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ACTIV87

Fast Neutron Activation Cross section File

1987

compiled by

V.N. Manokhin, A.B. Pashchenko, V.I. Plyaskin V.M. Bychkov, V.G. Pronyaev

Abstract

This document summarizes the content of the Fast neutron Activation Cross Section File based on data from different evaluated data libraries and individual evaluations in ENDF/B-5 format. The entire file or selective retrievals from it are available on magnetic tape, free of charge, from the IAEA Nuclear Data Section.

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October 1989

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Note:

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IAEA-NDS-reports are updated whenever there is additional information of relevance to the users of the data library.

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V.N. Manokhin. A.B. Pashchenko. V.I. Plyaskin V.K. Bychkov. V.G. Pronyaev

Revised by P.K.McLaughlin IAEA/NDS Jan. 2005

The file was revised to conform with ENDF/B format standards. All reactions of the same material were merged into a single material with the bibliography for each reaction given in File 1/451. The merged file was corrected for format errors and processed thro the 2002 pre-processing codes FIXUP and DICTIN and finally through the code CHECKR to ensure format compatibility.

INTRODUCTION

This compilation of fast neutron induced activation reaction cross- sections, covering energies from threshold to 20 KeV, is based on evaluated data taken from different evaluated data libraries and individual evaluations. The majority of these evaluations were prepared by using available experimental data for selecting the parameters needed in theoretical computations and for normalizing the results of such computations. Theoretical calculations were also used for interpolation and extrapolation of experimental cross-section data.

The following libraries and individual files of evaluated neutron cross-section data were used for the selection of the activation cross-sections: the BOSPOR Library [1], the Activation File of the Evaluated Nuclear Data Library [2), the Evaluated Neutron Data File (ENDF/B-V) Activation File [3], the International Reactor Dosimetry File (IRDF-82) [4) and individual evaluations carried out under various IAEA research contracts. All of the evaluated data curves were compared with experimental data that have been reported over the last four years. Only those cross-sections not in contradiction with the latest experimental data were retained in the present activation data file. In cases of several conflicting evaluations, that evaluation was chosen which best corresponded to the experimental data. A few evaluated curves were renormalized in accordance with the results of the latest precision measurements.

The file of selected reactions contains 206 evaluated cross-section curves of the (n,2n), (n,p) and (n,c) reactions which lead to radioactive products and may be used in many practical applications of neutron activation analysis. Some competing activation reactions, usually with low cross-section values, are given for completeness.

*The data are in ENDF/B-5 format. However, it should be noted that the arrangement of the evaluations does not conform to the rules of an ENDF/B-5 file in so far as in some cases, the same MAT number appears twice, giving data for 2 reactions (e.g. (n.p) and (n,2n» separately.

* See revision note above.

The entire file, or selective retrievals from it, are available on magnetic tape, free of charge, from the IAEA Nuclear Data Section. Retrievals of limited size are available also in listing form. Graphical plots of the data are shown in chapter 2.3 of the 1987 Handbook of Nuclear Activation Data [5]. On the following pages, an index (on reaction level) is given, using the following conventions:

CS	=	cross sections
COV	=	covariance file
8,9,10	=	data for radioactive nuclide production
		(ENDF/B file nos. 8,9,10)

[1] included in the INDL/V library, see IAEA-HDS-31

[2] see lAEA-NDS-55

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3] see IAEA-NDS-38

[4] see IAEA-NDS-41

[5] V.N. Kanokhin, A.B. Pashchenko, V.I. Plyaskin, V.K. Bychkov, V.G. Pronyaev, Handbook on Nuclear Activation Data, Technical Report Series No.273. IAEA. Vienna, 1987, pp. 305-411.

			DATA T	YPE	NO.RECS.	MA	AT.N
					ZOLOTAREV ET		220
3-L1- 6	4CCPFE1	EVAL-NOV/					330
				INFORM.	38		
			CS	(N,2N)	47		330
			CS	(N,P)	60		330
4-BE- 9	1USALRL	EVAL- 7	1				435
			TITLE	INFORM.	14		435
			CS	(N,A)	8		435
5-B-10	4CCPFEI	EVAL-NOV7	8 V.M.	BYCHKOV,K.I	ZOLOTAREV E	F AL.	530
5 5 10	10011.01			INFORM.			530
			CS	(N,T)	66		53
6-C -12	ACCOPET	FUAL -NOUT	0 17 M	BACHRON K T	.ZOLOTAREV E	T AL.	63
6-0 -12	4CCPFE1	EVAL-NUV /		INFORM.	35	I HD.	63
			CS	(N,P)	23		63
7-N-14	4CCPFEI	EVAL-NOV7			.ZOLOTAREV E	r AL.	
				INFORM.			73
			CS	(N,2N)	32		73
8-0 -16	4CCPFEI	EVAL-NOV7	78 V.M.	BYCHKOV, K. I	.ZOLOTAREV E	T AL.	83
				INFORM.			83
			CS	(N,P)	35		83
9-F-19	3AUSIRK	FUNT -	70 C TA	CESEN H VON	ACH, B. STROHM	ATER	92
9-F-19	JAUSIRK	EVAL-		INFORM.	32	61 BU	92
					34		92
			CS COV	(N,2N) (N,2N)	46		92
9-F-19	4CCPFEI	EVAL-NOV			.ZOLOTAREV E	T AL.	
			TITLE	INFORM.	40		93
			CS	(N,P)	55		93
			CS	(N,A)	60		93
11-NA-23	3POLTB.T	EVAL-FEB	79 ADAMS	KI, HERMAN	AND MARCINKO	WSKI	112
	51 0 5 1 5 0			INFORM.	50		112
			CS	(N,2N)	11		112
			COV	(N,2N)	11		112
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11-NA-23	4CCPFEI	EVAL-NOV			.ZOLOTAREV E	T AL.	
			a second second	INFORM.	40		113
			CS	(N,P)	57		113
			CS	(N,A)	50		113
12-MG-24	JAUSIRK	EVAL-	79 S.TA	GESEN, H. VON	ACH, B. STROHN	AIER	122
			TITLE	INFORM.	79		123
			CS	(N,P)	54		122
			COV	(N,P)	154		122
12-MG- 25	IUSALRL	EVAL-	76				123
12 110 15	100110110			INFORM.	14		123
			CS	(N,P)	7		123
		EVAL-	76				12:
12-40. 00		EVAL-	111				4.6
12-MG- 26	IUSALRL			TNFORM	14		12:
12-MG- 26	IUSALRL	-		INFORM. (N,A)	14 6		12

