individual might have been Raoul Wallenberg. Because of the name Miranda, he was puzzled and thought that perhaps the individual was Spanish. A guard had earlier told him, when Terelya inquired who the prisoner was after their first encounter, that the prisoner was a White Russian war criminal. For this reason Terelya stated that he would expect that Wallenberg was not imprisoned under his true identity since the name was too well known.

By way of confirmation of the information that Terelya provided, it is important to point out that Makinen interviewed by telephone a few years ago Janis Rozkalns, a Latvian émigré in Germany who had been a prisoner in the Soviet Union and had earlier written a letter to the Swedish Foreign Ministry that he had information about the fate of Raoul Wallenberg. The interview was conducted in German from the Foreign Ministry in Stockholm in the presence of Mr. Lage Olson, a member of the Working Group, and Rozkalns was at that time in Münster, Germany. Rozkalns had very similar information to that provided by Terelya, including the words Raoul Wallenberg and Martina Miranda written on the backside of the tumbuchka. When asked how he had learned of this information since he had not been himself a prisoner in Vladimir, Rozkalns stated that in a labor camp in Perm he met Terelya who had described the situation. (Terelya had been transferred to Perm from Vladimir.) Thus, this information provided by Rozkalns confirms that Terelya had indeed experienced an encounter with the foreign prisoner he described on the second floor of Korpus 2 and had described the situation to a prisoner in the Soviet Union before he had been forced to leave the Soviet Union and live in Canada.

Analysis of the prisoner registration card of Terelya from the *kartoteka* does indeed indicate that he was transferred from cell 2-6 on the first floor of Korpus 2 to cell 2-21 on the second floor on 24/12/69. The data from the *kartoteka* show the following cell changes:

Cell 2-21	24/12/69 – 19/02/70	Terelya
	14/11/69 – 25/03/70	Stepanov, I. S. (born 1930)
Cell 2-30	19/02/70 – 16/10/70	Terelya
	13/05/69 – 28/05/70	Menshagin
	12/03/70 – 14/12/70	Ogurtsov
	28/07/70 – 19/09/70	Budulak, Nikolai Aleksandrovich (born 1926)

Results of the analysis of the distribution of prisoners in cells on the 2nd floor of Korpus 2 are illustrated in Figure 17. This shows the occupancy of cells for three different dates that are critical to the statements of Terelya. The first cell map (Figure 17A) is calculated for 15/01/70, showing that Terelya is indeed in cell 2-21 which is located on the opposite side of the 2nd floor from cell 2-33. The latter cell has no identifiable occupants. Of considerable interest is that cell 2-25 is occupied by the prisoner Novikov, Vasilii Pavlovich (born 1926). The data from the *kartoteka* show:

Cell 2-25	31/12/69 – 29/01/70	Novikov
	13/12/69 – 08/01/70	Snastin, Evgenii Borisovich (born 1939)

Thus, the data indicate that Novikov was alone in cell 2-25 from 09/01/70 – 29/01/70 after which he was transferred to cell 3-38. However, from the database it is calculated that cell 2-25 remained 'empty' over the 29/01/70 – 04/02/70 period. This is illustrated in Figure 17B. Finally Figure 17C shows that Terelya has been transferred to cell 2-30 on the opposite side of the 2nd floor which he shared with the prisoners Ogurtsov and Menshagin. (This was apparently Menshagin's last cell according to his sentence and prior to release and exile to Murmansk.) Cell 2-30 was a few cells away from cell 2-33 with the unknown prisoner, precisely as described.

The cell occupancy data fully confirm the cell locations described by Terelya with respect to his encounter with a foreign prisoner. Firstly, cell 2-25 is 'empty' for a brief period compatible with Terelya's statement that the foreign prisoner had been transferred to cell 2-33 from 2-25. Furthermore, Terelya's description of the relationships of the cells that he occupied to that of the foreign prisoner are fully confirmed by the *kartoteka*. Furthermore, while all of the other cells on the second floor are continually occupied by identifiable prisoners with only relatively brief interludes of zero occupancy (Note that the data in Figure 14 show an average population of 38-40 prisoners for the 2nd floor at his time, indicating essentially a "full house".), inspection of the database shows that the occupancy of

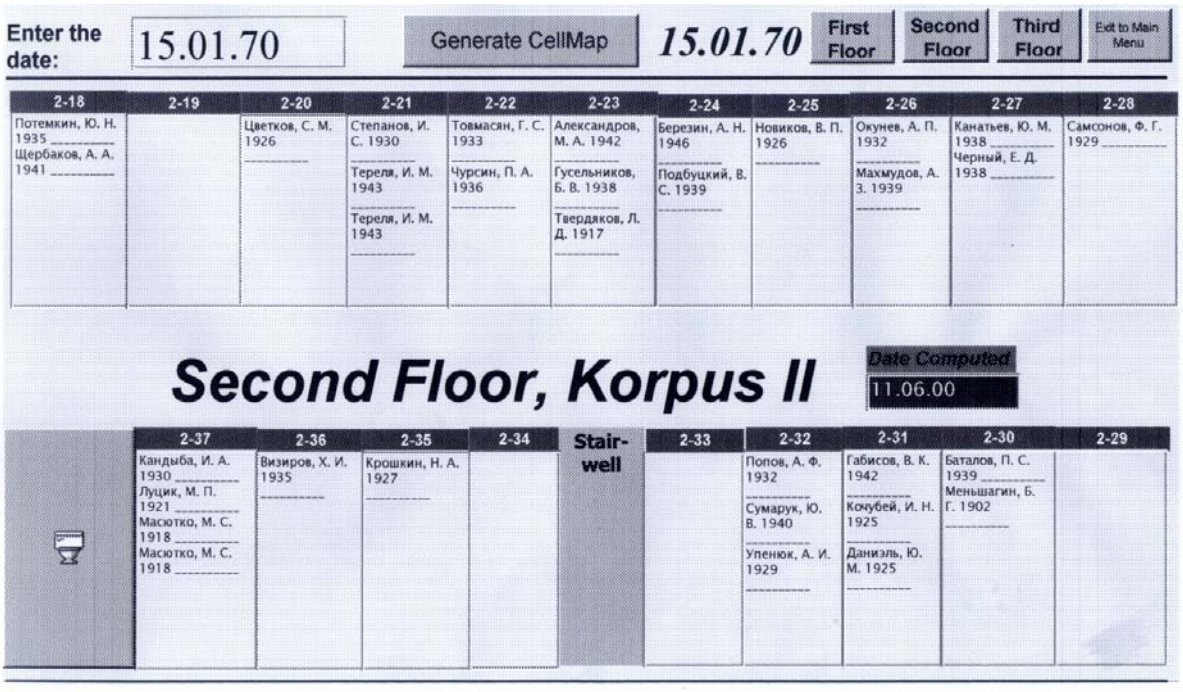


FIGURE 17A. Cell map of the 2nd floor of Korpus 2 shortly after the prisoner I. M. Terelya was brought to cell 2-21. While other cells, namely 2-19, 2-29, and 2-34 appear unoccupied in addition to cell 2-33, they all acquire occupants within a few days after 15/01/70. However, cell 2-33 remains without apparent occupants for a total of 267 days. The names of some prisoners appear twice within the same cell. This is because the cell occupancy data for that prisoner was written into two records with partial overlap of cell chronology data. It is seen that the prisoner Novikov occupied cell 2-25 alone at this time.

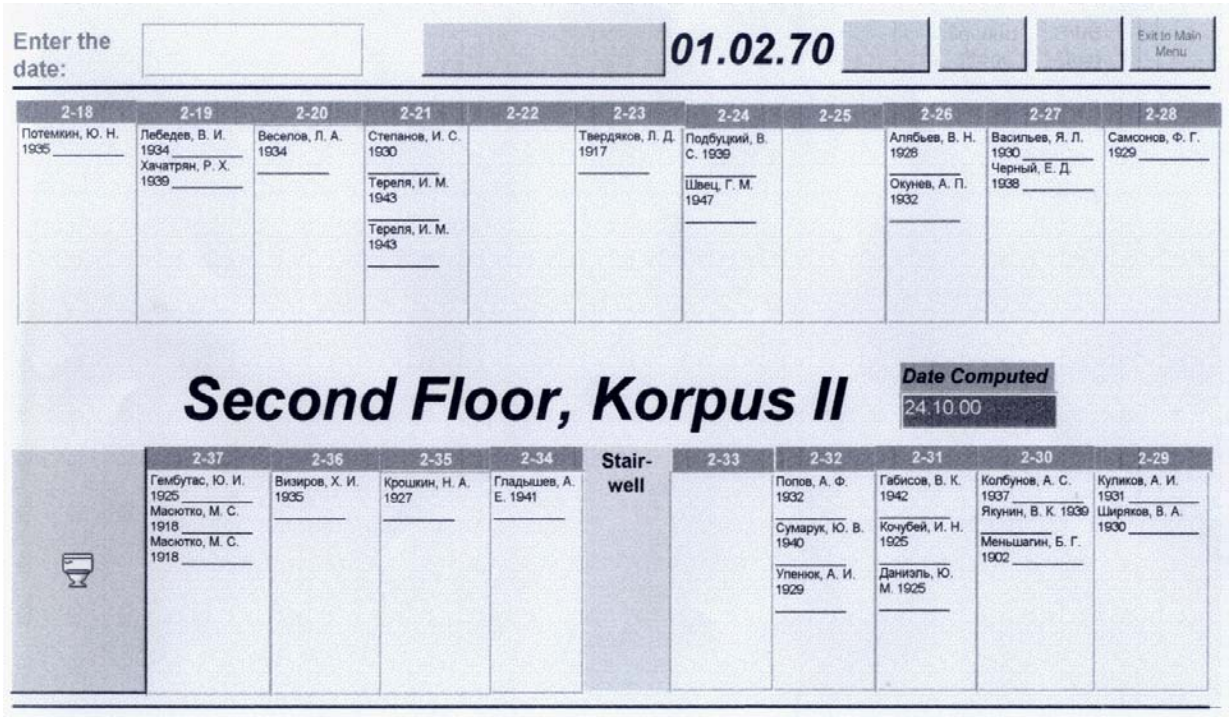


FIGURE 17B. Cell map of the 2nd floor of Korpus 2 on 01/02/70 before the prisoner I. M. Terelya had been brought to cell 2-30. It is seen that Novikov has left cell 2-25 leaving that cell empty while Terelya is still located in cell 2-21. Menshagin is alone in cell 2-30 and cell 2-33 is unoccupied.

