Intelligence Memorandum

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Reduced Production of No. 4 Heroin in the Golden Triangle

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CENTRAL INTELLIGENCE AGENCY
Directorate of Intelligence
March 1972

INTELLIGENCE MEMORANDUM

REDUCED PRODUCTION OF NO. 4 HEROIN
IN THE GOLDEN TRIANGLE

Conclusions

1. During 1970 and the first half of 1971, narcotics traffickers moved unusually large quantities of raw opium into processing centers in the Burma-Thailand-Laos border area – the Golden Triangle. Production of No. 4 heroin at existing refining centers expanded, and new refineries were established for heroin production. This increase in production served to meet a sharp increase in demand for heroin by US forces in South Vietnam. The expansion of No. 4 heroin production was in addition to, and did not affect, the ongoing production of prepared opium, morphine base, and No. 3 smoking heroin in the Triangle for consumption in the traditional markets in Southeast Asia.

2. Beginning in mid-1971, normal opium flows in the region were disrupted; stocks of raw opium, morphine base, and No. 4 heroin rose sharply; the refining of morphine base into No. 4 heroin was drastically curtailed; and, in some cases, heroin refineries shut down operations completely. By year-end, wholesale prices for all narcotics had fallen sharply. This recession in the market almost certainly was the result of the withdrawal of US forces from South Vietnam and the adoption in June 1971 of measures designed to inhibit the use of heroin by US forces remaining in South Vietnam. Narcotics suppression actions by the governments of Burma, Thailand, and Laos had only limited impact on the overall narcotics market and apparently were not a factor in the contraction of the GI market for No. 4 heroin in South Vietnam.

Note: This memorandum was prepared by the Office of Economic Research and has been coordinated within the Central Intelligence Agency and with the Bureau of Narcotics and Dangerous Drugs.

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3. Traffickers in the area are still adjusting to the loss of the US troop market and to the ongoing suppression efforts by Burma, Thailand, and Laos. At the same time, the basic capabilities of the Golden Triangle for supplying large quantities of heroin remain unimpaired. Raw opium supplies, equipment and processing skills for production of narcotics, and established distribution networks are all amply available. A resumption of No. 4 heroin production in the Triangle on the scale prevailing through mid-1971 would likely signify that Southeast Asian traffickers have sizably enlarged their presently limited access to the heroin market in the United States.

Discussion

Background

4. The Burma-Laos-Thailand border area, known also as the Golden Triangle, is one of the world's largest opium-producing regions (see the map). This region normally accounts for about 700 metric tons of opium annually, or about one-half of the world's total illicit output. A substantial proportion traditionally is consumed within this region as opium. Until 1969 the remaining portion of the opium was shipped to refineries in the Golden Triangle, processed into cooked opium, morphine base, and No. 3 smoking heroin, and exported for consumption in, for the most part, urban Southeast Asia. In such cities as Bangkok and Hong Kong, small quantities of morphine base were converted to No. 4 white heroin for the international traffic.

5. Beginning in late 1969, and continuing through 1970 and 1971, existing opium processing facilities in the Tachilek-Mae Salong segment of the tri-border area began production of No. 4 heroin in addition to their more traditional products. A number of new refineries exclusively producing No. 4 heroin were also established in the area during this period. This expansion of production of No. 4 heroin was intended to meet the growing demand for the commodity by US forces in South Vietnam.*

6. Demand for heroin by US forces in Vietnam was suddenly and severely depressed in June 1971 by the strengthening of US military enforcement action against the traffic on US bases, by implementation of a program of testing troops for drug use, and by the continuing withdrawal of troops. This decline in demand, described by some observers as a
"collapse" of the market for No. 4 heroin, created severe problems in the narcotics market during the last half of 1971. As indicated below, virtually all elements of that market — raw opium shipments, narcotics stocks, refinery operations, and prices paid for narcotics — were affected.

Opium Shipments

7. During 1971 the major producers of narcotics in the tri-border area imported an unusually large quantity of raw opium from northeast Burma for conversion into morphine base and No. 4 heroin. A total of 375 tons of raw opium was imported during 1971, with almost 300 tons arriving during the first half of the year. Quantities shipped in past years indicates that, although as much as 300 tons may move in a given year, 150 tons is a more normal figure. A minimum of 120 tons is known to have been shipped during 1970.

8. Although increased planting of poppy during the year, the 1971 opium harvest in Burma does not appear to have been unusually large, nor was there evidence of an extraordinary effort to collect opium from growers. On the other hand, there is some evidence that prices paid to growers during the 1971 opium harvest were much higher than in 1970. The unusually large 1971 shipments probably resulted from larger than usual sales of raw opium in response to the increase in purchase prices. A drawing down of growers' and distributors' opium stocks was probably a major source of supply. At least 60 tons of the total delivered in the first six months of 1971 are known to have originated from 1970 carry-over stocks.

