■ National Security

Launching Project Paperclip 2.0 to Recruit Top Scientists

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SUMMARY

The destinations of just a few superstar talents can make the difference in determining which countries develop cutting-edge technology. Recruiting the top scientists or engineers in a field can let a country secure leadership in that field; denying a rival just a few top minds can reduce that rival's competitiveness.

A new Office of Talent Assessment, housed under the Department of Defense or Department of State, could systematically identify top researchers poised to make important defense-relevant contributions in critical fields like AI, quantum computing, and semiconductors where China seeks dominance. This office would identify talent for targeted recruitment, deploy talent scouts, evaluate candidates, recruit vetted targets, and bring them to the US, with a limited quota of 80 green cards per year for principal targets.

PROBLEM

China is making aggressive moves through programs such as Qiming to recruit researchers in critical technologies. After long targeting its recruitment initiatives on the return of Chinese talent from abroad, China is beginning to target international talent without origins in China. In 2021, President Xi Jinping announced to the Central Committee the goal that "by 2035, the country will have competitive advantages in talent competition in many areas."

Meanwhile, the United States relies primarily on universities and companies for recruitment in a decentralized approach that, for all its successes, misses key talent necessary for defense-related industries and technologies. For example, the United States could very well have denied China leadership in 5G technology if it had recruited MIT PhD Erdal Arikan. Instead, he returned to Turkey, where his invention of polar codes was exploited by Huawei and secured 5G dominance for China.

We've successfully run targeted talent recruitment before. Project Paperclip brought to America transformative scientists who won the space race, while the Soviet Scientists Immigration Act denied crucial expertise to rogue states after the USSR's collapse and exploited that expertise for the United States. To maintain America's lead in defense and innovation, we must revive and modernize a proven strategy: proactively recruiting the world's best scientists and engineers in critical and emerging technology fields.

SOLUTION

The United States needs a comprehensive system to identify and recruit the very top foreign technical scientific and technical talent working on technologies critical to national defense. Launching a Project Paperclip 2.0 could be accomplished by a new and independent Office of Talent Assessment, housed in the Department of Defense (DOD) or the Department of State (DOS) to oversee and manage a US talent program.

While establishing a new independent office to coordinate talent identification and recruitment efforts would be the gold standard for a proactive recruitment effort, the US government need not wait for legislative authorization to begin taking meaningful steps. Existing authorities and resources allow agencies to start building the capacity for proactive identification and recruitment today, even before Congress authorizes and funds a permanent institutional home.

The strategy has two major phases: building a talent identification capacity, then beginning a talent recruitment and acquisition process.

Phase 1: Talent Identification

Success begins with systematically mapping the global talent landscape and identifying key researchers who could advance US technological leadership. A prerequisite to any effective proactive recruitment program is effective talent identification to produce targets for recruitment efforts.

The executive branch should immediately establish a strategic talent assessment network using existing authorities to start identifying potential recruiting targets:

- Instruct federally funded research and development centers (FFRDCs) to build or expand on existing predictive methodologies for identifying talent poised to make meaningful technical contributions after a move to the United States.
- Create a formal process at DOD to regularly solicit principal investigators at DOD Laboratories, the Office of Army Research, the Office of Navy Research to report on the leading foreign researchers working in defense-related fields on critical and emerging technologies. This process should also include principal investigators at National Laboratories and partner universities working on defense-relevant work.
- Maintain a regularly updated database of identified talent. A classified report identifying the top scientists and technologists, along with details from screening and vetting on the identified talent, should be made available to Congress.

Congress can assist the executive branch in expanding its talent assessment capacity with funding and new authorities. At a minimum, Congress should mandate and fund agencies to contract with FFRDCs to continue work on identifying the top researchers who should be recruited to the United States. This work could augment the database produced by a talent assessment network described above by developing standardized evaluation criteria to evaluate both technical expertise and security considerations. These criteria should include:

- metrics for measuring research impact in defense-related fields
- observable characteristics that predict future success
- observable characteristics that predict when researchers pose security risks

Congressional authorization for an Office of Talent Assessment to oversee these efforts (along with any eventual recruitment campaign) would coordinate the new talent identification efforts, grant authority to coordinate with the intelligence community, fund and manage the development of assessment methodologies, launch pilot programs for experimentation in talent evaluation, create secure systems for maintaining and updating talent databases, and establish any additional supporting infrastructure. Ultimately, an office would provide the accountability to ensure that identification is conducted and completed thoughtfully.