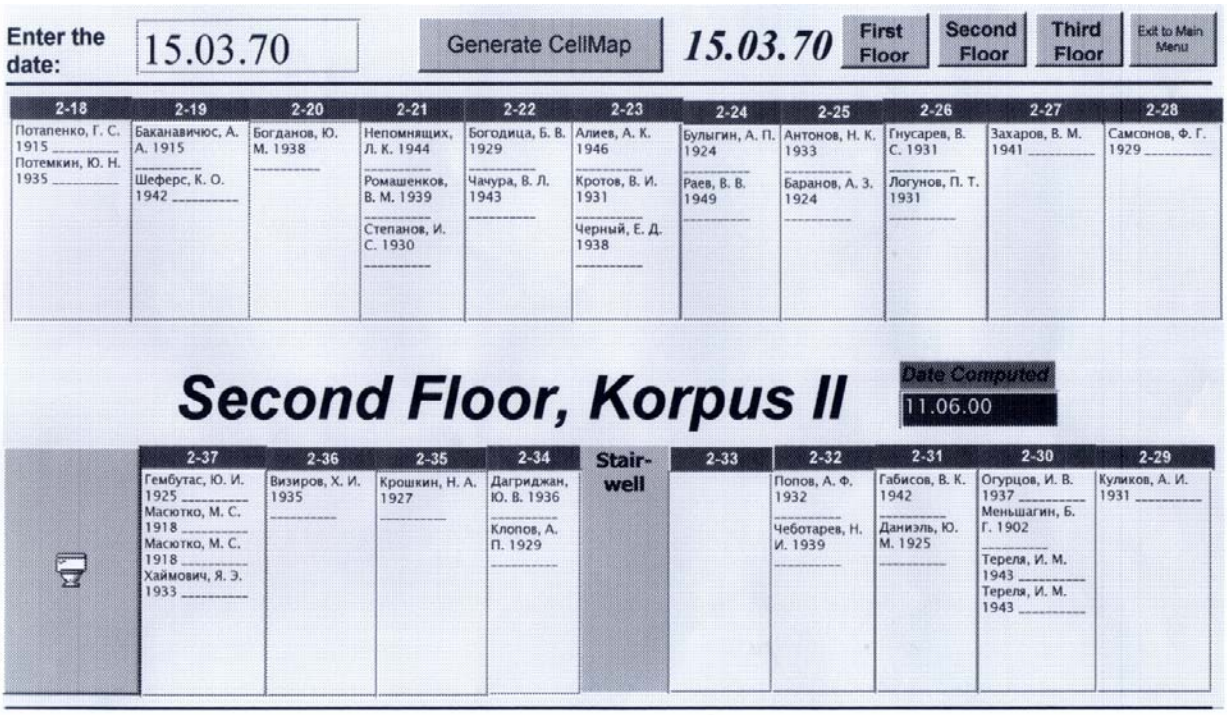


Figure 17C. Cell map of the 2nd floor of Korpus 2 on 15/03/70 after the prisoner I. M. Terelya had been brought to cell 2-30 which he shared with Ogurtsov and Menshagin. Cell 2-25 is occupied by other prisoners and cell 2-33 remains 'unoccupied' according to the registration cards in the Vladimir *kartoteka*. All other cells on the 2nd floor are occupied.

cell 2-33 is unaccounted for from 02/09/69 to 27/05/70 for a total of 267 days. From Terelya's description of the timing of the foreign prisoner's transfer from cell 2-25 to cell 2-33, we must assume that this person was not in cell 2-33 for the entire 267 days. However, from Terelya's description it is reasonable to assume that the prisoner possibly occupied cell 2-25 and 2-33 from 29/01/70, when Novikov was transferred out of cell 2-25, to 27/05/70, the last date for which cell 2-33 remained 'empty'. This period constitutes a total of 117 days. Thus, the data, nonetheless, attest in a striking manner to the unusual nature of the absence of occupancy data for cell 2-33 for which time we can assign the presence of this prisoner to this cell. Makinen can state by personal experience that cell 2-33 is an effective cell for isolation of a prisoner since he himself shared this cell with Mukha approximately 8 years earlier. As seen by comparison of the cell maps in Figure 15, the cell is located adjacent to the stairwell, making wall tapping communications ineffective. Also, the cell is located directly above the guards' office on the first floor, limiting communication by tapping on the floor.

It can be argued of course that the cell data do not prove that Raoul Wallenberg was the prisoner in cell 2-33. However, the data show unambiguously that this prisoner had to have been of unusual importance to the Soviet government and to the KGB for all records and documents to have been removed from the *Spetzchast'*. To disprove our contention that this prisoner was Raoul Wallenberg, it will be necessary for Russian government officials, presumably from the FSB and MVD, to disclose who this person was and to demonstrate convincingly that the history of this person's incarceration is fully compatible with this database analysis and the physical description of the prisoner by Terelya.

Terelya's description of the physical features of the prisoner, the words written on the backside of the *tumbuchka* repeated to another prisoner in Perm before they were ever communicated to us in the West, and the clear selection of Raoul Wallenberg's photograph and description of his physical features by Larina as the prisoner on the third floor only nine years earlier, coupled with the unambiguous confirmation of the conditions described by these witnesses through analysis of the cell occupancy data in the Vladimir *kartoteka*, leave virtually no room to argue for mistaken identity. Thus, we conclude that this prisoner was most likely Raoul Wallenberg. This conclusion remains in complete agreement with the statements made earlier by Kruminsh about meeting a Swedish prisoner in Korpus 2 "who expected to be well acknowledged for his work upon return home" and Kruminsh's reputation for having been a cellmate of the Swedish prisoner 'Van den Berg.' We cannot imagine another set of explanations that

would be logically consistent with all of these facts and observations. The chance that the prison records of cell occupancies, personal documents, transport records, personality traits, and physical features of some other secret, special prisoner incarcerated by Soviet authorities could be shown to be computationally consistent with this database analysis is so small as to be considered impossible.

3. *Examining Periods of Solitary Confinement of Other Important Prisoners*

A variety of reports from individuals having been incarcerated in the Vladimir Prison have implicated other prisoners as cellmates of Raoul Wallenberg, in addition to Mamulov, Shariya, Bereshvili or some other Georgian, and Kruminsh covered in part D. 2. above. For purposes of thoroughness we examine these cases, bringing into light statements made by these witnesses that are either confirmatory with or contradictory to the data in the *kartoteka*. We also add individuals to this list who have not been considered previously.

a. Boris Georgiyevich Menshagin

The case of Menshagin as a witness of Katyn has already been described. Of the 25-year sentence given to him by Special Tribunal, a significant part was spent in solitary confinement, including his incarceration in Moscow prior to transfer to the Vladimir Prison in 1951. To be precise, according to examination of the database, the following periods were spent in solitary confinement primarily in Korpus 2 (cells are not be listed because they are too numerous):

30/09/51 – 04/12/51 (coincides with arrival)
09/04/52 – 01/12/53
01/01/54 – 10/06/55
28/01/57 – 17/04/57 (spent in cell 1-45 coinciding with the presence of Kruminsh in cell 1-52 described earlier)
08/05/57 – 17/12/58
12/12/65 – 31/03/69

The last cell occupied by Menshagin was 2-30 with Ogurtsov and Terelya (among others before them) from which he was exiled to Murmansk on 28/05/70, as described earlier. While individuals such as Sudoplatov; Mamulov; Steinberg, Matus Ozaryevich (born 1904); and Moroz, Valentin Yakovlevich (born 1936) figure among his occasional cellmates, Menshagin makes no mention of direct association with Wallenberg in his autobiography *Vospominaniya* (YMCA Press, Paris, 1988) written while in exile, although he references articles of Abram Kalinskii published in Tel Aviv, 1986, claiming Shariya and Mamulov as cellmates of Wallenberg.

b. Nikolai Semyonovich Lyalikov (born 1924)

In an article in 1985 in *Novoye Russkoye Slovo*, a Russian language newspaper published from New York City, Abram Kalinskii states that Lyalikov was a 14-year old woodcutter who became a witness to Katyn while coincidentally working in the forest at that time, and was arrested and kept in the Vladimir Prison. In that article he also states that Raoul Wallenberg died of pneumonia as a cellmate of Lyalikov in the 1970s. Although he did not know the name of the individual, Kruminsh himself told Makinen while the two shared cell 2-31 that it was known among prisoners in Vladimir that somewhere in the Vladimir Prison was a prisoner-woodcutter who had been arrested as a young teenager because he had accidentally witnessed Katyn. Thus, this story about a young woodcutter was obviously known to many.

Lyalikov according to his registration card lived in the village Yeernishenski in the Lyoznenskii Raiyon of the Viterbskii Oblast', an area that would have had appropriate proximity to Katyn. He was first brought to the Vladimir Prison as a 20-year old man, spending the initial period 28/06/44 – 12/07/44 in solitary confinement in cell 2-5. After 1947, the only periods of solitary confinement experienced by Lyalikov were the following:

Cell 2-44	14/05/47 – 19/03/48
Cell 2-48	05/07/48 – 08/07/48
	08/08/48 – 30/08/48
	25/09/48 – 26/09/48 (the latter date corresponds to departure from the Vladimir Prison).