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				INFORM.	64	6313
			CS	(N,P)	118	6313
			CS	(N,A)	186	6313
			COV	(N,P)	18	6313
			COV	(N,A)	15	6313
14-SI-28	ADOL THE	FUAT -	82 T 80	AMSKI, M. HERM	AN FT AL	1450
14-51-28	4POLINK	EVAL-		INFORM.	20	1450
					53	1450
			CS	(N,P)	53	1450
14-SI- 30	IUSALRL	EVAL-	76			1436
				INFORM.	14	1436
			CS	(N,A)	10	1436
15-P-31	4CCPFEI	EVAL-NO		BYCHKOV, K.I.		
				INFORM.	40	1530
				(N,2N)	28	1530
			CS	(N,A)	55	1530
5-P-31	AUSTRE	FUAL-	70 C ma	GESEN, H. VONA	CH. B CTDO	HMATER 1520
5-2-31	3AUSIRK	EVAL-		GESEN, H. VONA INFORM.	37	1520
				(N,P)	65	1520
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			COV	(N,P)	108	1250
16-S-32	4CCPFEI	EVAL-NO	0V78 V.M.	вуснкоу,к.і.	ZOLOTAREV	ET AL.1630
	1.000	States and a		INFORM.	41	1630
			CS	(N,2N)	19	1630
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16- S- 32	BNL	EVAL-A	PR79 DIVAD		1000	6439
				INFORM.	38	6439
			CS	(N,P)	27	6439
			COV	(N,P)	13	6439
16- 6- 22	lusalrl	EVAL-	76			1635
10- 2- 33	TOSALKL	LVAL-		INFORM.	14	1635
			CS	(N,P)	14	1635
			CS	(4,2)	11	1033
16-S-34	4CCPFEI	EVAL-N	DV78 V.M.	BYCHKOV, K.I.	ZOLOTAREV	ET AL.1640
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			CS	(N,P)	9	1640
			CS	(N,A)	54	1640
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17-CL-35	4CCPFEI	EVAL-N		BYCHKOV, K.I.		
				INFORM.	41	1730
			CS	(N,2N)	27	1730
			CS	(N,2N)-M		1730
			CS	(N,A)	61	1730
17-CL- 37	lusalrl	EVAL-	76			1735
11 00- 31	LODRERE	21112		INFORM.	14	1735
				(N,A)	11	1735
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19-K-41	4CCPFE1	EVAL-NUV	/8 V.M.	BICHROV,R.	20		1940	
			TITLE	INFORM.	30		1940	
			CS	INFORM. (N,P)	60			
			CS	(N,A)	56		1940	
20-CA- 40	IUSALRL	EVAL-	76				2035	
			TITLE	INFORM.	14		2035	
			CS	(N,A)	7		2035	
20-CA-42	4CCPFEI	EVAL-NOV	78 V.M	.BYCHKOV,K.	I.ZOLOTAREV	ET A	L.2030	
			TITLE	INFORM.	35		2030	
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20-00- 12	1USALRL	EVAL-	76				2036	
20-CA- 42	TUSADAD	DVIIL	TTTLE	INFORM.	14		2036	
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20-CA-44	4CCPFEI	EVAL-NOV	//8 V.M	.BYCHKOV,K.	1.20LOTAREV	DI A	2040	
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			CS	(N,P)	49		2040	
			CS	(N,A)	47		2040	
20-CA- 46	IUSALRL	EVAL-	76				2037	
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			CS	(N,A)	5		2037	
20-CA- 48	lUSALRL	EVAL-	76				2038	
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21-50-45	ACCPEET	EVAL-NO	V78 V.M	A. BYCHKOV, K	.I.ZOLOTARE	TET A	AL.2130	
21 00 40	40011.01		TTTL	E INFORM.	46		2130	
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			CS	(N,2N)			2230	
			CS	(N,P)	61		2230	
22-TI-47	4CCPFEI	EVAL-NO	V78 V.	M. BYCHKOV, K	.I.ZOLOTARE	V ET	AL.2240	
			TITL	E INFORM.	35		2240	
			CS	(N,P)	67		2240	
22-TI- 4	7 ANT	EVAL-TA	N77 C.	PHILIS.O.BE	ERSILLON, D.S.	MITH,	ETC6428	
22-11- 4	(AND	DVIL UI		E INFORM.			6428	
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22-TI-48	4CCPFEI	EVAL-NO	DV78 V.	M. BYCHKOV, F	K.I.ZOLOTARE	V ET	AL.2250	
				E INFORM.			2250	
			CS	(N,P)	54		2250	

			CS CS	(N,2N)	24		22610 2610	
	144		TITLE	INFORM.	43		2610	
26-FE-54	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV,K.I	.ZOLOTAREV	ET AL	.2610	
			CS	(N,A)	8		2535	
				INFORM.	14		2535	
25-MN- 55	4CCPFEI	EVAL-			at the state of the		2535	
			CS		10		2535	
25-MN- 55	lusalrl	EVAL-	77		14		2535 2535	
			CS	(N,2N)	35		2530	1. A.
				INFORM.			2530	
25-MN-55	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV,K.I	. ZOLOTAREV	ET AL	.2530	
			CS	(N,A)	10		2437	
			TITLE	INFORM.	14		2437	
24-CR- 54	lusalrl	EVAL-	76				2437	
				(1)111			2450	
			CS	INFORM. (N,N+P)	14		2436	
24-CR- 53	lusalrl	EVAL-	76	TUPOPU			2436	
			CS	(N,P)			22420	
			CS	INFORM. (N,2N)	42		2420	
24-CR-52	4CCPFEI	EVAL-NC		BYCHKOV, K. I				
			CS	(N,2N)	26		2440	
24-CR-50	ACCELET	EVAL-NO		INFORM.			2440	
24-00-60	ACCOPET	EURT -NO	170 TI M	BYCHKOV,K.I	ZOLOTADEU		2440	
			CS	(N,A)	47		2330	
			CS	(N, P)	9		2330	
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23-17-51	ACCREET	FUAL-NO	W78 W M	BYCHKOV,K.I	ZOLOTAREU	ET AT	2330	
			CS	(N,A)	9		2236	
	ing of the state		TITLE	INFORM.	14		2236	
22-TT- 50	1USALRL	EVAL-	76				2236	
			CS	(N,P)	44		2270	
			TITLE	INFORM.	35		2270	
22-TI-50	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K.I.	ZOLOTAREV	ET AL.	2270	
			CS	(N,P)	60		2260	
			TITLE	INFORM.	35		2260	
22-TI-49	4CCPFEI	EVAL-NO		BYCHKOV, K.I.		ET AL.	2260	
			COV	(N, N+P)	4		0429	
			CS	(N, N+P) (N, N+P)	17		6429 6429	
			TITLE	INFORM. (N,N+P)	39			
22-TI- 48	ANL	EVAL-JA	N77 C.PHI	LIS, O. BERSII	LON, D. SMI	TH ETC.	6429	
			CS .	(478)	2		2235	
				INFORM. (N,A)			2235	
			TITLE	INFORM.			2235	

