U.S. MISSILE DEFENSE PROGRAMS

Recommended Citation

Michael O'Hanlon, "U.S. MISSILE DEFENSE PROGRAMS", nuke policy Nuclear Policy, July 08, 2004, https://nautilus.org/nuke-policy/u-s-missile-defense-programs/

"East Asian Regional Security Futures: Theater Missile Defense Implications" The United Nations University, Tokyo, Japan, June 24-5, 2000

See Relat L. Garvin, The strong gain, "Builties of the Manine Scientific, vol. 56, no. 2 MarchNerf 2000, pp. 36–41, Related L. Garvin, 'A Defres hat will not Defend, "Waihington Quarterly, Garvin estimates the weight of such a boost phase interceptor, which need not carry a heavy puylos for 0 min. Theodors, Noted, "A match 55, Song Performance and March Stream and Performance and

the most important defense issue in the 2000 presidential campaign, and one of the 1972 U.S.-Russia Anti- Ballistic Missile Treaty, which presently bans any su successing including those theater-missile defense (TMD) systems designed to

informed partly by the China-Japan- U.S. discussion in T THE STATE OF THEATER MISSILE DEFENSES

ENT SCHEDULES REALISTIC?

TMD mode against intermediate-range missiles, they would not work a MORE AMBITIOUS NATIONAL MISSILE DEFENSE CONCEPTS

ibed as the "C3" option

like North Korea that may not be able to develop and deploy or AN EXPANDED FORM OF THE CURRENT NMD SYSTEM

sites in this way is often desc If concerned about the env h

southward facing radars. NAVY AEGIS SYSTEMS The Name Theater Wide de

their Alter

operating capability. (20) THE DECOY OUESTION

warheads. That said, it is n

BOOST-PHASE NMD To make it much tough phase within the atmost

Given th be usable against 1 The limit boost-ph

The second secon

The second secon

node (acc) defect in a large of a

E INVENDENT SCHEDUES EXISTENCE E INVENDENT SCHEDUES E INVENDENT E INV

THE TROY OUTSTOY

BOOST-PRIASE NOD
To make I under house plot or as ensemp to defeast NMD with furly simple construments, the United Status could develop interceptor missiles for boost phase defense. They would be relatively small but externmely fast burn recleats that would be fired very quickly after an ensemp hausch was detected, catching up with the ensemp ICBM while it was still in its burn or boost phase defense. They would be relatively small but externmely fast burn recleats that would be fired very quickly after an ensemp hausch was detected, catching up with the ensemp ICBM while it was still in its burn or boost phase defense. They would be relatively mail to its concertainty, making is trajected plant with high acceleration could versame that that any or the plant is an interceptor missile with high acceleration could versame that that any or the plant is an interceptor missile with high acceleration could versame that that any or the plant is and the relatively was all to its could be relatively was all trajected is a work of plant to any or the relative and that the any or the relative and that has any or the relative and that has a many or the relative and that has a many or the relative and that has a many or the relative and that has a relative and has a re One dramatics to the bookplasse energies concepts to anny on anny on annotation of a state of the state of a state of the state of a state of the st es ice of Iran, defending against a missile launch by that country would require two boods phase interceptor bases. One would be north of Iran—in the Caspins Sea, Turkmenista, or possibly Kazakhata or Udekista. Soch basing could be tough to arrange, meaning that boots phase defenses against Iran may a work, or may require inform interceptor bases. The other has would be bound has interceptor that would be found to strategin and that boots phase interceptor against a missile launch by that country would require two boots phase interceptor bases. One would be north of Iran—in the Caspins Sea, Turkmenista, or possibly Kazakhata or Udekista. Soch basing could be tough to arrange, meaning that boots phase defenses against Iran may a work, or may require inform interceptors that would be bound has been restere. Turkmenista, or possibly Kazakhata or Udekista. Soch basing could be tough to arrange, meaning that boots phase interceptor adult be defended builted States (and the Udekista). Soch Analis, or the Udekista Sach adult be defended bagaint by a base in eastern Turkmy, which could also defende the Udekist Sates (and the Udekista) and that the other defended againt by a base in eastern Turkmy, which could also defende the Udekist Sates (and the Udekista) and that the other defended againt by a base in eastern Turkmy, which could also defende the Udekist Sates (and the Udekista) and that the other defended bagaint by a base in eastern Turkmy, which could also defende the Udekist Sates (and the Udekista) and the other defended bagaint by a base in eastern Turkmy, which could also defende the Udekist Sates (and the Udekista) and the Udekista Sates (and the Udekista) and the Udekista Sates (and the Udekista) and the Udekista Sates (and the Udekista) and Udekista against and the Udekista Sates (and the Udekista) and Ud

come optimes around more around again around

repertorms (Table and SLMMs error man, watch are man, ungardy systems. (In PA AL, PC REMIPS, UAA and use and a sove manual pertops, watch and a sove manual pertops, watch and a sove manual pertops. (In PA AL, PC REMIPS, UAA and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) error manual pertops. (In PA AL, PC REMIPS, UAA) and UAA) error manual pertops. (In PA AL, PC REMIPS, UAA, PC REMIPS, UAA, PC REMIPS, U

