July 03, 1960
Report by Nie Rongzhen to Mao Zedong Regarding Science and Technology (Abridged)

Citation:

Summary:
Nie Rongzhen reports to Mao on scientific and technical issues and Soviet assistance and cooperation in the area of nuclear development. The Chinese were becoming frustrated by what they called the Soviet “stranglehold” on key technical data, and led to an unwanted feeling of dependence on their Soviet comrades.

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Chinese

Contents:
- English Translation
- Chinese Transcription
Central Committee and Chairman [Mao Zedong]:

Under the new circumstances in Chinese-Soviet relations, there needs to be new policies and practices with respect to several scientific and technical issues. Over the last year and more, Soviet assistance and cooperation in our country’s science and technology [endeavors] has tightened across-the-board, especially in defense science and technology, where the door has already been shut. It has also already done all it can to control new technology in the [Chinese] economy. Though there are a lot of bilateral signed agreements, the Soviet Union, has adopted the tactic of 1) delaying, 2) putting off, and 3) ignoring, that is, withholding. It goes without saying that there is no use discussing unfinished agreements or [in cases] where we have made new requests. Quite clearly, before we resolve Chinese-Soviet political ideological differences, we should not suppose that we can achieve assistance in this area.

1) The Soviet side’s stranglehold on us on the crucial issue of key technology is really infuriating. But indignation is useless. We are just going to have to show them. Maybe this kind of pressure will instead become the impetus for developing our science and technology so we strive even more resolutely for independence and autonomy and self-reliance in science and technology, rather than counting on foreign assistance. [Taiwanese Defense Minister] He Yingqin held back 300,000 yuan in military funds from us, not even giving us one fen, trying to starve us to death. As a consequence, we organized a great production movement, and both our troops and people were well-fed and well-clothed. Though these two things cannot be entirely compared, what is the same is that we must bring credit on ourselves and rely on ourselves. During the first five-year plan, important [infrastructure] construction was all basically Soviet-designed, and most equipment and technology was imported in sets. This period was very helpful for us, allowing us to quickly master technology. But, on the other hand, it also entailed a certain psychology of scientific and technological dependence, of blindly holding out our hands. Since proposing a general line on constructing scientific socialism in 1958, the Central Committee and Chairman Mao have repeatedly directed that in science and technology we must liberate our minds and eradicate superstitions. For the past two years and more we have started to do this, to great effect. For the most part, we are now able to resolve ourselves common technological issues affecting the national economy. There are still some important sectors [where there are issues that] await resolution, but, if we work hard, these can also be resolved. Though we are still behind in advanced technology, we have come from zero to having some level of achievement, and have put down a foundation. In science and technology we have already found our own approaches. Consequently, it is now possible to propose independence, autonomy and self-reliance.

A big country like ours, which has its own general line for building socialism, and a whole set of policies for walking on our own two legs, must have science and technology that is appropriate to our political and economic needs and natural resources. In resolving scientific and technological issues, we must depend on our own domestic [resources], and, only in this way, can we then keep total initiative and not wind up under the control of others in defense and economic development. We need ambition and tenacity, and on any difficult scientific and technological questions, we need go all out to mobilize the masses to experiment and research, do things ourselves and never to rely on others. In this respect, we may have to spend some more money, and in some cases we may have to spend some more time, but this will bring a reward. We can cultivate our own strength and train up real abilities. Man-made satellites were launched into the sky forty years after the Soviet revolution. If we start from now, and are able to quietly put our shoulder to the wheel for ten years and then get into space, we’ll make it in half the time they did and more quickly than they did.

2) We need to adopt a new way of doing things in our future scientific and technological dealings with the Soviet Union. When the time comes to do so, we should inquire about and still request all assistance that is set out in agreement. But if the other side won’t give [us the assistance], we certainly won’t press [the issue]; we’ll just keep account. In the last few months, staff members of our office in the Soviet Union have repeatedly pressed their inquiries, encountering many rebuffs, leaving the impression that we are in a desperate situation without
Soviet assistance and, in this way, making the other side even more cocky and more controlling. We have already told these comrades that they should only ask lightly and just forget it if assistance is not forthcoming. Don't raise any new requests now not covered by agreements. It is also best not to raise scheduled annual Chinese-Soviet technical cooperation. As for responsibilities that our side has signed and taken on, such as the provision of technical data to the Soviet side, the reception of study teams to China, etc., we should carry out commitments in our agreements to the letter.

Of the Soviet experts working in China, some have good attitudes, others are not quite up to the mark, and a few individuals are quite bad. We must implement the policy of upholding principles, upholding unity and working harder as outlined by the Central Committee. Since we have invited them, we must fully exploit their strong points and, to the extent possible, attain something [useful], and help them politically and unite with them. As for experts who have finished their term [of assignment], it will be very hard to hire [back] the good ones, and we don't need to keep average ones. As for newly hired experts, the Soviets have been unwilling to send [experts] in important technical fields, or new arrivals are only [in China] in the role of "observers." In addition, since there are also numerous limitations, it is very hard [for them] to be of any help to us, rather they cause a lot of difficulties for us. Therefore, to the extent possible, make few if any demands [on them].