			CS	(N,2N)	32	22620
26-FE- 56	ORNL	EVAL-JU	L78 C.Y.F	U		6431
					45	6431
				(N,P)	77	6431
				(N, P)	32	6431
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26-FE- 57	lUSALRL	EVAL-				2635
			TITLE	INFORM.	14	2635
			CS	(N,P)	10	2635
26-FE- 58	HIGAT DI	EVAL-	76			2636
20 11 30	TOBRERE	DVHD		INFORM.	14	2636
				(N,A)	9	2636
			CS	(1)(A)		2050
27-CO- 59	1USALRL	EVAL-	76			2735
			TITLE	INFORM.	14	2735
			CS	(N,2N)-M	8	2735
27-CO- 59	BNL	EVAL-JU	JN77 S.MUG			6327
				INFORM.	96	6327
				(N,2N)	8	6327
			COV	(N,2N)	8	6327
27-00-59	ACCREET	EVAL-NO	M V78 VM	BYCHKOV,K.I.2	OLOTAREV	ET AL. 2730
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				(N,P)	59	2730
				(N,A)	54	2730
			CS	(14, A)	54	2730
28-NI-58	4CCPFEI	EVAL-NO		BYCHKOV, K.I.2		ET AL.2820
			TITLE	INFORM.	44	2820
			CS	(N,2N)	28	22820
			CS	(N,D)		22820
			CS	(N,A)	61	22820
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28-NI- 58	lusalrl	EVAL-	76			2835
				INFORM.	14	2835
			CS	(N,P)-M	11	2835
28-NI- 58	BNL	EVAL-M	AR77 M.DIV	ADEENAM		6433
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	6-76-76-75-		AY78 DIVAD TITLE RES.IN CS CS 8 8 9 10 76	EENAM INFORM. (N,2N) (N,P) (N,P) (N,P) (N,P) (N,P) (N,2N)	31 4 10 16 3 21 10	7280 7280 7280 7280 7280 7280 7280 7280
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28-NI- 60	lusalrl	EVAL-	AY78 DIVAE TITLE RES.IN CS CS 8 8 9 10 76 TITLE CS	EENAM INFORM. FORM. (N, 2N) (N, P) (N, P) (N, P) (N, 2N) INFORM. (N, P)-M	31 4 10 16 3 21 10 14	7280 7280 7280 7280 7280 7280 7280 7280
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28-NI- 61	IUSALRL	EVAL-	76			2837
				INFORM.	14	2837
			CS	(N,P)	9	2837
			76			2838
28-NI- 62	IUSALRL	EVAL-	and the second second	TUROPH	14	2838
				INFORM.	14	
				(N,P)	8	2838
28-NI- 62	lUSALRL	EVAL-	76			2838
			TITLE	INFORM.	14	2838
			CS	(N,P)-M	8	2838
28-NI-62	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K.I.	ZOLOTAREV	ET AL.2840
				INFORM.	35	2840
			CS	(N,A)	45	2840
28-NI- 64	HIGAT DT	EVAL-	76			2839
28-N1- 04	IUSALRL	EVAL-		THEODY	14	2839
				INFORM.		
			CS	(N,P)	7	2839
28-NI- 64	1USALRL	EVAL-	76			2839
			TITLE	INFORM.	14	2839
			CS	(N,A)	7	2839
29-CU-63	3AUSIRK	EVAL-		AGESEN, H. VONA		
			TITLE	INFORM.	99	2920
			CS	(N,2N)	33	2920
			COV	(N,2N)	35	2920
29-CU- 63	HISALRI.	EVAL-	76			2935
			TTTLE	INFORM.	14	2935
			CS	(N,P)	12	2935
					his Works	17 (DD) 17
29-CU- 63	4CCPFEI	EVAL-	80		CHKOV ET A	AL. 2930
			TITLE	INFORM.	14	2930
			CS	(N,A)	9	2930
29-CU- 63	1USALRL	EVAL-	76			2935
	Concernant of the	1201255	TITLE	INFORM.	14	2935
			CS	(N,A)	12	2935
29-CU-65	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV, K.I.	ZOLOTAREV	ET AL.2930
			TITLE	INFORM.	38	2930
			CS	(N,2N)	37	2930
			CS	(N,P)	60	2930
			- The			
29-CU- 65	lUSALRL	EVAL-				2936
			TITLE	INFORM.	14	2936
			CS	(N,A)	12	2936
29-CU- 65	HISALRI.	EVAL-	76			2936
27 00 05	100110110		TTTLE	INFORM.	14	2936
						2936
			CS.	(N,A)-M	12	2930
30-ZN-64	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV, K.I.	ZOLOTAREV	ET AL.3010
			TITLE	INFORM.	37	3010
			CS	(N,2N)	29	23010
in the second	Sec. Sec. Sec. Sec.		-			
30-ZN-64	3AUSIRK	EVAL-		AGESEN, H. VONA		
			TITLE	INFORM.	95	3020
			CS	(N,P)	67	3020
			COV	(N,P)	103	3020
20-71-66	ACCOPET	FUDT -NO	178 UM	.BYCHKOV,K.I.	ZOLOTAREU	ET AL. 3040
30-2N-00	ACCEPTEI	EVAL-NC		INFORM.		3040
			TITLE	INFORM.	50	5040