Despite the contradictory statements of Kalinskii about the history of this prisoner, the 14/05/47 – 19/03/48 period of solitary confinement in cell 2-44 is not inconsistent with the possibility of Raoul Wallenberg's first transfer to the Vladimir Prison according to study of documents in Moscow by Susan Mesinai. Nothing is at present further known to us about Lyalikov. It would be important to determine whether he may still be alive to shed further light on the period of solitary confinement described above.

c. Semyon Levanovich Gogiberidze

The history of this prisoner has been thoroughly discussed above. Analysis of the history of his cellmates and cells occupied by Gogiberidze shows that he spent the period 11/03/53 – 26/03/53 in solitary confinement in cell 2-44. The neighboring cells 2-43 and 2-45 each had identifiable prisoners according to the *kartoteka*, ruling out possible wall tapping communications with Wallenberg. This is the only period of solitary confinement after 1947 during Gogiberidze's incarceration in Vladimir. While Gogiberidze was known to have talked to many about Raoul Wallenberg, as described above, and is likely one of the earliest sources of information about Raoul Wallenberg in Korpus 2, this period of solitary confinement occured after Gogiberidze had shared cells with Kutepov and Shulgin. No prisoner from the Vladimir Prison who has given statements to the Swedish Foreign Ministry has implicated Gogiberidze as having had direct contact with Raoul Wallenberg as a cellmate in Korpus 2.

d. Masami Okamoto (born 1916)

According to the Wallenberg Archives in the Swedish Foreign Ministry, the German prisoner Ferenz Posch (born 1913) had learned in cell 6 from a Japanese prisoner Nakamura, Kumasaburo (born 1890) that another Japanese prisoner had informed him about Raoul Wallenberg's presence in Korpus 2. Posch did not give the name of the Japanese prisoner but Nakamura had stated that the Japanese prisoner had shared cells earlier with Gouaze and Maximov, a Finnish prisoner. From the *kartoteka* it is clear that Posch and Nakamura were cellmates, confirming Posch's statement:

Cell 3-6	01/06/54 – 23/12/54	Posch
	01/06/54 – 06/09/54	Nakamura

The difficult question is the identity of the Japanese prisoner who had related this information to Nakamura.

Of the Japanese cellmates of Nakamura, the most probable candidate is Masami Okamoto although admittedly the reasoning is not obvious and straightforward. We first examine the cell history of Okamoto to show its consistency with Nakamura's statements. Firstly, although Okamoto did not share a cell with the Finnish prisoner Maximov, Vasilii Nikolaiyevich (born 1918), he did share cells with two other Finnish prisoners, Puschkaryov and Narbut, before Nakamura was a cellmate of Posch's:

Cell 3-63	27/03/49 – 31/10/49	Okamoto
	28/03/49 – 31/05/49	Puschkaryov, Kirill Nikolaiyevich (born 1897)
	27/03/49 – 31/10/49	Shulgin
Cell 3-47	15/09/50 – 26/02/52	Okamoto
	12/09/50 – 21/01/51	Narbut, Yurii Antonovich (born 1896)
	04/10/50 – 05/01/51	Gouaze
	12/09/50 – 26/02/52	Nakamura

The interesting aspect of the cell history of Okamoto is that he was in solitary confinement in Korpus 2:

Cell 2-39	01/03/50 – 03/03/50	Okamoto
Cell 2-50	03/03/50 – 15/03/50	Okamoto

after which he shared a cell with Nakamura:

Cell 1-97	23/04/50 – 15/09/50	Okamoto
	23/04/50 – 12/09//50	Nakamura.

The question that must be then asked is why did Nakamura say anything about Okamoto in general to Posch unless he had obtained new information that had not been given while he and Okamoto shared cells earlier, for instance:

Cell 3-37	31/10/49 – 01/12/49	Okamoto
	31/10/49 – 01/10/49	Nakamura
	31/10/49 – 01/10/49	Shulgin.

While the neighboring cells to 2-39 and 2-50 where Okamoto was placed in solitary confinement were occupied by identifiable prisoners, inspection of the database shows that cell 2-48, a corner cell across from cell 2-50 with Okamoto, was empty for 52 days 04/02/50 – 28/03/50 (*cf*., Figure 16). The possibility, thus, exists that Raoul Wallenberg either might have been placed for a short time as a cellmate of Okamoto's or more likely he occupied cell 2-48 overlapping with Okamoto in cell 2-50.

Of the 13 different Japanese prisoners with whom Shulgin shared cells, in his writings located in GARF in Moscow, as translated for us by Svetlana Zavrazhnova, Okamoto is the only one mentioned, stating that he spoke Russian and that he was a diplomat. We have no further information about Okamoto and it would be important to inspect his personal dossier and other related prison documents. Also it would be important to determine whether he was returned to Japan and is still alive for interviewing or whether he died as a prisoner. To clarify this situation further we request access to Okamoto's personal file and related documents.

e. Matus Ozaryevich Steinberg (born 1904)

Steinberg's name is brought up here mainly to point out that he is unlikely to have been the prisoner identifed by Larina. While his name has the syllable *berg* and Steinberg was noted to be a high-strung, chronic, bitter complainer, the only periods of solitary confinement he experienced in Korpus 2 are:

	Cell 2-26	29/02/60 – 23/03/60
and	Cell 2-28	18/11/61 – 01/12/61.

These cells are located on the 2nd floor of Korpus 2 and do not overlap with the death of Osmak.

f. Voldemar Intovich Steinbergs (born 1924)

Steinbergs, a Lithuanian, has not been mentioned in association with Raoul Wallenberg, but because of the syllable *bergs* in his name we examine his cell history also, as for Matus Steinberg above. From his arrival on 31/08//49 until his departure on 02/09/57, he shared cells with many foreign prisoners who knew of Raoul Wallenberg: von Grigori, Pörzgen, Rezinghoff, Bastamov, Landwehr von Pragenau, Cumish (the latter two overlapping), Wolfin, Schellhorn, Voss, Gouaze, and others, mostly in Korpus 3. He did, however, spend time in solitary in Korpus 2, as seen from the following data:

Cell 3-49	30/03/53 – 20/04/53
Cell 3-43	04/20/53 – 02/06/53
Cell 2-56	02/06/53 – 17/06/53
Cell 3-43	17/06/53 – 01/12/53
Cell 2-21	30/06/55 – 19/07/55
Cell 2-19	19/07/55 – 21/07/55.

We have no basis for associating these dates with Raoul Wallenberg, but point out that the series of four cells in solitary is unusual. While cell 2-56 is located on the 3rd floor of Korpus 2, the period of solitary confinement, however, does not overlap with the death of Osmak.

g. Eero Danil'ovich Pelkonen (born 1922)

Pelkonen, a Finnish prisoner arrested in Karelia, was a cellmate of Vilmos Langfelder in Moscow prior to having been brought to the Vladimir Prison. In his personal dossier, it is stated that he was hospitalized in the

Butirka Prison because he had tried to commit suicide in his cell in the Lefortovo Prison by climbing to the window of his cell and jumping onto the concrete floor head-first. This occurred after he was interrogated around July 22, 1947, about his knowledge about Wallenberg and Langfelder, as were other prisoners such as Gustav Richter, Horst Kitschman, Franz Langer, etc., who had similarly shared cells either with Wallenberg or Langfelder.

Upon arrival at the Vladimir Prison on 03/05/51, Pelkonen was placed in solitary confinement in cell 2-1, a cell well suited for isolation (*cf*., Figure 15), for approximately 4½ months. This practise of assigning the first cell in solitary confinement, as can be already seen from the data presented in this report, was commonly applied to incoming political prisoners. Thereafter, Pelkonen shared cells with a number of different prisoners, Hofstetter, Hans (born 1924); Hille, Paul-Erhard (born 1913), with whom he corresponded after their mutual repatriation to Germany and Finland, respectively; among others, until 02/07/53. There then occurs in his cell occupancy history an unexplained period of solitary confinement for about 6 months:

Cell 2-56	02/07/53 – 13/10/53
Cell 3-32	13/10/53 – 04/11/53
Cell 2-36	04/11/53 – 22/01/54

Since no other period of solitary confinement occurs after cell 2-36 up to the time of his departure from the Vladimir Prison on 21/07/55, the three contiguous periods of solitary confinement in his record appears unusual, and should be investigated further.