Phase 2: Talent Recruitment

With targets identified, the US would then deploy a coordinated recruitment strategy. Like talent identification, recruitment efforts can begin through existing authorities while building toward more comprehensive capabilities that require congressional support.

After identifying targets, the executive branch should begin to play a part in the recruitment of those targets with the following existing authorities:

- DOD should fully use its allotment of H-1B2s, a special set-aside of 100 visas for researchers working on a DOD cooperative research and development project or

a coproduction project under a reciprocal government-to-government agreement administered by DOD. In recent years, DOD has used only approximately 30 percent of its H-1B2 allotment. It could immediately work to use remaining visa slots by placing eligible targets in eligible projects using remaining visa slots if they want to work on those projects.

- DOD should act as an interested government agency to submit findings to the US Citizenship and Immigration Service about a target's work, or otherwise offer an inter-governmental letter explaining a target's eligibility for an O-1 visa and/or a National Interest Waiver.
- DOD should request expedited processing for identified targets.
- DOD and/or DOS can train officials abroad (for example, DOS EducationUSA advisories and Global Innovation through Science and Technology Initiative officials) to better inform targets of available immigration options under existing laws.

Ultimately, however, existing authorities are insufficient for a successful recruitment campaign to secure US leadership. Proactive recruitment by the government will require congressional support in the form of new authorities and some small but designated funding.

Congressional authorization for an Office of Talent Assessment should include:

- Authorization and funding for an independent office. A fully empowered and independent Office of Talent Assessment would require new authorities and resources to execute its mission effectively. Placement would likely make sense under the DOD Under Secretary of Defense for Research and Engineering, or under the DOS Under Secretary of State for Economic Growth, Energy, and the Environment.
- Resources and authority for experimentation in real-world recruitment. To determine what actually works to persuade top scientists to move to the United States would require experimentation and learning-by-doing. During Project Paperclip, US recruitment suffered until it learned to emulate some of the recruitment techniques used by the other allies' recruitment efforts (for example, by approaching German scientists with German recruiters). What techniques, pitches, and incentives will work best today will not be known until recruiters are empowered to try different methods.
- Reserved visas. At the outset, the Office could be launched with a small quota of immigrant visas for targets (e.g., 80 green cards per year for principal targets). Green cards should also be made available for their families to increase the likelihood of a successful recruitment.
- Coordination with the Departments of Homeland Security, State, and Labor to expedite the visa processing for identified targets.
- Authorization for Public-Private Partnership Programs. Targets will likely want to know they will have access to good jobs, housing, and schools for their children upon moving. The Office should coordinate with the private sector to find jobs and possibly even housing before a move. Further, partnerships could help provide cultural orientation to help new arrivals generally navigate their new country. In many cases, private sector or civil society partners may be better poised to successfully approach and/or recruit a target than the Office itself.

- Authorization for designated counterintelligence resources and/or cooperation with the Intelligence Community. Proactive recruitment would allow US authorities to choose targets who pose a low risk of espionage. Nevertheless, some counterespionage capacity is prudent, though special care must be taken not to deter targets with a culture of suspicion. ■

FURTHER RESOURCES

- Jeremy Neufeld, "The Immigration Advantage in the US-China Strategic Contest for STEM Talent," *Asia Policy*, 2024
- Jeremy Neufeld and Hamidah Oderinwale, "The Talent Scout State," Institute for Progress, 2024
- National Academies of Sciences, Engineering, and Medicine, "International Talent Programs in the Changing Global Environment," 2024
- Wilson Miles, Jeremy Neufeld, and Jordan Chase, "Strengthening the National Security Innovation Base Requires International STEM Talent," National Defense Industrial Association Emerging Technologies Institute, 2024

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