			CS	(N,2N)	34		3040	
			CS	(N,P)	56		3040	
80-ZN-68	4CCPFEI	EVAL-NO		BYCHKOV, K. I		ET		
				INFORM.			3070	
			CS	(N,A)	9		3070	
1-GA-69	4CCPFEI	EVAL-NO		BYCHKOV, K. I		ET		
				INFORM.			3130	
			CS	(N,2N) (N,P)-M	35		3130	
			CS	(N,P)-M	9		3130	
1-GA-71	ACCREET	EVAL-NO	178 U M	BYCHKOV, K. I	ZOLOTAREV	ET	AT. 3140	
I GA II	ACCELEI	LVAL NO		INFORM.		51	3140	
				(N,2N)			3140	
32-GE-70	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3230	
				INFORM.	35		3230	
			CS	(N,2N)	31		3230	
32-GE- 70	lUSALRL	EVAL-	82		121.02		3235	
				INFORM.	14		3235	
			CS	(N,P)	10		3235	
32-GE- 72	HIGATOT	FUAT	82				2226	
52-GE- 72	TUSALRL	EVAL-		INFORM	14		3236	
			CS	INFORM. (N,2N)	14		3236 3236	
			CS	(N, 2N)	9		3230	
32-GE- 72	IUSALRI.	EVAL-	82				3236	
				INFORM.	14		3236	
			CS	(N,P)	10		3236	
32-GE- 73	lusalrl	EVAL-	82				3237	
			TITLE	INFORM.	14		3237	
			CS	(N,P)	11		3237	
32-GE- 74	lUSALRL	EVAL-	82				3238	
				INFORM.	14		3238	
			CS	(N,P)	10		3238	
32-GE- 74	1USALRI.	EVAL-	82				3238	
				INFORM.	14		3238	
			CS	(N,A)	9		3238	
32-GE- 76	1USALRL	EVAL-	82				3239	
			TITLE	INFORM.	14		3239	
			CS	(N,P)	9		3239	
	1000000	THE P. P.						
32-GE- 76	IUSALRL	EVAL-		TNEODH			3239	
				INFORM.	14		3239	
			CS	(N,A)	9		3239	
32-GE-76	4CCPFET	EVAL-NO	V78 V.M	.BYCHKOV,K.I	ZOLOTAREV	ET	AL. 3240	
		21112 110		INFORM.	35	~ 1	3240	
				(N,2N)	38		3240	
					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
33-AS-75	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV, K.I	.ZOLOTAREV	ET	AL.3330	
			TITLE	INFORM.	41		3330	
			CS	(N,2N)	36		3330	
			Co	(N,E)	57		3330	
			CS	(N,A)	45		3330	
	1000000	-		DUCINON I	-			
34-SE-74	4CCPFEI	EVAL-NO	V/8 V.M	.BYCHKOV,K.I	.ZOLOTAREV	ET	AL.3430	

			CS	(N,2N)	34		3040	
			CS	(N,P)	56		3040	
30-2N-68	ACCREET	EVAL-NOT	78 V M	BYCHKOV,K.I.	ZOLOTAREV	ET	AL. 3070	
50 11 00	ACCELLE	aving not			35		3070	
					9		3070	
31-GA-69	ACCREFT	EVAL-NOT	79 V M	BYCHKOV,K.I.	ZOLOTAREV	ድጥ	AT. 3130	
51 GH 05	ACCELLI	EVAL NO		INFORM.	36	22	3130	
			CS	(N, 2N)	35		3130	
			CS	(N,P)-M	9		3130	
31-GA-71	ACCOUNT	PUNT NO	70 17 M	BYCHKOV,K.I.	TOLOWADER	FT	NT 2140	
51 GA /1	ACCELET	LVAL NO.		INFORM.	35	DI	3140	
			CS	(N,2N)	38		3140	
						1.2		
32-GE-70	4CCPFEI	EVAL-NOV		BYCHKOV, K.I.		ET		
				INFORM.	35		3230	
			CS	(N,2N)	31		3230	
32-GE- 70	1USALRL	EVAL-	82				3235	
			TITLE	INFORM.	14		3235	
			CS	(N,P)	10		3235	
32-GE- 72	INCALDI	EVAL-	82				3236	
32-GE- 72	IUSALKL	EVAL-	Contraction and the second	INFORM.	14		3236	
			CS	(N, 2N)	9		3236	
			1.11	(,,			5250	
32-GE- 72	lUSALRL	EVAL-	82				3236	
			TITLE	INFORM.	14		3236	
			CS	(N,P)	10		3236	
32-GE- 73	lUSALRL	EVAL-	82				3237	
			TITLE	INFORM.	14		3237	
			CS	(N,P)	11		3237	
32-GE- 74	IUCALDI	EVAL-	82				3238	
52 GL 14	TUSALKL	DVAD-		INFORM.	14		3238	
			CS	(N,P)	10		3238	
			100.0		1912			
32-GE- 74	lUSALRL	EVAL-	82				3238	
			TITLE	INFORM.	14		3238	
			CS	(N,A)	9		3238	
32-GE- 76	1USALRI.	EVAL-	82				3239	
				INFORM.	14		3239	
			CS		9		3239	
32-GE- 76	IUSALRL	EVAL-					3239	
				INFORM.	14		3239	
			CS	(N,A)	9		3239	
32-GE-76	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL.3240	
			TITLE	INFORM.	35		3240	
			CS	(N,2N)	38		3240	
33-AS-75	ACCPEET	EVAL-NO	V78 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL. 3330	
				INFORM.			3330	
			00	(N 2N)	36		3330	
			CS	(N,P)	57		3330	
			CS	(N,A)	45		3330	
						-		
34-SE-74	4CCPFEI	EVAL-NO	V/8 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL.3430	