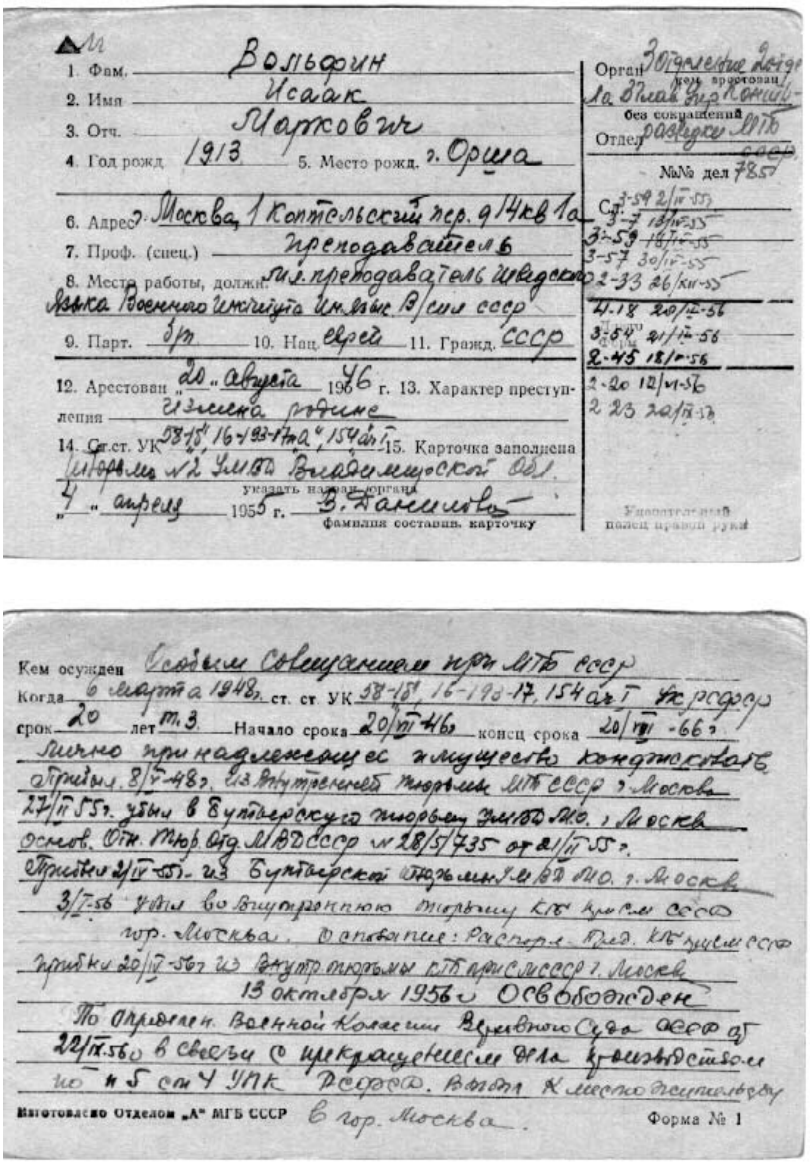
Although Pelkonen was interviewed by the Finnish Security Police after his repatriation, he has in general refused to discuss anything about his imprisonment in the Lefortovo or Vladimir Prisons, and his correspondence with Hille was burned by Hille's daughter by request, according to information obtained by Susanne Berger.

h. Isaak Markovich Wolfin (born 1913)

The possible importance of Wolfin to the case of Raoul Wallenberg was appreciated first only by independent consultants to the Swedish-Russian Working Group. After the interview of Larina conducted by Makinen in Gennadii Kuzovkin's presence in the office of the director of the Vladimir Prison described in section A. 2., upon his return to Moscow, Kuzovkin recalled from the Vladimir cards photographed in 1990 that a prisoner had been in cell 2-49 who had been an instructor of the Swedish language and found the hard copy print-out of the computerized version of the registration card prepared by Dr. Rolf Bjornerstedt. This revealed that Wolfin was an instructor of the Swedish language in a GRU institute and had been imprisoned in Vladimir as a 'Swedish spy'. The front and back images of one of his registration cards photographed in 1990 are shown in Figure 18. This case was then looked upon by us as a possible instance of mistaken identity, and in truth this possible interpretation could be moved aside only as further information was gathered. For one, when the date of Osmak's death was revealed by finding his card in the *kartoteka*, it was clear that Wolfin could not have been the foreign prisoner because he occupied cell 2-49 on three occasions starting 14/05/51, 13/03/54, and 02/06/54 and was released in 1956, long before Osmak's death.

Wolfin's cell occupancy record suggests strongly that he was a cell informant for the authorities in the Vladimir Prison: The frequency of cell changes for Wolfin, 53 changes over a period of 1958 days spent in the Vladimir Prison, calculates as the thirteen highest of more than 8000 prisoners. This is also supported by the observation that he was required to carry out only one-half of his sentence, as seen on the backside of his card in Figure 18, similarly to the case of Kruminsh. We mentioned earlier that Wolfin had served in the Soviet Embassy in Stockholm before his arrest. It is intriguing to note that in the materials handed over from the KGB in the first session of the Swedish-Soviet Working Group in October, 1991, showing how Raoul Wallenberg's name and signature had been smeared over with ink in the registry for interrogations on August 30, 1946, the name of Isaak Wolfin is clearly seen as having been interrogated at the same time. Also, Susan Mesinai has established that Wolfin was interrogated late in the night on July 17, 1947, as were all former cellmates of Raoul Wallenberg and Vilmos Langfelder around that time.

Wolfin shared cells with a large number of foreign prisoners with direct or indirect knowledge about Raoul Wallenberg. His cell occupancy record shows the following prisoners and dates for their first encounter with Wolfin (many shared cells with him on multiple occasions) :



1. Фам. Вольфин
2. Имя Исаак
3. Отч. Маркович
4. Год рожд. 1913 5. Место рожд. г. Орша
6. Адрес г. Москва, 1 Коптельский пер. 9/14 кв 1а
7. Проф. (спец.) преподаватель б
8. Место работы, должн. ин. преподаватель шведского языка Военного института ин. яз. В/сил СССР
9. Парт. б/п 10. Нац. еврей 11. Гражд. СССР
12. Арестован "26" августа 1946 г. 13. Характер преступления измена родине
14. Ст.ст. УК 58-1б, 16-193-17а, 154а-1 15. Карточка заполнена
"4" апреля 1955 г.

Орган 2 Отделение 2 отд. 1а Упр. Упр. Контр. разведки МГБ
Отдел разведки СССР
№№ дел 7855
3-59 2/IV-55
3-7 18/IV-55
3-59 18/IV-55
3-57 30/IV-55
2-33 26/VII-55
1-18 20/XII-56
3-54 21/IX-56
2-45 18/X-56
2-20 12/VI-56
2-23 20/IX-57

Кем осужден Особым Совещанием при МГБ СССР
Когда 6 марта 1948 г. ст. ст. УК 58-1б, 16-193-17, 154а-1 УК РСФСР
срок 20 лет т.з. Начало срока 20/VIII-46 конец срока 20/VIII-66 г.
Лично принадлежащее имущество конфисковать
Прибыл 8/V-48 г. из Внутренней тюрьмы МГБ СССР г. Москва
27/IV-55 г. убыл в Бутырскую тюрьму Упр. МО. г. Москва
основ. Отд. Тюр. Отд. МВД СССР № 28/5/735 от 21/IV-55 г.
Прибыл 2/IV-55 г. из Бутырской тюрьмы Упр. МВД МО. г. Москва
3/I-56 убыл во Внутреннюю тюрьму МГБ СССР
гор. Москва. Основание: Распор. Пред. КГБ при СМ СССР
Прибыл 20/IV-56 г. из Внутр. тюрьмы МГБ при СМ СССР г. Москва
13 октября 1956 г. Освобожден
По определен. Военной Коллегии Верховного Суда СССР от 22/IV-56 г. в связи с прекращением дела производством по п. 5 ст. 4 УПК РСФСР. Выбыл к месту жительству
Изготовлено Отделом "А" МГБ СССР в гор. Москва.
Форма № 1

Figure 18. Front (top) and back (lower) side of the registration card of Isaak Markovich Wolfin, who was arrested as a 'Swedish spy.' The lower left-hand quadrant of the front (top) side shows that the date of arrest was August 26, 1946, and the lower right quadrant provides cell occupancy data starting from 02/02/55 in cell 3-59 until his release. (There were other cards in the *kartoteka* covering earlier periods of his incarceration in the Vladimir Prison.) The back (lower) side details the length of sentence and lists the dates of departure from and return to the prison in addition to providing a brief explanation of the basis for the order for transfer.

Cell 3-70	08/06/48 – 23/03/49	Wolfin
	29/06/48 – 23/03/49	Narbut, Yu. A.
Cell 3-66	23/03/49 – 17/06/49	Wolfin
	23/03/49 – 17/06/49	Ten Hompel, R.
	23/03/49 – 17/06/49	Klauberg, K.
	31/05/49 – 16/06/49	Puschkaryov, K. N.
Cell 3-22	19/11/49 – 01/12/49	Wolfin
	19/11/49 – 01/12/49	Böhm, J. M.
	19/11/49 – 01/12/49	Schellhorn, F. G.
Cell 3-64	21/02/50 – 23/04/50	Wolfin
	01/12/49 – 31/03/50	Maksimov, V. N.
Cell 2-12	13/07/50 – 13/09/50	Wolfin
	20-06-50 – 21/08/50	Goldstein, I. I.

Cell 3-44	13/09/50 – 04/10/50	Wolfin
	12/09/50 – 30/03/51	von Grigori, K.
Cell 3-44	03/11/50 – 09/05/51	Wolfin
	04/01/51 – 30/03/51	Langer, F.
Cell 3-48	27/12/51 – 02/02/52	Wolfin
	24/01/52 – 02/02/52	Martins, G.
Cell 3-44	02/02/52 – 02/04/52	Wolfin
	17/03/52 – 29/05/53	Beckerle, A. H.
Cell 3-46	30/04/52 – 18/06/52	Wolfin
	12/09/52 – 18/06/52	Rehekampf, G.
	27/01/51 – 18/06/52	Supprian, K.
	28/02/52 – 18/06/52	Krenner, E.
Cell 2-20	11/02/53 – 14/05/53	Wolfin
	31/01/53 – 06/03/53	Schöggl, O.
Cell 2-46	27/02/53 – 14/05/53	Wolfin
	16/04/53 – 25/04/53	Fuchs, A.
Cell 2-49	02/06/54 – 02/12/54	Wolfin
	28/06/54 – 05/07/54	Kupriyanov, G. N.
Cell 3-57	30/04/55 – 26/12/55	Wolfin
	25/11/55 – 08/12/55	Kalinskiii, A. M.
	22/11/55 – 22/12/55	Kupriyanov, G. N.

