING USED THEN THE SUBJECT IS CERTAINLY BREAKING LOCAL LAWS.

PAGE TWO SECRET

LABORATORIES (LBL), BERKELEY, CALIFORNIA. INTRUSIONS INTO LBL COMPUTERS HAVE BEEN ONGOING SINCE SEPTEMBER, 1985, AND HAVE BEEN CLOSELY MONITORED. COMPUTERS AT LBL ARE ACCESSED BY A MODEM OR THROUGH ONE OF A NUMBER OF COMPUTER NETWORKS. THE MAJORITY OF THE INTRUSIONS HAVE BEEN FROM TYMNET, WHICH IS A NATIONWIDE NETWORK THAT CAN BE DIALED BY A LOCAL PHONE CALL FROM MOST MAJOR CITIES.

IT IS IMPORTANT TO UNDERSTAND THAT AFTER CONNECTING TO THE LBL COMPUTERS, THE INTRUDER THEN HAS USED THE LBL COMPUTER TO CONNECT TO OTHER NETWORKS AND COMPUTERS. LBL HAS MAINTAINED LOGS WHICH SHOW ALMOST ALL OF THE INTRUDER'S ACTIVITIES WHILE CONNECTING THROUGH THE LBL SYSTEMS. IT IS IN THIS MANNER THAT IT HAS BEEN DETERMINED THAT A NUMBER OF COMPUTER SYSTEMS HAVE BEEN THE TARGETS OF ATTEMPTED AND SOMETIMES SUCCESSFUL PENETRATIONS.

WHEN LBL DISCOVERED THE METHODS THAT THE INTRUDER WAS USING,
THEY OBTAINED WARRANTS THROUGH CALIFORNIA COURTS AND TRACED
INCOMING PHONE CALLS. THE CONNECTION TO TYMNET WAS DISCOVERED
TO ORIGINATE FROM INSIDE OF MITRE CORPORATION IN MCLEAN,
VIRGINIA. WHEN MITRE WAS APPRISED OF THE SITUATION, THEY