			CS	(N,2N)	34		3040	
			CS	(N,P)	56		3040	
30-ZN-68	ACCPEET	EVAL-NOT	78 V.M.	BYCHKOV,K.I.	ZOLOTAREV	ET	AL. 3070	
	10011111	21112 110			35		3070	
					9		3070	
31-GA-69	ACCREFT	EVAL-NO	79 V M	BYCHKOV, K.I.	ZOLOTAREV	FT	AT. 3130	
51 GH 05	ACCELLI	LVAD NO		INFORM.	36	~	3130	
			CS	(N, 2N)	12.376		3130	
			CS	(N,P)-M	9		3130	
31-GA-71	ACCOFFT	FUAL-NO	79 V M	BYCHKOV,K.I.	TOLOTAPEU	FT	AT. 3140	
JI GH /I	ACCELET	DVAD NO		INFORM.			3140	
			CS	(N,2N)	38		3140	
32-GE-70	ACCREFT	FUAL-NOT	178 T.M	BYCHKOV, K.I.	TOLOTAREV	ድጥ	AT. 3230	
52 66 70	ACCELET	DAND-NO.		INFORM.	35	PT.	3230	
			CS	(N, 2N)	31		3230	
			00	(11/211)	51		5250	
32-GE- 70	lUSALRL	EVAL-	82				3235	
			TITLE	INFORM.	14		3235	
			CS	(N,P)	10		3235	
32-GE- 72	IUSALRL	EVAL-	82				3236	
			Collins and a second	INFORM.	14		3236	
			CS	(N,2N)	9		3236	
			82					
32-GE- 72	IUSALRL	EVAL-		THEODY			3236	
			CS	INFORM. (N,P)	14		3236 3236	
			CS	(N,P)	10		3230	
32-GE- 73	lUSALRL	EVAL-	82				3237	
			TITLE	INFORM.	14		3237	
			CS	(N,P)	11		3237	
32-GE- 74	1USALRI.	EVAL-	82				3238	
				INFORM.	14		3238	
			CS	(N,P)	10		3238	
32-GE- 74	lusalrl	EVAL-	82				3238	
				INFORM.	14		3238	
			CS	(N,A)	9		3238	
32-GE- 76	1USALRL	EVAL-	82				3239	
				INFORM.	14		3239	
			CS	(N,P)	9		3239	Ϊ,
32-GE- 76	HIGAT DI	EVAL-	87				3239	
32-GE- 70	TUSHLIKD	EVAD-		INFORM.	14		3239	
			CS	(N,A)	9		3239	
32-GE-76	4CCPFEI	EVAL-NO		.BYCHKOV,K.I. INFORM.	ZOLOTAREV 35	ET		
				(N,2N)	35		3240 3240	
			00	(11/211)	50		5240	
33-AS-75	4CCPFEI	EVAL-NO		BYCHKOV, K.I.		ET		
				INFORM.			3330	
			CS CS	(N,2N)	36		3330	
				(N,P)	57		3330	
			CS	(N,A)	45		3330	
34-SE-74	4CCPFEI	EVAL-NO	V78 V.M	BYCHKOV, K.I.	ZOLOTAREV	ET	AL.3430	

			TITLE	INFORM.	35		3430	
			CS	(N,P)	9		3430	
34-SE-76	4CCPFEI	EVAL-NO		BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3440	
				INFORM.	35		3440	
			CS	(N,2N)	32		3440	
35-BR-79	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV,K.I	. ZOLOTAREV	ET	AL.3530	
			TITLE	INFORM.	36		3530	
			CS	(N,2N)	34		3530	
			CS	(N,A)	9		3530	
35-BR-81	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3540	
			TITLE	INFORM.	38		3540	
			CS	(N,2N)	35		3540	
			CS	(N,2N)-M			3540	
37-RB-85	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3730	
		Control Control Control		INFORM.	36		3730	
			CS	(N,2N)	35		3730	
			CS	(N,A)	35		3730	
37-RB-87	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K.I	.ZOLOTAREV	ET	AL. 3740	
	and the second			INFORM.			3740	
			CS	(N,2N)	36		3740	
20 00 01	1000000							
38-SR-84	4CCPFEI	EVAL-NO		BYCHKOV, K. I		ET		
				INFORM.	35		3830	
			CS	(N,2N)	30		3830	
38-SR-86	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3850	
			TITLE	INFORM.	35		3850	
			CS	(N,P)	9		3850	
38-SR-88	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3840	
			TITLE	INFORM.	36		3840	
			CS	(N,2N)-M	32		3840	
			CS	(N,P)	8		3840	
39-Y-89	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.3930	
			TITLE	INFORM.	36		3930	
				(N,2N)	31		3930	
			CS	(N,P)	9		3930	
40-ZR-90	JAUSIRK	EVAL-		GESEN, H. VON	ACH, B.STRO	HMAI	ER 4020	
			TITLE	INFORM.	99		4020	
			CS				4020	
				(N,2N)	42		4020	
40-ZR- 92	IUSALRL	EVAL-					4035	
				INFORM.	14		4035	
			CS	(N,P)	9		4035	
40-2R-92	4CCPFEI	EVAL-NO	78 V.M.	BYCHKOV, K.I	.ZOLOTAREV	ET	AL.4080	
				INFORM.	35		4080	
			CS	(N,A)	9		4080	
40-ZR- 94	1USALRL	EVAL-	76				4036	
			TITLE	INFORM.	14		4036	
			CS	(N,P)	9		4036	
40-2R-94	4CCPFEI	EVAL-NO	78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.4070	
	NA STREET				35		4070	
					0000			