There are also numerous periods of solitary confinement throughout his incarceration in Vladimir:

Cell	Period of Time	Number of days
3-48	09/05/51 – 14/05/51	5
3-57	09/10/52 – 24/10/52	15
2-54	10/02/53 – 11/02/53	1
2-46	27/02/53 – 15/04/53	45
3-43	08/12/53 – 11/12/53	3
3-59	18/04/55 – 30/04/55	12
2-33	26/12/55 – 03/01/56	8

While the 1-3 day periods are not likely to be significant with respect to sharing cells with another prisoner, the others provide adequate opportunity to interact with a cellmate to extract information.

Kalinskii has stated that Wolfin had told him that Raoul Wallenberg was on a transport with him once when he was returned from Aleksandrovsk. Kalinskii referred to Wolfin as "Sasha." The registration cards of Wolfin show only that his departures and arrivals were to and from Butirka Prison in Moscow. Thus, if Wolfin was transported from Aleksandrovsk to Moscow and then to Vladimir, only the arrival from Moscow would have been noted on his card, and Butirka is a well known prison from which prisoners were sent or where they arrived by transport. While Sasha is the nickname in Russian for Aleksandr, much as Sandy in English is the nickname for Alexander, it is known that family members of Wolfin called him Sasha. It is probable that Kalinskii learned this information when he shared cells with Wolfin, as shown above.

The Swedish and the Russian members of the Swedish-Russian Working Group have been willing to reveal only scant information about Wolfin thus far. Since the circumstances surrounding his case suggest strongly that he

was in some manner associated with the case of Raoul Wallenberg, all information about him must be released to determine the relevance of his activities and history to the case of Raoul Wallenberg.

4. *Examining a Reported Sighting of Vilmos Langfelder*

An American prisoner Wilfrid Cumish (born 1915), arrested in Austria in 1948, was in the Vladimir Prison from 23/06/49 until 20/08/55. He stated in interviews that he had been for a short period with Vilmos Langfelder in Korpus 3 and that Langfelder had arrived earlier on the same transport as Dengg, Friedrich (born 1912). Through a CIA document the statement is attributed to Admiral Voss that Cumish had reportedly told Voss that he had also seen a Swedish prisoner in Vladimir in 1954.

There are several inconsistencies in Cumish's statements, making evaluation difficult. However, certain statements while appearing as inconsistencies lead to the conclusion that Cumish may well have seen both Wallenberg and Langfelder. For instance, in one interview he stated that he had been in a cell with a prisoner named Wallberg, but in the following interview he stated that he had meant Steinberg, a former Gestapo person. From a large collection of photographs, however, he had picked out Wallenberg's photograph as the person he had in mind. Unfortunately, the representatives of the Swedish Foreign Ministry concluded that Cumish must have mistaken the prisoner Schluger for Wallenberg since the two had similar physical features. There is no registration card in the *kartoteka* for a prisoner by the name of Schluger, but there is a Schluga, Josef (born 1915) who had been a cellmate of Dengg's. The *kartoteka* data show:

Cell 3-1	17/07/54 – 03/12/54	Dengg
	29/07/54 – 07/08/54	Schluga
	25/06/54 – 03/12/54	Voss, Hans-Erios (born 1897)
	25/06/54 – 06/09/54	Sato, Seichi (born 1924)

While we have no information whether Schluga and Cumish ever had the opportunity to see each other, for instance, in the bath, the cell histories of Schluga and Cumish show that they were never cellmates.

The officials from the Swedish Foreign Ministry seem to have also concluded that Cumish meant the prisoner Landwehr von Pragenau, Kurt (born 1910) instead of Langfelder. However, Cumish in his interviews clearly described Langfelder as having reddish hair, an appropriate description, while he described Landwehr distinctly differently. It appears that only Lorentzon of the Swedish Foreign Ministry after meeting Landwehr for an interview realized that Cumish could not have not confused the two men and that he had in mind two different prisoners.

Upon his arrival in Vladimir, Cumish first spent 2 days alone in cell 3-42 and was then brought to cell 3-44. The following prisoners (among others) shared overlappingly this cell:

Cell 3-44	25/06/49 – 31/10//49	Cumish
	28/03/49 – 31/10/49	Landwehr von Pragenau
	31/03/49 – 31/10/49	Pörzgen, Herman (born 1905)
	02/04/49 – 31/10/49	Martins, Günther (1917)
	02/04/49 – 31/10/49	Pataridze
	05/05/49 – 31/10/49	Rezinghof, Berngard (1900)
	05/05/49 – 31/10/49	von Grigori, Karl (born 1899)
	31/08/49 – 11/10/49	Steinbergs

Several of the same prisoners were transferred to the next cell with Cumish:

Cell 3-40	31/10/49 – 05/11/49	Cumish
	31/10/49 – 01/12/49	Landwehr von Pragenau
	31/10/49 – 05/11/49	Martins
	31/10/49 – 01/12/49	Pörzgen
	31/10/49 – 01/12/49	Rezinghof
	31-10-49 – 01/12/49	Ten Hompel

These cells in the very early part of his incarceration in Vladimir were the only ones that Cumish shared with Landwehr von Pragenau or Steinbergs.

In further confirmation of Cumish's statement about Dengg, the *kartoteka* data showed that Dengg arrived in Vladimir on 28/04/54 from Verchne Uralsk. There were four other prisoners on the same transport: Vesseli, Otto (born 1911); Lanksch, Imant Karlovich (born 1925); Pritula, Pyotr Nikolaeyevich (born 1890); and Savitzkas, Antanas-Josas (born 1887). Cumish stated also that Langfelder had been earlier in a cell with Dengg. The data do show that Dengg spent a period of solitary confinement although he shared cells otherwise from the very beginning of his arrival in Vladimir with others. For instance,

Cell 2-41	30/04/54 – 10/06/54	Dengg
	17/04/54 – 10/06/54	Lausch, Henrich (born 1913)
Cell 2-42	10/06/54 – 17/07/54	Dengg
	01/07/54 – 20/07/54	Okamoto

indicating that Dengg was without an identifiable cellmate over the 10/06/54 – 30/06/54 period before Okamoto entered the cell.

There are numerous periods of solitary confinement of Cumish, ranging from 6 – 35 days, but the only period that could be relevant for Langfelder as a possible cellmate according to Cumish's statements is in cell 3-54 (13/05/55 – 16/07/55). Cumish stated that Voss had been in and out of the cell prior to Langfelder. The *kartoteka* data show:

Cell 3-57	03/12/54 – 16/02/55	Cumish
	03/12/54 – 16/02/55	Dengg
	03/12/54 – 16/02/55	Pörzgen
	24/01/55 – 16/02/55	Poisinger, Franz (born 1912)
	03/12/54 – 24/12/54	Voss
Cell 3-1	16/02/55 – 24/03/55	Cumish
	16/02/55 – 22/02/55	Akkerman
	16/02/55 – 24/03/55	Dengg
	16/02/55 – 10/10/55	Pörzgen
	16/02/55 – 24/03/55	Poisinger
Cell 3-7	24/03/55 – 13/04/55	Cumish
	24/03/55 – 13/04/55	Poisinger
	24/03/55 – 13/04/55	Dengg
Cell 3-54	13/04/55 – 16/07/55	Cumish
	13/04/55 – 12/05/55	Poisinger
	25/04/55 – 12/05/55	Akkerman, Adam (born 1918)
	13/04/55 – 28/04/55	Dengg

thus, leaving Cumish alone in cell 3-54 for approximately 2 months. Hereafter, Cumish was transferred to cell 3-52 which he shared with Filippov-Solovyov, Ivan Yakovlevich (born 1923) until he was released for repatriation on 20/08/55.

There are many difficulties in evaluation of the details of Cumish's statements, the possibility that he shared a cell with Vilmos Langfelder and possibly Raoul Wallenberg, and the inexcuseable interpretations of the Swedish officials who interviewed him to make conclusions about whom Cumish actually met in prison. Moreover, Cumish stated that the year was 1954, but he had no period of solitary confinement between 06/07/53 and 13/05/55. He confused cell numbers, but considering the large number of different cells that he had to share with others and the frequency of changes, this may not be a point to be criticized considering his weakened health upon release. Since the only statement of the Russian government with respect to the fate of Vilmos Langfelder relies on the statement of the Soviet government to an inquiry from Hungary that Langfelder died in 1948 (providing no legally compelling

documentation), we must consider the information provided by Cumish as potentially very important. Since these data are consistent with Cumish's statements, the matter of Vilmos Langfelder cannot be considered resolved. For this reason, every detail of any document that sheds light on the case of Vilmos Langfelder should be opened and made available for further study.

E. Summary and Conclusions

Despite the Gromyko Memorandum issued by the Soviet government to the Swedish Foreign Ministry in 1957, alleging that Raoul Wallenberg died of a myocardial infarct on July 17, 1947, in the Internal or Lubyanka Prison of Moscow, there have been a large number of reports about him in Soviet prisons, labor camps, and psychiatric hospitals by former prisoners into the 1980s. A significant number of these reports has come from the prison in the city of Vladimir in Russia, claiming Korpus 2 of the prison as the building in which Wallenberg was incarcerated. This building of the prison is well known to have served the dual function of providing hospital and medical facilities for sick prisoners and having cells which were effective in isolating prisoners from each other for long periods of time. For this reason, we have reconstructed the chronological history of the occupancy of all cells in Korpus 2 of the Vladimir Prison from prisoner registration cards in the prison *kartoteka* for the period ranging from January 1, 1947, to December 31, 1972, to examine the consistency of eyewitness reports with conditions defined by these prison documents. The years 1947 and 1972 correspond, respectively, to the purported death of Raoul Wallenberg according to the Soviet government and the last sighting of him in the Vladimir Prison, in this case as reported by Iosif Mikhailovich Terelya from March-April of 1972.