Narcotic Stocks

9. The normal patterns of opium flows were disrupted in 1971 and caused severe imbalances in stocks held in processing areas throughout the tri-border region. The heavy demand for raw opium during the first half of 1971 apparently depleted carry-over stocks from 1970 in growing areas. Declining prices and a depressed narcotics market in the tri-border region beginning about mid-1971 resulted in a drastic reduction in opium shipments to the processing centers during the latter half of 1971. For the most part, traffickers became wary about shipping additional opium until a more favorable market situation developed. The traffic in traditional opium products was also temporarily affected by the heroin market depression. As a result, some 60 tons of raw opium stocks accumulated in the northern Shan State of Burma by the end of November 1971. Unsold stocks of morphine base and No. 4 heroin also accumulated in the processing areas during this period. In the Tachilek - Mae Sai area alone, stocks of No. 4 heroin totaled about 600 kilograms. Even larger supplies were believed to be languishing in Vientiane, Bangkok, and Saigon.
10. A temporary shortage of raw opium to meet the demands of domestic Asian markets was reported in November. This situation was exacerbated by the imposition of limitations by the Burmese government on opium shipments from the northern Shan State, which temporarily prevented the replenishment of processing stocks. However, the resumption of large opium shipments in December 1971 and January 1972 – more than 100 tons – flooded the market and apparently resulted in a considerable buildup of stocks in the processing areas for carryover into 1972.

Refinery Operations

11. Since June 1971, many opium conversion facilities have reportedly closed down because of disruptions created in the traffic and transportation systems in Thailand and Laos by enforcement measures imposed by the governments of those countries. Even the Burmese authorities have periodically ordered closure of heroin refineries in the Tachilek area, a major opium conversion center. In addition, some of the marginal heroin producers – who went into operation in 1969 to meet the needs of the greatly increased US forces in South Vietnam – closed because of shortages of opium conversion chemicals. These shortages were in part the result of the Laotian government’s seizure of a sizable amount of acetic anhydride in November 1971.

12. In addition to the Tachilek area, refinery operations have also been curtailed in Laos, and those operating in Thailand are believed to be restricted to the facilities owned by the Chinese Irregular Forces (CIF) in the Mae Sai, Mae Salong, and Tham Ngop areas.

13. These remaining facilities have drastically reduced their production of No. 4 heroin, and many have reverted to the production of refined opium and No. 3 smoking heroin for traditional Asian markets. The most striking evidence of reduced No. 4 heroin production activity lies in reports of the layoff of known heroin "chemists."

14. The reversion of many of the former No. 4 heroin producing refineries to the production of refined opium and No. 3 heroin in recent months has also been accompanied by a flurry of relocation activity within the tri-border area. As indicated in Figures 1, 2, and 3, the equipment in these refineries is suited to primitive surroundings and is simple to move.
Figure 1. Working Area in a Golden Triangle Refinery

Figure 2. Portable Electric Generator. This 7-kilowatt generator probably puts out 220-volt current and is diesel-driven. Power from this generator appears to have been used as a heat source and to run equipment such as the air compressor shown in Figure 3.
Figure 3. Portable Air Compressor. This water-cooled compressor probably takes 220 volts to run a 1-2-horsepower motor. Use of such a compressor can shorten opium processing time through use of vacuum filtration.

generally, the operation of refineries in the Tachilek area appears to depend on the relationship between the owners of these facilities (predominantly members of the Burmese-Self Defence Force – KKY) and the Burmese government. In return for KKY assistance in counter-insurgency actions, the Burmese government has on occasion acquiesced in KKY operation of refineries.

Prices

15. Wholesale prices for all narcotics in the area began to decline about mid-June 1971 (see the table). Traffickers attributed this depressed market to many causes, including such things as a collapse of the credit purchase system, raw opium shortages, chemical shortages, and suppression actions by the governments of Burma, Thailand, and Laos. With the exception of government suppression measures, most of these factors appear
Wholesale Prices of Narcotics in the Tachilek - Mae Sai Area