		CS	(N,A)	8	4070	
101	THINT	70 6 70	CECEN H VONA	TH B STROP	MATER 4120	
JAUSIRK	EVAL-	19 5.16	GESEN/IL. VOIAN	27	4120	
		TITLE	INFORM.	37	4120	
					4120	
ACCOPET	FUAL-NO	U78 V.M.	BYCHKOV.K.I.	ZOLOTAREV	ET AL.4130	
ACCELEI	LVAL NO	mTmt D	TNEODM	37	4130	
		CS	(N, 2N)-M	40	4130	
IUSALRL	EVAL-	76			4235	
		TITLE	INFORM.	14	4235	
		CS	(N,P)-M	14	4235	
IUSALRL	EVAL-	76			4236	
		TITLE	INFORM.	14	4236	
		CS	(N,2N)	7	4236	
3RUMPIT	EVAL-JU	N83 M. J	VASCU, M. AND	V.AVRIGE	ANU 4250	
		TITLE	INFORM.	28	4250	
					4250	
3RUMPIT	EVAL-JU	N83 M. 1	VASCU,M. AND	V.AVRIGE	ANU 4260	
and the state of the		TITLE	INFORM.	29	4260	
					4260	
		CS	(N,P)	10	4260	
3RUMPIT	EVAL-JU	JN83 M. 3	IVASCU, M. AND	V.AVRIGE	ANU 4270	
					4270	
					4270	
		CS	(N,P)	10	4270	
RIMPTT	EVAL-JI	IN83 M.	IVASCU,M. ANI	V.AVRIGE	ANU 4280	
		TITLE	INFORM.	28	4280	
				7	4280	
IUSALRL	EVAL-	82			4335	
			INFORM.	14	4335	
				11	4335	
IUSALRI.	EVAL-	82			4335	
TODUDIND			INFORM.	14	4335	
					4335	
3AUSIRK	EVAL-	79 S.T	AGESEN, H. VON	ACH, B.STRO	HMAIER 4520	
		TITLE	INFORM.	37	4520	
		CS	(N,INL)	-M 82	4520	
					4520	
4CCPFEI	EVAL-N				ET AL.4530	
					4530	
				38	4530	
lUSALRL	EVAL-				4735	
		TITLE	INFORM.	14	4735	
				6	4735	
lUSALRL	EVAL-	73			4735	
			INFORM.	14	4735	
		11111				
	4CCPFEI IUSALRL IUSALRL 3RUMPIT 3RUMPIT 3RUMPIT 1USALRL 1USALRL 3AUSIRK 4CCPFEI 1USALRL	ACCPFEI EVAL-NO IUSALRL EVAL- IUSALRL EVAL- JRUMPIT EVAL-JU JRUMPIT EVAL-JU JRUMPIT EVAL-JU JRUMPIT EVAL-JU IUSALRL EVAL- IUSALRL EVAL- JUSALRL EVAL- IUSALRL EVAL-	TITLE CS 4CCPFEI EVAL-NOV78 V.M. TITLE CS 1USALRL EVAL- 76 IUSALRL EVAL- 76 IUSALRL EVAL- 76 SRUMPIT EVAL- 76 SRUMPIT EVAL-JUN83 M. J TITLE CS SRUMPIT EVAL-JUN83 M. J IUSALRL EVAL- 82 IUSALRL EVAL- 82 JUSALRL EVAL- 82 SAUSIRK EVAL- 79 ACCPFEI EVAL-NOV78 V.M TITLE CS CS IUSALRL EVAL- 73 TITLE CS CS	TITLE INFORM. CS (N,INL)-1 COV (N,INL)-1 4CCPFEI EVAL-NOV78 V.M.BYCHKOV,K.I. TITLE INFORM. CS (N,2N)-M 1USALRL EVAL- 76 TITLE INFORM. CS (N,P)-M 1USALRL EVAL- 76 TITLE INFORM. CS (N,P)-M 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND TITLE INFORM. CS (N,P) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND TITLE INFORM. CS (N,N+P) CS (N,P) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND TITLE INFORM. CS (N,N+P) CS (N,P) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND TITLE INFORM. CS (N,N+P) CS (N,P) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND TITLE INFORM. CS (N,N+P) 1USALRL EVAL- 82 TITLE INFORM. CS (N,P) 1USALRL EVAL- 82 TITLE INFORM. CS (N,A) 3AUSIRK EVAL- 82 TITLE INFORM. CS (N,A) 3AUSIRK EVAL- 79 S.TAGESEN,H.VON. TITLE INFORM. CS (N,INL) COV (N,INL) 4CCPFEI EVAL-NOV78 V.M.BYCHKOV,K.I TITLE INFORM. CS (N,2N) 1USALRL EVAL- 73 TITLE INFORM. CS (N,2N)	TITLE INFORM. 37 CS (N, INL)-M 80 COV (N, INL)-M 140 4CCPFEI EVAL-NOV78 V.M.BYCHKOV,K.I.ZOLOTAREV TITLE INFORM. 37 CS (N, 2N)-M 40 1USALRL EVAL- 1USALRL EVAL- 76 TITLE INFORM. 1USALRL EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEL TITLE INFORM. 28 CS (N, P) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEL TITLE INFORM. 29 CS (N, NP) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEL TITLE INFORM. 29 CS (N, NP) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEL TITLE INFORM. 28 CS (N, NP) 1USALRL EVAL- SUSALRL 82 CS <td>ACCEPFEI EVAL-NOV78 V.M. BYCHKOV, K. I. ZOLOTAREV ET AL. 4130 TITLE INFORM. 37 4130 (S) 1USALRL EVAL- 76 4235 (S) 4235 (S) 1USALRL EVAL- 76 4235 (S) 4236 (N,P)-M 1USALRL EVAL- 76 4236 (S) 4236 (N,P)-M 1USALRL EVAL- 76 4236 (S) 4236 (N,2N) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4250 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4260 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4260 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4270 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4270 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4270 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4280 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4280 (CS) 1USALRL EVAL- 82 (N,NP) 10 4270 (CS</td>	ACCEPFEI EVAL-NOV78 V.M. BYCHKOV, K. I. ZOLOTAREV ET AL. 4130 TITLE INFORM. 37 4130 (S) 1USALRL EVAL- 76 4235 (S) 4235 (S) 1USALRL EVAL- 76 4235 (S) 4236 (N,P)-M 1USALRL EVAL- 76 4236 (S) 4236 (N,P)-M 1USALRL EVAL- 76 4236 (S) 4236 (N,2N) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4250 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4260 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4260 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4270 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4270 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4270 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4280 (CS) 3RUMPIT EVAL-JUN83 M. IVASCU,M. AND V.AVRIGEANU 4280 (CS) 1USALRL EVAL- 82 (N,NP) 10 4270 (CS