A database was constructed from the registration cards of all prisoners who were incarcerated for at least one day in Korpus 2 during their imprisonment in Vladimir between January 1, 1947, and December 31, 1972. The database was extracted from over 11,000 registration cards belonging to over 8,000 prisoners and involving over 98,000 cell changes or records. The accuracy of the data was verified by specially devised algorithms to test for chronological and other types of inaccuracies introduced during construction of the database. Where necessary inconsistencies were resolved by comparison of the computer file with the original TIFF image of the computer scanned registration card, and the database was accordingly corrected. Specifically devised search algorithms were applied to evaluate fluctuations in prisoner population on each floor of Korpus 2, the number of prisoners entering and leaving, the chronological history of the occupancy of each cell by prisoners in Korpus 2, the pairing of prisoners in cells, and the identification of prisoners in neighboring cells. It was possible to reconstruct the occupancy of each cell in Korpus 2 on a day-by-day basis throughout the entire 25 year period investigated.

In addition to the large number of evidentiary statements and reports about Raoul Wallenberg examined against cell occupancy data, we have analyzed in great detail the occupancy of cells on the 3rd floor of Korpus 2 corresponding to the time of the death of the prisoner Osmak. Varvara Larina, an elderly, pensioned employee of the prison, described in interviews to Professor Makinen that a non-German foreign prisoner was held in solitary confinement in a cell on the opposite side of the 3rd floor at the time of Osmak's death. Not only was her description of the foreign prisoner's physical appearance compatible with that of Raoul Wallenberg, but she also consistently selected a photograph of a side profile of Wallenberg (not used in the international press and rarely seen) as the prisoner in solitary confinement, ignoring photographs of other individuals. Aleksandr Timofeiyevich Kukin, a retired former head guard of Korpus 2, confirmed that the picture selected by Larina was not unlike the foreign prisoner held in solitary confinement but claimed not to remember any details about name and country of origin.

Analysis of the cell occupancy data showed that the prisoner Kirill Ivanovich Osmak died on May 16, 1960, in cell 49 on the 3rd floor of Korpus 2. The database showed that several cells were without identifiable occupants on the opposite side of the 3rd floor that remained "empty" for varying periods of time, ranging from 243 to 717 days, overlapping with Osmak's death. While a detailed inspection of changes in cell occupancy from June, 1960, through January, 1961, revealed a sharp decrease in prisoner population on the 3rd floor, three well known, special prisoners, Pavel Anatol'yevich Sudoplatov, Boris Georgeiyevich Menshagin, and Evgenii Stepanovich Prishlyak, continued each to occupy cells also in solitary confinement on the opposite side from cell 49 throughout this period of time. The sharp decrease in prisoner population, presumably due to renovations of the building, would also be compatible with administrative efforts to ensure strict isolation of the foreign prisoner to conceal his identity. Interestingly, the three special prisoners were separated by empty cells from each other and from the cell which likely held the foreign prisoner, providing effective isolation by preventing wall tapping communications. These results show unambiguously that these cells on the 3rd floor remained totally compatible with detention of prisoners whatever the operational reasons for the decrease in prisoner population in other parts of the 3rd floor. The confirmation of the death of the prisoner Osmak by inspection of the *kartoteka* demonstrates the clarity and accuracy

of Larina's description of conditions on the 3rd floor at that time. The identification of the foreign prisoner as Raoul Wallenberg by Larina unhesitatingly selecting his photograph, her description of his physical appearance, and the confirmation of the selected photograph by a former head guard of Korpus 2 leave little room to argue for a case of mistaken identity. These results, thus, lead essentially only to the conclusion that this prisoner was most likely Raoul Wallenberg and provide strong doubt about his alleged death in 1947, as claimed in the Gromyko Memorandum of the Soviet government.

We have similarly examined other evidentiary statements against the database and find striking confirmation of most reports. For example, the report of Iosef Mikhailovich Terelya from March-April, 1972, describing cells that he occupied on the 2nd floor of Korpus 2 with respect to those occupied by an elderly foreign prisoner having physical features not unlike those expected of Raoul Wallenberg, and the transfer of this prisoner from cell 2-25 to 2-33 are confirmed in every detail by the database with respect to time and location. The long period of time that cell 2-33 remains without an identfiable occupant according to the registration cards available in the *kartoteka*, 233 days, provides strong reason to assume that this must have been a very important prisoner and that his idenitity has been concealed by removal of documents.

We have also examined against the database the consistency of a number of statements by former prisoners about reported cellmates of Raoul Wallenberg. The cell histories of several of these prisoners, in particular that of Zigurds-Dzidris Ernestovich Kruminsh, the former cellmate of Francis Gary Powers, Marvin W. Makinen, and reportedly of a Swedish prisoner named "Van den Berg", shows unexplained lengthy periods of 'solitary' confinement that could correspond to sharing of cells with Wallenberg. Of particular importance is that Kruminsh himself admitted to Makinen in 1962 of having earlier met a Swedish prisoner who was "very sure that he would be well rewarded and acknowledged for his work upon his return home." This is not the only example of these types of statements. The German prisoner-of-war Hermann Platz stated that during transport to labor camp in 1949 other prisoners in Kirov pointed out to him a prisoner whose name was supposedly Van den Berg although they stated that he was Swedish. Similarly, Theodor von Dufving, a German prisoner-of-war, reported that while in transit in February of 1949 en route to Vorkuta, probably in Kirov, he met a Swedish diplomat who told him "*Ich bin hier durch ein grosses* (sic) *Irrtum*." Also, Julian Kaliyanskii attributes a statement to the German prisoner Wallenstein that he had met a Swede "who would be well rewarded" for his work upon return home.

Furthermore, we have analyzed the history of cellmate pairings of a large number of foreign prisoners who provided evidentiary statements upon repatriation to identify the most likely original source of information among prisoners about the presence of Raoul Wallenberg in Korpus 2. The analysis indicates that the most probable original eyewitness report of Raoul Wallenberg having been transferred to the Vladimir Prison from Moscow comes from Vitalii Vital'yevich Shulgin, who reportedly stated that he was transferred on the same transport with Raoul Wallenberg. Shulgin was brought to the Vladimir Prison on July 25, 1947. The analysis confirms reports of others that the well known prisoner Semyon Levanovich Gogiberidze most likely learned of Raoul Wallenberg from a Russian prisoner in the late 1940s or early 1950s since he shared a cell for one month with Shulgin, shortly after Shulgin's arrival, and for 13 months with Pavel Anatol'yevich Kutepov, who was transferred to Vladimir together with Shulgin.

In addition to examining evidentiary reports about Raoul Wallenberg, we have also determined cell occupancies and cellmate pairings from the database to evaluate the report of Wilfrid Cumish that he shared a cell for a short time in Korpus 3 with Vilmos Langfelder, the assistant of Raoul Wallenberg who was arrested with him in Hungary. The data reveal that Cumish was in 'solitary confirnement' for a period of about 2 months in Korpus 3 in 1955 and find general correlation with many of the details in his report. Since Cumish described Langfelder as a man of short stature with reddish hair, as was appropriately descriptive of Wallenberg's assistant, the case of Langfelder should be similarly further explored and investigated. The possible sighting of Langfelder in the 1950s is in sharp contradiction to the report, given without legally compelling documentation, by the Soviet government to the Hungarian government that Langfelder purportedly died in 1948.

These results taken together provide compelling reasons to doubt the credibility of the Gromyko Memorandum about the alleged death of Raoul Wallenberg in 1947, and they suggest strongly that he lived incarcerated in the Soviet Union at least into the 1960s and possibly 1970s and further. While the Russian government, through statements in more recent times, has begun to change the manner of death, claiming execution either by shooting or lethal injection rather than a myocardial infact in a 34-year old man who had no family medical history of heart disease and who, according to statements of two of his known cellmates, Gustav Richter and Jan Loyda, did physical exercises daily, the basic situation has not changed. There has been no compelling

documentation offered to substantiate the claim. There is only one legal standard that should be adhered to in the case of Raoul Wallenberg, and that is proof of death beyond a reasonable doubt. Until the Russian government is willing to provide that documentation, it is unwarranted to come to any conclusion about Raoul Wallenberg's fate.

F. Acknowledgments

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APPENDIX I

List of Programs Developed for Verifying the Accuracy and Self-Consistency of Entered Data

This appendix describes the algorithms used to verify the accuracy of data in the analysis of Vladimir prison records, 1947 – 1972. The cards were carefully selected and scanned in 1998. After being scanned, ProSoft, AG was hired to scientifically enter the prison record information. Their system was to use two operators entering identical information. The ProSoft program would detect if the data were different for the two operators, at which point a manager would explicitly look at the discrepancy. As a result of this careful methodology, the prison record data were entered with a high degree of accuracy. This is described in more detail in the "Work Conditions and Procedures for Construction of the Database" section in the main report.

The accuracy of the data, while conducting an analysis of this magnitude, is of primary importance. With this in mind, there were thirty-five computer algorithms developed to further check the accuracy of the data. These algorithms are useful to determine first if ProSoft's data entry was improperly made, and second to determine the accuracy of the information from the original cards. For example, a clerical mistake could have been made for a date in January similarly to the situation when one enters the previous year in writing the date in the beginning of the New Year through a conditioned response; a similar phenomenon was observed with some registration cards.

As a result of these algorithms, manual inspection of the scanned images of the original cards was conducted, and, where appropriate, data were corrected.

The thirty-five computer algorithms used to validate the accuracy of the data are described below:

1. **Arrival after last departure**: all cards where there was an "arrival" into the prison specified, but no departure or death date. Only two of the 8607 cards met this criterion.

2. **Bad Birthdays**: prisoners with no birthday indicated, or with an obviously incorrect birthday, including being born before 1800 or after 1969. Five of the 8607 cards met this criterion.

3. **Bad Cells: ENTERED after LEFT**: prisoners that entered into a cell after they left the cell. These are due to an invalid date that was associated the cell entry or missing data that was misinterpreted by the computer. There were 150 out of 98030 cell records for this condition.