<table>
<thead>
<tr>
<th>Date</th>
<th>No. 4 Heroin</th>
<th>No. 3 Heroin</th>
<th>Morphine Base</th>
<th>Opium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962 a/</td>
<td>675</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1970</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>50.00</td>
</tr>
<tr>
<td>Sep</td>
<td>1,240</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1971</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>1,780</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>May</td>
<td>1,570</td>
<td>-</td>
<td>495</td>
<td>-</td>
</tr>
<tr>
<td>Jun</td>
<td>1,500</td>
<td>-</td>
<td>389</td>
<td>-</td>
</tr>
<tr>
<td>Jul</td>
<td>1,230</td>
<td>157</td>
<td>378</td>
<td>35.62</td>
</tr>
<tr>
<td>Aug b/</td>
<td>1,062 to 1,097</td>
<td>96 to 101</td>
<td>370</td>
<td>33.12 to 36.25</td>
</tr>
<tr>
<td>Sep</td>
<td>926</td>
<td>91</td>
<td>359</td>
<td>33.12</td>
</tr>
<tr>
<td>Oct b/</td>
<td>823 to 891</td>
<td>89</td>
<td>317</td>
<td>32.50</td>
</tr>
<tr>
<td>Nov</td>
<td>686</td>
<td>123</td>
<td>154</td>
<td>39.60</td>
</tr>
<tr>
<td>Dec b/</td>
<td>617</td>
<td>123</td>
<td>190</td>
<td>27.00 to 31.50</td>
</tr>
</tbody>
</table>

a. Average.
b. When a range is given, the lower figure represents the cash price, the higher figure the credit price.

To have been results rather than causes of the market decline. To judge from the reporting received, most traffickers appear to have had only an imperfect knowledge of the factors affecting the No. 4 heroin market in South Vietnam. In particular, traffickers either were unaware of or chose to ignore the ongoing withdrawal of US forces from Vietnam and the imposition of stricter US military controls on troop drug consumption. As a result there was a significant overproduction of No. 4 heroin.

16. The narcotics market recession affected all commodities and persisted through the end of 1971. The price of No. 4 heroin continued its eight-month decline during December, probably reflecting the unsold accumulation of large stocks of this commodity throughout the tri-border area and in major cities of Southeast Asia. The decline in morphine base prices appears to have halted in December with the price stabilizing at a level above November but still well below earlier levels. Except for a short-lived upturn in November 1971, the price of raw opium also continued to decline through the end of the year.
17. No. 4 heroin continued to be available in abundant supply throughout South Vietnam, and retail prices remained steady during the last quarter of 1971. However, the wholesale price in Saigon began declining after June 1971, when it had peaked at $10,000 per kilogram, to a November 1971 price of $5,000 per kilogram. Wholesale prices for No. 4 declined even further in January and February. Wholesale price declines were also observed in Bangkok and Vientiane over the same period.

Current Situation

18. At present the production of No. 4 heroin in the tri-border area has been curtailed drastically. The depression in the narcotics market has also led to lesser cutbacks in production of morphine base and No. 3 heroin for the traditional markets in Southeast Asia. So far as is known, neither the cutbacks in production of narcotics for traditional markets nor the disruptions in the traffic in the tri-border area have affected consumption in such places as Hong Kong and Singapore. In the meantime the resumption of large raw opium shipments from northeast Burma during December 1971 and January 1972 has further depressed the market for opium. Three factors may account for these increased shipments. First, the traffickers may be building up large stocks of opium in expectation of a future resumption in demand for No. 4 heroin. Second, the traffickers, fearing further interdiction efforts, particularly by the Burmese government, may be trying to move as much opium as possible from growing areas to processing points beyond Burmese control. Third, it may now be necessary to clear out remaining opium stocks in the producing areas to allow space for new stocks from the current harvest in January-March 1972.

Factors Affecting the Current Situation

The US Market in South Vietnam

19. The declining demand for No. 4 heroin by American forces in South Vietnam is almost certainly the major cause of the curtailment of heroin production in the Golden Triangle. The number of US military personnel in South Vietnam reached a peak level of more than 543,000 men in April 1969. Thereafter, withdrawals caused a steady decline in US troop strength to levels of 475,000 in December 1969, 415,000 in June 1970, 335,000 in December 1970, and 239,000 in June 1971. Incidence of No. 4 heroin use by GIs was reportedly low in 1969 and through the first five months of 1970. From June 1970 through June 1971, however, the use of heroin burgeoned. This increase in drug use was particularly marked after the Cambodian campaign of May 1970, when US forces were withdrawn from offensive operations.
and committed to perimeter defense and other passive defense tasks in South Vietnam. The expansion of No. 4 heroin processing capacity in the Golden Triangle area roughly coincided with this increased demand for heroin by US forces in South Vietnam.

20. In June 1971 the US Government took a number of actions aimed at attacking the narcotics problem in Southeast Asia in general and among US troops in South Vietnam in particular. Governments in the area were urged to strengthen their capabilities for suppression of the traffic, and, in many cases, the United States offered material assistance. In South Vietnam, US military enforcement actions against the traffic were strengthened, sizable troop education programs dealing with drug abuse were mounted, and a system of testing troops for narcotics use was implemented. Troop withdrawals from South Vietnam also continued during 1971, and by year-end, troop strength was down to a level of 157,000 men. All of these actions appear to have contributed to the declining use of No. 4 heroin by US forces in South Vietnam during the last half of 1971 and early 1972.