			TITLE	INFORM.			4730	
			CS	(N,P)	9		4730	
47-AG-109	IUSALRL	EVAL- 7	3				4736	
			TITLE	INFORM.	14		4736	
			CS	(N,A)	7		4736	
48-CD-106	ACCPEEI	EVAL-NOV7	S V.M.	BYCHKOV,K.I.	ZOLOTAREV	ET	AL.4830	
10 00 100		21112 110111		INFORM.			4830	
				(N, 2N)	7		4830	
			CS	(N, 2N)-M			4830	
49-00-111	ACCORDI	FUNT-NOU7	D TZ M	BYCHKOV, K.I.	ZOLOTADEV	FT	AT. 4840	
40-00-111	ACCELET	EVAL-NOV /		INFORM.			4840	
				(N,P)			4840	
							Actump 1	
48-CD-112	4CCPFEI	EVAL-NOV7		BYCHKOV, K.I. INFORM.		ET	AL.4850 4850	
			CS	(N,A)	40		4850	
			5.00	CORARCE IN TH				
49-IN-115	HEDL/ANL	EVAL-JAN7		MITTROTH/D.L			6437	
			TITLE	INFORM.	80		6437	
			CS	(N,INL)-M	74		6437	
			COV	(N,INL)-M	9		6437	
49-IN-115	4CCPFEI	EVAL-NOV7	8 V.M	.BYCHKOV, K.I.	ZOLOTAREV	ET	AL.4940	
			TITLE	INFORM.	38		4940	
			CS	(N,2N)	40		4940	
			CS	(N,2N)-M	39		4940	
50-SN-112	4CCPFEI	EVAL-NOV7	8 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL.5030	
				INFORM.			5030	
			CS	(N,2N)			5030	
51-SB-123	ACCREET	FUAL-NOV7	8 V M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL 5140	
51-55-125	ACCELDI	LVAD NOV/		INFORM.			5140	
			CS	(N,2N)	40		5140	
53-1-127	ACCORDI	FUNT -NOU7	0 T7 M	.BYCHKOV,K.I.	TOTOTADEU	Fm	AT 5210	
55-1-121	ACCELEI	EVAL-NOV/		INFORM.		111	5310	
			CS	(N,2N)	40		25310	
	10000007							
55-CS-133	4CCPFE1	EVAL-NOV/		.BYCHKOV, K.I. INFORM.	20LOTAREV 35	ET	AL.5530 5530	
			CS	(N,2N)	39		5530	
					0.5852	-	A. 194	
58-CE-140	4CCPFEI	EVAL-NOV7		.BYCHKOV,K.I.		ET		14
				INFORM.			5830	
			CS	(N,2N)			5830	
			CS	(N,2N)-M	37		5830	
58-CE-142	4CCPFEI	EVAL-NOV7	8 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL.5840	
			TITLE	INFORM.	35		5840	
			CS	(N,2N)	47		5840	
59-PR-141	4CCPFEI	EVAL-NOV7	8 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL.5930	
				INFORM.	35		5930	
			- 5976 States	(N,2N)	39		5930	
60-ND-142	4CCPFET	EVAL-NOV7	8 V.M	.BYCHKOV,K.I.	ZOLOTAREV	ET	AL. 6030	
00 110 142	TOOLTHI	DVIID 110V/		INFORM.	35		6030	
			CS	(N,2N)	37		6030	

CO ND-149	ACCOPET	FUAL-NOV	78 V M	BYCHKOV,K.I.	ZOLOTAREV	ET AL.6050	
60-ND-140	4CCPF BI	EVAL NOV	TTTLE	INFORM.	37	6050	
				(N,2N)		6050	
				1			
60-ND-150	ACCPEEI	EVAL-NOV	78 V.M.	BYCHKOV, K.I.	ZOLOTAREV	ET AL.6060	
00 10 100	40011.04	2	TITLE	INFORM.	37	6060	
			CS	(N,2N)	21	6060	
62-SM-144	ACCPEET	EVAL-NOV	78 V.M.	BYCHKOV, K.I.	ZOLOTAREV	ET AL.6230	
02 50 144	4001121		TITLE	INFORM.	35	6230	
				(N,2N)		6230	
				2010 L 1 1			
62-SM-148	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K.I.	ZOLOTAREV	ET AL.6240	
			TITLE	INFORM.	35	6240	
			CS	(N,2N)	43	6240	
62-SM-152	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K.I.	ZOLOTAREV		
				INFORM.		6260	
			CS	(N,2N)	42	6260	
						tone way only a	
62-SM-154	4CCPFEI	EVAL-NO		BYCHKOV, K. I.		ET AL.6270	
				INFORM.		6270	
			CS	(N,2N)	44	6270	
67-HO-165	1USALRL	EVAL-	76			6735	
				INFORM.		6735	
				(N,2N)	12	6735	
67-HO-165	1USALRL	EVAL-				6735	
				INFORM.		6735	
			CS	(N,2N)-M	12	6735	
						6735	
67-HO-165	1USALRL	EVAL-	76			6735 6735	
			TITLE	INFORM. (N,P)	14		
			CS	(N,P)	0	0755	
	LOCODERT	THAT NO	1770 17 M	.BYCHKOV,K.I	ZOLOTAREU	FT AT. 6930	
69-JW-163	4CCPFE1	EVAL-NC		INFORM.	35	6930	
				(N,2N)			
			CO	(11/211)	45	07.00	
71-11-175	1USALRL	EVAL-	77			7135	
11-10-115	TOBUDUD	DVILL		INFORM.	14	7135	
				(N,2N)		7135	
1				(
71-T.II-175	1USALRL	EVAL-	77			7135	
				INFORM.	14	7135	
				(N,2N)-M		7135	
71-LU-176	1USALRL	EVAL-	77			7136	
	and the second se			INFORM.	14	7136	
			CS	(N, 3N)	9	7136	
71-LU-176	IUSALRL	EVAL-				7136	
				INFORM.		7136	
			CS	(N, 3N)-M	1 9	7136	
72-HF-179	1USALRL	EVAL-				7235	
				E INFORM.		7235	
			CS	(N,P)	15	7235	
			- A.			20.20	
		FUAT -	76		-	7236	
	1USALRL	LVAD				7236	
	1USALRL	LVAD	TITLE	E INFORM.	14		
	1USALRL	LVAD	TITLE	E INFORM. (N,P)		7236	
	1USALRL	EVAL	TITLE				
) 1USALRL	DVAD	TITLE				
) 1USALRL	DVAD	TITLE				