4. **Bad Cells: Left after last change**: prisoners that left a cell after they died or finally departed the prison. There were no such cases for the 8607 cards.

5. **Bad Cells: Entered before first Change**: prisoners that were in a cell before they arrived into the prison system. There were no such cases for the 8607 cards.

6. **Bad Names**: These are prisoners that have either a missing first, last, or patronymic name. They are not necessarily "bad", such as numbered prisoners, but this report was useful in determining if there were legitimate errors with the prisoner names.

7. **Blank Cell Dates**: Cells that did not have a date associated with them. This is not necessarily bad, as the computer algorithm was designed to assume the dates from previous and future cells for the prisoner, along with arrival and departure information. This is described in more detail in the "Work Conditions and Procedures for Construction of the Database" section in the main report.

8. **Blank Cell Dates in Block 2**: Cells in Korpus II that did not have a date associated with them.

9. **Cell Dates After Final Departure**: Prisoners that were recorded to be in cells after they died or had a final departure. Two of the 8607 cards met this criterion.

10. **Cells not in chronological order**: Cells that were not entered or listed in chronological order. Initially there were dozens of such cells, and after manual review of scanned images, all such cells were resolved. None of the 98030 cells were out of chronological order after fixing the data.

11. **Cells not in chronological order – Korpus 2**: Cells in Korpus II that were entered or listed not in chronological order. None of the 98030 cells met this criterion.

12. **Cells with no parent prisoner**: Cell occupancies that are not associated with any prisoner. No cells met this criterion.

13. **Changes with no parent prisoner**: Arrivals/Departures/Deaths information that is not associated with any prisoner. No cards met this condition.

14. **Differences between date of filling out and first arrival (more than 7 days)**: Show prisoners that had a discrepancy of dates between when the date of filling out was indicated, and the date the prisoner first arrived. While not necessarily an error in data, this report flags potential problems.

15. **Differences between first arrival and first cell (> 7 days)**: Show prisoners that had a discrepancy of dates between when the prisoner first arrived, and the date the prisoner was first placed into a cell. While not necessarily an error in data, this report flags potential problems.

16. **Difference between "Date of Filling Out" and first known Cell Date, when the first Cell Date is Null and there is no Date of Arrival**: This report is important for a special situation whereby there is no date associated with the first cell. If there is a date of arrival, then it is assumed that the prisoner was placed into the cell upon the date of arrival. If there is no date of arrival, then it is assumed that the prisoner was placed into the cell upon the date on which the registration card was written, *i.e.,* filled out. This report shows the difference between the date of filling out and the first cell date, in that situation.

17. **Duplicate / Multiple Cards (based on name, YOB)**: Shows the number of cards where prisoners share the same name and year of birth. This is used to eliminate potential duplicate cards.

18. **Duplicate / Multiple Cards (based on name, YOB, Case)**: Shows the number of cards where prisoners share the same name, year of birth, and case number.

19. **Duplicate / Multiple Cards (same name, different YOB)**: Shows the number of cards where prisoners share the same name, but have different years of birth.

20. **Duplicate Cards with same name, same YOB, and overlapping dates between the cards (based on cells and arrival/departures)**: Shows the number of cards where prisoners share the same name and year of birth, and have overlapping cell dates (were in the prison at the same time).

21. **Duplicate Cards with same name, same YOB, and overlapping dates between the cards (based on cells only)**: Shows the number of cards where prisoners share the same name and year of birth, and have overlapping cell dates (were in the prison at the same time based only on cell information and not on arrival/departure/death).

22. **Duplicate Cards with same name, same YOB, and overlapping dates between the cards (based on cells only – 2 days minimum overlap)**: Shows the number of cards where prisoners share the same name and year of birth, and have overlapping cell dates (not including arrival/departure/death information, and with a 2-day minimum overlap).

23. **Duplicate Cards with same name and YOB, and no overlapping dates among the cards (based on arrival/departures)**: Shows the number of cards where prisoners share the same name and year of birth, and have overlapping cell dates (including arrival/departure/death information and not cell information, and with a 2-day minimum overlap).

24. **Date of Filling Out After First Known Cell Date**: Shows all cards where the date the card was filled out was after the prisoner was already registered in the *kartoteka*, based on cell information. While not necessarily an error, this helped to identify cards that had been rewritten.

25. **Date of Filling Out After First Known Change Date**: Shows all cards where the date the card was filled out was after the prison was already registered in the *kartoteka*, based on arrival information.

26. **4+ prisoners in a cell – detail**: Displays the names, cells, and dates where there were four or more prisoners in a cell at a time.

27. **4+ prisoners in a cell – summary**: Displays the cells, dates, and totals where there were four or more prisoners in a cell at a time.

28. **4+ prisoners in a cell (no blank dates)**: Displays cells and dates where there were four or more prisoners in a cell at a time, and no cell dates were blank.

29. **4+ prisoners in a cell, no overlap/blank**: Displays cells and dates where there were four or more prisoners in a cell at a time, and no cell dates were blank, and prisoners were not arriving or departing the cell on the date.

30. **Prisoners in 1990 data not in 1999 data**: Prisoners that are missing in the 1999 data from the roughly 1200 prisoners scanned years earlier. This report did not help, as the 1200 cards are in English, and the 1999 cards are in Russian.

31. **Prisoners who were in their last cell for at least 2 years (or an undetermined amount) – Korpus II**: This can determine if the final death or departure is incorrect, as this shows prisoners left in their last cell for at least two years. This is not always an error, but flags for potential errors that were reviewed against the original scanned images.

32. **Prisoners with no Cell info**: Shows prisoners that have no cell information. These were cross-checked with original scanned images.

33. **Prisoners with no Change info**: Shows prisoners that have no arrival/departure/death information. These were cross-checked with original scanned images.

34. **Unresolved Unclear Cell Dates**: When entering data, Prosoft indicated in a special field cell dates that were unclear to the operator entering the data. By looking at the original scanned images, many of these were resolved. This report shows all unresolved unclear cell dates.

35. **Unresolved Unclear Change Dates**: When entering data, Prosoft indicated in a special field arrival/departure/death dates that were unclear to the operator entering the data. By looking at the original scanned images, many of these were resolved. This report shows all unresolved unclear arrival/departure/death dates.

APPENDIX II

List of Programs for Analysis of Cell Occupancy Data

This appendix describes programs used to analyze the data of Vladimir prison records, 1947 – 1972. While Appendix I describes 35 algorithms used to ensure that the data were of the highest accuracy possible, Appendix II describes the eighty-two computer algorithms used to analyze the data:

1. **Age of prisoners when departing**: shows how old prisoners were at the time of their final departure or death.

2. **All prisoners – alphabetical**: a comprehensive list of all prisoner cards, sorted alphabetically.

3. **All prisoners – by ID**: a comprehensive list of all prisoner cards, sorted by computer-generated ID numbers. This is used to speed up cross-referencing of prisoners from other reports.

4. **All prisoners arriving between two dates**: The analyst enters a start date and an end date, and all prisoners that arrived between those two dates are displayed.

5. **All prisoners arriving on a date**: The analyst enters a date, and all prisoners that arrived exactly on that date are displayed.

6. **All prisoners by birth**: a comprehensive list of all prisoners, sorted alphabetically and by year of birth within the year.

7. **All prisoners by order of entry**: a comprehensive list of all prisoners, sorted by the order that they entered into the prison.

8. **All prisoners departing between two dates**: The analyst enters a start date and an end date, and all prisoners that departed between those two dates are displayed.

9. **All prisoners departing on a date**: The analyst enters a date, and all prisoners departing only on that date are displayed.

10. **All prisoners in a cell**: The analyst enters a cell number, and all prisoners that were ever in that cell (1947-1972) are displayed.

11. **All prisoners in a cell on a date**: The analyst enters a cell number and a date, and all prisoners that were in that cell on that date are displayed.

12. **All prisoners in a cell on a date w/nullable dates**: The analyst enters a cell number and a date, and all prisoners that were in that cell on that date are displayed including nullable dates. [1]

13. **All prisoners in Korpus II on a date**: The analyst enters a date and all prisoners that were in Korpus II on that date are displayed acording to cell number.

14. **All prisoners in Korpus II on a date w/nullable dates**: The analyst enters a date and all prisoners that were in Korpus II on that date are displayed including nullable dates. *

15. **All prisoners with cards filled out between two dates**: The analyst enters a start date and an end date, and all prisoners with the "date of filling out" between those two dates are displayed.

16. **Cell change date range – alphabetical**: The analyst enters a cutoff for the minimum number of days in prison and the number of days in prison for each prisoner is displayed alphabetically.

[1] Nullable dates occur under two conditions: (1) if the first cell (or first several cells) of a card has no date and there is no arrival information and no date of filing out; and (2) if there are no final departure or death dates after the date of the last cell in which the prisoner was held.

17. **Cell change date range – by dates in prison**: The analyst enters a cutoff for the minimum number of days in prison and the number of days in prison for each prisoner is displayed by the order of total days in prison.

18. **Cell change frequency – alphabetical**: The frequency of a prisoner is the number of total cell changes for a prisoner, divided by the total number of days in prison. For example, if a prisoner was in prison 400 days and had 34 cell changes during that period, the frequency is 0.085. Frequency is important to analyze how often prisoners switched cells and to suggest if a prisoner was a cell informant by being placed in and out of many cells in order to extract information from other prisoners. The analyst enters the minimum number of days for a prisoner having been in prison, and the cell change frequencies are displayed by the prisoners' alphabetical listing.

19. **Cell change frequency – by frequency**: The analyst enters the minimum number of days for a prisoner being in prison, and the cell change frequencies are displayed by the most actively cell-switching prisoners to the least active.