Recently, we also have had to reconsider our policy regarding sending of students to the Soviet Union. First, the other side does not admit them or places lots of limitations on them, so they don't study any new technology. Second, given their insufficient political maturity, young people are exposed to the corrupting influence of revisionist thought. As a consequence, now we should send very few. Of course, we should not have a complete cutoff. We will send them when there is a need and it's possible to study something. After [further] study, we will issue another report about what we ought to do.

3) Independence and self-reliance does not at all imply that we will isolate ourselves. On the contrary, we have to study and master all internationally advanced science and technology based on our country's particular conditions. To be self-reliant, we need to strengthen scientific and technical intelligence work. We should study as much as we can from the Soviet Union. But the Soviet road in the period ahead will be narrower and narrower. Therefore, we must vigorously pursue scientific and technical intelligence work toward the capitalist countries. American imperialism is also now deeply engaged in scientific and technical intelligence. Although the number of countries with which we have established diplomatic relations is fewer than that of the Soviet Union, it is entirely possible that if we are serious, through various means, we can abundantly collect the results and directions of international advanced science and technology.

I am awaiting your comment on the appropriateness of the ideas expressed above.

Nie Rongzhen

3 July 1960
臻 于 科 技 展 毛 的 告（本）

1960年7月3日

中央并主席：

在中系的新形势下，有科技上的若干，有新的方和做法。一年多以，我的科技援助与合作，卡，特是防科技上已封。民中的新技，也已量控制。然有很多的，方却采取一拖、二推、三不理的手法，就是不，有定好，或我新提要求的，就更不用了。很明，在中政治思想上的分歧有取得一致以前，休想在方面取得援助。

（一）方在重要技，卡住我，令在人气。但是气是用的，我一定要一口气，有可能一迫，反而成展我科技的力，更加的在科技上力。立自主，依靠自己，而不是指望外援。何扣住我三十万元，一毛不，企死我，果我搞起了大生，民丰衣足食。个事情然不能完全比，但是我气，要自力更生是一，第一五年划，重要的建基本上都是，和技大都是成套口，一段我了有，使我能迅速掌握技。但是另一方面，也了某些科技上的依心理，一昧伸手。一九五八提出建科社主路以，中央和毛主席一再指示，在科技上要解放思想，破除迷信。年多始做了，很有成效。我在大体上能自己解民中的一般技，有一重要的是待解，只要我努力，也是可以解的，尖端技方面的然差，但也未到有，打下了一些底子。在科技上已找到了我自己的一些路子。因此，在提出立自主，自力更生，是有可能的。

像我一大，有自建社主的路，有一整套腿走路的方，就必有适合我政治、要求和自然源件的科技。科技的解，一定要立足于，只有，我在防和建上才能完全主，而不至于受制于人。我要有志气，有毅力，任何巨的科技，都要放手群研究，自己搞，不依。在方，有可能要多花一点，有些要多花一点，但是得到酬的，可以付自己的力量，出真本事。革命四十年人造星上了天，我正在起，如果埋苦干十年，能天上天的，也比他快了一半，也比他快。

（二）今后方方的科技往，采取新的作法。凡是上了的援助，我到候就要，仍然要。但是如果方不，我不能再，上一就成了。去几月，我的事人一再催，多了子，反而得我如无援就有不可日之的子，再加上方尾巴得更高，控制越加密，我已告些同志，一下不就算了。之外的新要求，在也不要提了。例行的年度中技合作，也以少提妙。至于我方去已字承的，如提供方技料，接受考察等，在一般科技范，我按如完成。

在工作的家，有些人度是好的，有些差一些，的很坏，我要中央所指示的持原，持，多做工作的方，既然了，就要充分利用他，可能取得一些西，并在政治上助、他。显然期的家，好的很延聘，一般的眼也不必留。新聘家，重要技方方面方不肯派，或者新的也只作”察”，加以有种种限制，很我有什么助，反而多不便，因此也量少提，不提。

最近派派遣留生方，也要新考。一是方不接或限制重重，不到什么新技；二年青人政治不，在修正主思潮的薰染下，受到影不好。因此，最近少派，然也不中，有必要而又能到些西的才派，怎才合适，研究后另行告。

（三）立自主，立足，不是意味着自己封自己。相反的，一切上的科技，我都要根据我具体的，掌握，要立自主，就愈要加强科技情工作。能的西是要的。但是，路在今后一时期是越越了。因此，要大力辟本主家的科技情工作。帝主在也在大搞科技情。我建交的然比少，但是只要我重，通各种形式，充分搜集上的先科技成果和方向，是大有可的。

以上意，是否有，予指示。

臻

1960年7月3日