New York 2014 (The Area Control 100) (The Are

POLIFICULAND POLICY ASSESSMENT The above is a brieflig on the state of U.S. missile defense programs, in which I have attempted to describe the technologies and the policial debates without interjecting many personal opinions or policy preferences. But I would like to add several subjective views at this point, most of which I expressed in Tokyo during the trillateral meetings at U.N. University. The access in missile defense programs, in which I have attempted to describe the technologies and the policial debates without interjecting many personal opinions or policy preferences. But I would like to add several subjective views at this point, most of which I expressed in Tokyo during the trillateral meetings at U.N. University. The case for missile defense programs, in which I have attempted to describe the technologies and the policial debates without interjecting many personal opinions or policy preferences. But I would like to add several subjective views at this point, most of which I expressed in Tokyo during the trillateral meetings at U.N. University. The case for the addepties of the subjective views at this point, most of which I expressed in Tokyo during the trillateral meetings at U.N. University. The case for the addepties of the subjective views at this most enter (Marka by 2007 of the backby 2007 of the table) of at Alam. If does crately tochoological provide to U.S. estication at Alam 2004 content. U.S. defense planner, including mysel, are special planner to the estication of the maintee attributeral to descript up to a couple dama energy such data, is and entert to the estive the transfer to the estive the transfer the term the transfer to the estive the term the term

in the state of a war provided by Nerth Kores is which the United States and South Kores had decided to overhrow the DPSK regine, Propagating applice the Internation Japan with minick carring the denies of a biological applice of a state provided by Nerth Kores is which the United States. This is constrained with a state of the state of the

chardy impossible for Verk Korns. At that yoint, Its later might for they had the to here, and se weak a threat as there any weaming hope of any significant on a single action. J Counter, Yearth Korns had in EURA, it could also directly threat the line of yoint in the line of yoint in a single action. J Counter, Yearth Korns had in EURA, it could also directly threat the line of yoint in the line of yoint

Constraints of the second second

SYSTEM successor might equad current U.S. plans for NMD further. For example, the United States could deploy missile defense sites in both North Dakota and Alacka, winding up with a total of 250 interceptor missile, as well as nine advanced missile-tracking radars on U.S. and alled territory. Setting up two interceptor missile or craphility and envisioned for deployment by 2011 by the Petatagen(40) It multiplic cost \$10 billion more than the C option, rougbly speaking—for a total of advost \$50 billion in acquisition costs, all total(41) or the United Statement and the Cost of the Statement and the C option, rougbly speaking—for a total of advost \$30 billion in acquisition costs, all total(41)

0 STRUESS instance of the state of the stat

Wign Diak Wood Bable Books, and or vanies stature, is and stature stat

umbers of interceptors and radars and other components of the systems proposed above, or consis rs and the Navy Theater Wide interceptor; and the Bush Administration's "GPALS" concept of the where, they could worsen nuclear security rather than help it, and lead to a proliferation of count

Jess than ideals of delivering such agents (27)
An end of the section of delivering such agents (27)
An end of the section o

not entirely trivial to develop decoys that work properly. It is not particularly hard for a technologically sophisticated country, but nor is it easy—and it may take a country such as North Korea quite a while to perfect the needed ionatic space to text very much may not succeed in any imined period of line. (26) Although countermeasures would be unnecessary for an attack size may mobilisty filed with chemical or biological agents, such attack would be an expenses are test very much may benafted size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of a state of a state of the size of a state of a state of the size of a state of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a state of the size of a state of a sta

thy improved its only existing missile defense system, the Patriot. Patriot's radar now has greater range and can track more objects simultaneously. Starting in 2001, the Pentagon is to deploy a further improved version of the Patriot. That is later than initially expected--another reminder of the difficulty of developing even were Patriot is ladey to work with high effectiveness. It will have the ability to identify wurkeds to that it will not be food by an enemy's use of angula develop or the lensing of a missile body during simuppheric resulty (as any it vitages of Patriot were in Deart Storm). It will also posses a see "Alti-ob-ill" interception or the lensing of a missile body during dimensional body during dimensional or the lensing of a missile body during dimensional body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing of a missile body during dimensional or the lensing during du

ons of missile defense for the East Asian theater. It concludes with several ob-

Specifically, it is likely to require some realistic flight testing to make such decoys work, so such the such decoys work with nuclear warheads. Chemical weapons are intrinsically less lethal than a ptoms of disease, at which point it would already be too late to treat most of them effectively

les launched from the interior of Asia. It could in theory be reconfigured to work against a missile after it had left se with these arguments, if his proposals shortly after his June, 2000 Moscow summit with President Clinton are a

es that a much smaller, cheaper system such as the Clinto

ing U.S. ICBMs and SLBMs ge

choology that would likely negate the benefits of mid- course defense systems (like that planned by the Clinton administration) even against course

ucle Ba

rable focus on the impli

d be less danger

View this online at: https://nautilus.org/nuke-policy/u-s-missile-defense-programs/

Nautilus Institute 608 San Miguel Ave., Berkeley, CA 94707-1535 | Phone: (510) 423-0372 | Email: nautilus@nautilus.org