20. **Cell change frequency – by totals**: The analyst enters the minimum number of days for a prisoner being in prison, and the cell change frequencies are displayed by the most total number of cell changes.

21. **Cells with the longest unoccupied periods**: This displays which cells were unoccupied for the longest time, along with the start date and stop date that the cells were unoccupied.

22. **Cellmates with overlap and nullable dates**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, including nullable dates. *

23. **Cellmates with overlap**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, even those that left the cell on the date that another prisoner entered or entered the cell on the date that another prisoner left.

24. **Cellmates with overlap – Korpus 2**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, even those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left. This report is limited to Korpus 2.

25. **Cellmates with overlap and nullable dates – Korpus 2**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, even those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left. This report is limited to Korpus 2, and includes nullable dates.

26. **Cellmates with no overlap**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, exluding those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left.

27. **Cellmates with no overlap and nullable dates**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, exluding those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left. This report also includes nullable dates. *

28. **Cellmates with no overlap – Korpus 2**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, excluding those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left. This report is limited to Korpus 2.

29. **Cellmates with no overlap and nullable dates – Korpus 2**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, exluding those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left. This report is limited to Korpus 2, and nullable dates.

30. **Cellmates with no overlap – Korpus 2, 1947-1972**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, exluding those that left the cell on the date that

the prisoner entered or entered the cell on the date that the prisoner left. This report is limited to Korpus 2 and the years 1947-1972.

31. **Cellmates with no overlap and nullable dates – K2, 1947-1972**: The analyst enters the computer-generated ID of a prisoner, and all cellmates are listed in chronological order, exluding those that left the cell on the date that the prisoner entered or entered the cell on the date that the prisoner left. This report is limited to Korpus 2, and nullable dates, and the years 1947-1972.

32. **Neighbors of a prisoner to the left**: The analyst enters the computer-generated ID of a prisoner, and all prisoners in the cell to the left is displayed. This shows all prisoners that could have potentially communicated by tapping on the wall. Adjacent cells on the left or right side are defined according to their location in the cellmap calculated for that floor.

33. **Neighbors of a prisoner to the right**: The analyst enters the computer-generated ID of a prisoner, and all prisoners in the cell to the left are displayed. This shows all prisoners that could have potentially communicated by tapping on the wall. Adjacent cells on the left or right side are defined according to theit location in the cellmap calculated for that floor.

34. **Neighbors of a prisoner above**: The analyst enters the computer-generated ID of a prisoner, and all prisoners in the cell above are displayed. This shows all prisoners that could have potentially communicated by tapping on the ceiling, or by passing notes on a string from window to window.

35. **Neighbors of a prisoner below**: The analyst enters the computer-generated ID of a prisoner, and all prisoners in the cell below are displayed. This shows all prisoners that could have potentially communicated by tapping on the floor, or by passing notes on a string.

36. **Graph of arrivals over time (DAILY)**: The analyst enters the start date and the end date, and a graph of the number of arrivals over time for each day is displayed.

37. **Graph of arrivals over time (WEEKLY)**: The analyst enters the start date and the end date, and a graph of the number of arrivals over time for each week is displayed.

38. **Graph of arrivals over time (MONTHLY)**: The analyst enters the start date and the end date, and a graph of the number of arrivals over time for each month is displayed.

39. **Graph of departures over time (DAILY)**: The analyst enters the start date and the end date, and a graph of the number of departures over time for each day is displayed.

40. **Graph of departures over time (WEEKLY)**: The analyst enters the start date and the end date, and a graph of the number of departures over time for each week is displayed.

41. **Graph of departures over time (MONTHLY)**: The analyst enters the start date and the end date, and a graph of the number of departures over time for each month is displayed.

42. **Graph of average prisoners per cell (DAILY)**: The analyst enters the start date and the end date, and a graph of the average number of prisoners in each cell over time for each day is displayed.

43. **Graph of average prisoners per cell (WEEKLY)**: The analyst enters the start date and the end date, and a graph of the average number of prisoners in each cell over time for each week is displayed.

44. **Graph of average prisoners per cell (MONTHLY)**: The analyst enters the start date and the end date, and a graph of the average number of prisoners in each cell over time for each month is displayed.

45. **Graph of case numbers in a year**: The analyst enters a year, and a graph of the case numbers over time of entry are displayed.

46. **Graph of number of prisoners over time (DAILY)**: The analyst enters the start date and the end date, and a graph of the total number of prisoners in each cell for each day is displayed.

47. **Graph of number of prisoners over time (WEEKLY)**: The analyst enters the start date and the end date, and a graph of the total number of prisoners in each cell for each week is displayed.

48. **Graph of number of prisoners over time (MONTHLY)**: The analyst enters the start date and the end date, and a graph of the total number of prisoners in each cell for each month is displayed.

49. **Graph of number of prisoners – Floor 1, over time**: The analyst enters the start date and the end date, and a graph of the total number of prisoners in each cell on floor 1 for each day is displayed.

50. **Graph of number of prisoners – Floor 2, over time**: The analyst enters the start date and the end date, and a graph of the total number of prisoners in each cell on floor 2 for each day is displayed.

51. **Graph of number of prisoners – Floor 3, over time**: The analyst enters the start date and the end date, and a graph of the total number of prisoners in each cell on floor 3 for each day is displayed.

52. **Graph of prisoner entries over time (DAILY)**: The analyst enters the start date and the end date, and a graph of the total number of prisoners entering the prison for each day is displayed.

53. **Graph of prisoner entries over time (WEEKLY)**: The analyst enters the start date and the end date, and a graph of the total number of prisoners entering the prison for each week is displayed.

54. **Graph of prisoner entries over time (MONTHLY)**: The analyst enters the start date and the end date, and a graph of the total number of prisoners entering the prison for each month is displayed.

55. **Graph of total cell moves over time**: The analyst enters the start date and the end date, and a graph of the total number of cell moves is displayed.

56. **Graph of unoccupied cell percentage**: The analyst enters the start date and the end date, and a graph the percent of days each cell was unoccupied is displayed.

57. **Graph of numbered prisoners vs Date of Entry**: The analyst enters the start date and the end date, and a graph of the numbered prisoners is plotted against the dates of first entry into the prison.

58. **Graph of numbered prisoners vs Date of Arrival**: The analyst enters the start date and the end date, and a graph of the numbered prisoners is plotted against all dates of arrival into prison.

59. **Most common cells**: Each cell, along with the total number of prisoners that ever occupied it 1947-1972 are displayed, ordered by the most occupied cells.

60. **Most common cells with NULL dates**: Each cell, along with the total number of prisoners that ever occupied it with NO associated date are displayed, ordered by the most occupied cells.

61. **Most common days of week that prisoners entered prison**: Each day of the week (Monday, Tuesday, etc.) are displayed along with the total number of prisoners that entered prison on that day.

62. **Most common days of week that prisoners entered their cells**: Each day of the week (Monday, Tuesday, etc.) are displayed along with the total number of prisoners that entered prison on that day.

63. **Most common days of week that prisoners left prison**: Each day of the week (Monday, Tuesday, etc.) are displayed along with the total number of prisoners that left the prison (or died) on that day.

64. **Most common days of week that prisoners left their cells**: Each day of the week (Monday, Tuesday, etc.) are displayed along with the total number of prisoners that switched or left their cells on that day.

65. **Most common last names**: Each last name, along with the total number of prisoners with that last name, are displayed.

66. **Most common first names**: Each first name, along with the total number of prisoners with that first name, are displayed.

67. **Most common special marking 1**: Each special marking on the front side of prisoner cards, along with the total number of prisoners with that special marking, are displayed.

68. **Most common special marking 2**: Each special marking on the back side of prisoner cards, along with the total number of prisoners with that special marking, are displayed.

69. **Most commonly occupied cells between two dates**: The analyst enters the start date and the end date, and all cells are displayed along with the total number of prisoners that were in the cell between the dates.

70. **Numbered prisoners**: All numbered prisoners are displayed.

71. **Numbered prisoners and dates of entry**: All numbered prisoners are displayed, along with their dates of entry, to determine any trends in the system of numbering prisoners.

72. **4 or more prisoners in a cell – Korpus II (including blank dates)**: All cells and dates that there were four or more prisoners in a cell at any time (in Korpus II) are displayed, including nullable dates. *

73. **4 or more prisoners in a cell – Korpus II (no blank dates)**: All cells and dates that there were four or more prisoners in a cell at any time (in Korpus II) are displayed, excluding nullable dates. *

74. **4 or more prisoners in a cell – Korpus II (no overlap/blank cells)**: All cells and dates that there were four or more prisoners in a cell at any time (in Korpus II) are displayed, including nullable dates. This report does not count prisoners that entered or left on a particular date into the total for that date. *

75. **Unoccupied days in floor 1**: Shows all days when the entire floor 1 was unoccupied.

76. **Unoccupied days in floor 2**: Shows all days when the entire floor 2 was unoccupied.

77. **Unoccupied days in floor 3**: Shows all days when the entire floor 3 was unoccupied.

78. **Prisoners that were ONLY in Korpus II**: Shows all prisoners that had cell occupancy information ONLY for Korpus II. If they spent any time in Korpus I or Korpus III or elsewhere, they do not show up on this report.

79. **Prisoners who died in Korpus 2, 1947-1972**: Shows all prisoners who died in Korpus II, from 1947-1972, along with their ages at the time of death.

80. **Prisoners who died in prison**: Shows all prisoners who died in prison along with their ages at the time of death.

81. **View Special Markings 1**: Shows a list of all special markings on the front side of the card, along with the total number of prisoner cards with this marking. The analyst selects a special marking and all prisoner cards with that marking on the front side of their card are displayed.

82. **View Special Markings 2**: Shows a list of all special markings on the back side of the card, along with the total number of prisoner cards with this marking. The analyst selects a special marking and all prisoner cards with that marking on the back side of their card are displayed.