**Narcotics Suppression Actions in the Region**

21. Narcotic suppression actions by the governments of Burma, Thailand, and Laos have not been the major factor in the recent reduction of No. 4 heroin production in the area. Nevertheless, such actions have contributed to the general disarray that has marked all narcotics traffic in the region since mid-1971. These government actions and the initial adjustments of the market to such actions are reviewed below.

**Burmesse Actions**

22. In previous years the Burmese government had shown a great reluctance to cooperate in any bilateral or regional program for narcotics control. Initially the government refused to acknowledge any Burmese involvement in the opium traffic, placing the blame on alien groups such as the CIF and various insurgency forces operating in the northern Shan State. Nevertheless, since the beginning of 1971 the Burmese government has initiated actions designed to reduce or eliminate the production and traffic in narcotics in areas under its control. In April 1971 the authorities ordered all refineries in the Tachileik area to suspend operations. However, many of these facilities simply moved to new locations and continued operating. Later, the operators of these facilities were observed resuming production again in the Tachileik area. In July, and again in November, the government ordered the closing of these refineries, particularly those producing No. 4 heroin.
23. Burmese government relationships with these KKY leaders are delicate ones. The KKY forces act as a buffer force in the northern Shan State in defending major population centers from the various insurgent forces operating in the area. The Burmese government provides very little material assistance to the KKY who depend on opium trade to support their troops. It was therefore surprising that, in addition to the closing of refineries, the government directed Burmese array forces to intercept opium caravans and to limit the movement of opium by traders and KKY leaders to two shipments per year between Keng Tung in the northern Shan State and Tachileik. The delicate nature of the situation in this part of Burma is reflected by the fact that the Burmese government subsequently had to relent on this regulation by late January. Burmese authorities were again putting pressure on refinery owners at Tachileik.

Laotian Actions

24. The first Royal Laotian Government anti-narcotics law went into effect on 15 November 1971. Before this enactment the government had undertaken various other suppressive actions against the traffic. In June it ordered the curtailment of all refinery operations in the country. At least two refineries were subsequently destroyed by government forces.

25. The government of Thailand has cooperated with US narcotics and customs agents in strengthening its enforcement efforts in the tri-border area. The increased seizures of opium and heroin by Thai authorities during 1971 are testimony to this effort. As a result, traffickers shipping No. 4 heroin from Mae Sai and Tachileik to Bangkok have found it necessary to break their shipments into smaller units to minimize losses in the event of a seizure.
Adjustments in the Market

26. The narcotics market in the tri-border area is still adjusting to the events of the past year, and the full scope of the changes is not yet clear. Refineries continue to be relocated to avoid governmental attempts to shut them down, and shipments of finished products continue to be broken down into smaller lots to avoid seizure. In addition, traffickers who normally market their products through the traditional smuggling routes from the Shan State of Burma to Laos and Thailand are actively seeking alternative markets and routes. Some traders are also attempting to expand the local Burmese market for heroin and other narcotics in major population centers such as Mandalay and Rangoon. At the same time, they are also attempting to develop Rangoon as a new transshipment point for the smuggling of narcotics to their traditional markets in Asia and overseas. These markets could also be serviced by opium conversion facilities in the northern Shan State. Although there are now no known heroin producing refineries in this area, the four facilities reportedly in operation in the northern Shan State have a capability for producing morphine base. These refineries are owned by various KKY leaders, who are also experienced in the production of heroin. Thus these refineries remain potential sources of No. 4 heroin.

Outlook

27. The continued withdrawal of US forces from South Vietnam and the maintenance of strong constraints against heroin use by the remaining troops should continue to limit the market for No. 4 heroin produced in the Golden Triangle. Suppression efforts by local governments in the area are having few direct effects on this market and have so far had only limited success in disrupting the overall traffic in opium and derivatives. The full dimensions of the current adjustment of the narcotics market to these suppression efforts is not yet clear. What seems clear is that the basic capabilities of the Golden Triangle for supplying large quantities of heroin and other opium derivatives remain unimpaired:

- Raw opium is produced in amounts well in excess of local levels of consumption.
- The equipment and processing skills required for production of narcotics are readily available.
- Sizable stocks of narcotics apparently have been built up.
- A functioning distributing network to the major cities and ports of Southeast Asia exists.
29. Small amounts of Southeast Asian No. 4 heroin continue to enter the United States. As of early 1972, however, traffickers in Southeast Asia evidently still had not been able to establish the connections required to move large amounts of heroin into the United States.* As efforts to halt the flow of heroin to the United States from other parts of the world go forward, the Southeast Asian traffickers will be increasingly attracted to the lucrative US market. A resumption of No. 4 heroin production in the Golden Triangle on the scale prevailing up through mid-1971 is likely to signify that these traffickers have enlarged their access to the US market.