73-TA-181	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV ET AL	.L.ADAMSKI	ET 7330	
				INFORM.		7330	
			CS	(N,2N)-M	8	7330	
				(N,P)		7330	
74- W-180	TUSAL PL.	EVAL-	76			7435	
/4 1 100	TOBREND	DVIID		INFORM.	14	7435	
				(N,2N)		7435	
	1.000100	DUAT	76			7436	
74- W-182	IUSALRL	EVAL-	11. The second sec		14	7436	
				(N,2N)		27436	
						2426	
74- W-182	lusalrl	EVAL-		1	1.1	7436	
				INFORM.	14	7436	
			CS	(N,P)	12	7436	
74- W-183	IUSALRL	EVAL-	76			7437	
			TITLE	INFORM.	14	7437	
			CS	(N, N+P)	13	7437	
74- W-183	IUSALEL	EVAL-	76			7437	
/1 1 105	TOOMENE	21112	The second s	INFORM.	14	7437	
				(N,P)	11	7437	
			0.2			7438	
74- W-184	lusalrl	EVAL-	82		14	7438	
				INFORM.		7438	
			CS	(N,N+P)		7430	
74- W-184	1USALRL	EVAL-	76			7438	
			TITLE	INFORM.	14	7438	
			CS	(N,P)	12	7438	
74- W-194	IUSALRL	FUAL-	76			7438	
14- M-104	TOSALKI	DVAD		INFORM.	14	7438	
				(N,A)		7438	
	614 1932-240 - 240					7439	
74- W-186	IUSALRL	EVAL-	76				
				INFORM. (N,2N)	14	7439	
			CS	(N, 2N)	11	/435	
74- W-186	lusalrl	EVAL-	76			7439	
			TITLE	INFORM.	14	7439	
			CS	(N,P)	11	7439	
74- W-186	IUSALRL	EVAL-	76			7439	
			TITLE	INFORM.	14	7439	1
			CS	(N,A)	13	7439	
75-75-195	1USALRL	FUAL-	76			7535	
13-RE-103	TOBALIND	DVIID		INFORM.	14	7535	
			CS	(N,2N)		7535	
						7525	
75-RE-185	IUSALRL	EVAL-	76			7535	
			TITLE	(N,2N)-M	14 9	7535 7535	
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1			
79-AU-197	4CCPFEI	EVAL-N		.BYCHKOV,K.I.			
				INFORM.	37	7930	
			CS	(N,2N)	13	7930	2
79-AU-197	IUSALRL	EVAL-	76			7935	
The second second second							

				mTmT P	INFORM.	14	7935
					(N, 2N)-M	6	7935
	79-AU-197	HIGHT PL.	EVAL-	82			7935
	19-40-191	TOBRENE	DVND		INFORM.	14	7935
				CS	(N,P)	6	7935
	80-HG-202	HIGAT DT	EVAL-	82			8035
	00-ng-202	TOBRERE	DVND		INFORM.	14	8035
					(N,P)	9	8035
	80-HC-202	1USALRL	EVAL-	82			8035
	00 110 202	100115115		TTTLE	INFORM.	14	8035
					(N,A)	6	8035
	80-HG-204	IUSALEL	EVAL-	82			8036
	00 110 204	100112112	21112	TITLE	INFORM.	14	8036
				CS	(N,2N)	12	8036
	80-HG-204	1USALRL	EVAL-	82			8036
	00 116 204	100110110	Ditte		INFORM.	14	8036
					(N,P)	8	8036
	80-HG-204	IUSALRI.	EVAL-	82			8036
	00 110 204	2001.010	21112		INFORM.	14	8036
				CS	(N,A)	6	8036
	81-77-203	4CCPFEI	EVAL-NO	V78 V.M	.BYCHKOV,K.I.Z	OLOTAREV	ET AL.8110
	01 10 200	10011.01			INFORM.	35	8110
				CS	(N,2N)	44	28110
	81-71-203	1USALRL	EVAL-	82			8135
	01 10 200	100112112	21112		INFORM.	14	8135
				CS	(N,P)	10	8135
	81-TL-205	ACCREET	EVAL-NO	V78 V.M	.BYCHKOV,K.I.Z	OLOTAREV	ET AL.8140
	01 10 200	HOULIDI	21112 110		INFORM.	35	8140
					(N,2N)	44	8140
	81-TL-205	INCALDI	EVAL-	82			8136
	01-10-200	TOBUDUD	DAUD		INFORM.	14	8136
				CS	(N,P)	9	8136
2 ₁					.BYCHKOV,K.I.2	OT OWADEU	TTT AT 9330
	82-PB-204	4CCPFEI	EVAL-NC		INFORM.	35	8230
				CS	(N,2N)	41	8230
				01			8235
	82-PB-204	IUSALRL	EVAL-	81	THROPH		
					INFORM.	14	8235 8235
				CS	(N,P)	,	0233
	82-PB-207	1USALRL	EVAL-	81			8237
				TITLE	E INFORM.	14	8237
				CS	(N,P)	8	8237
	82-PB-208	ACCPFEI	EVAL-NO	DV78 V.M	A.BYCHKOV, K.I.		
				TITLE	E INFORM.	35	8240
				CS	(N,2N)-M	40	8240
	83-BI-209	4CCPFEI	EVAL-N	0V78 V.N	A.BYCHKOV,K.I.	ZOLOTAREV	ET AL.8330
					E INFORM.	35	8330
				CS	(N,2N)	45	8330

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83-BI-209	lusalrl	EVAL-	82 TITLE	INFORM.	14		8335 8335	
			CS	(N,P)	7		8335	
90-TH-232	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV, K. I	.ZOLOTAREV	ET	AL.9030	
				INFORM.	35		9030	
			CS	(N,2N)	49		9030	
92-U-238	4CCPFEI	EVAL-NO	V78 V.M.	BYCHKOV,K.I	.ZOLOTAREV	ET	AL.9230	
			TITLE	INFORM.	35		9230	
			CS	(N,2N)	50		9230	