

Week 13 — Command and Control

1. What is command and control (c2)?
 - Policies and tech that seeks to:
 1. make clear who has the authority to order the use of nuclear weapons
 2. enable that authority to use the weapons when they deem it appropriate to do so
 3. make it so that the weapons cannot be used or detonated if that authority has not ordered it to be so
 - Often includes communication (c3)
2. Always/Never
 - The US nuclear forces will always be usable when they are legally ordered to be used
 - The US nuclear forces will never be usable when that legal authorization is not there

C2 history in the USA

1. Custody dispute
 - Truman didn't want the military to have all nuclear say with bombs
 - Compromise is to have the nuclear cores in AEC control and only president can issue the AEC to give it to the military
 - Eisenhower passes policies that allow military to have their own nuclear weapons (DOD)
 - Ends after Eisenhower
 - Mainly tech advancements, H-bomb cores can't be easily removed
2. Operation Chrome Dome
 - US bombers fly around US and ally borders with live nuclear bombs this way some portion of nukes are airborne
 - Failure rate of bombers crashing were high so lots of nuclear accidents
 - 32 total crashes
3. US C2 history overview
 - Truman (WWII): mostly military operation, light civilian oversight/guidance
 - Truman (postwar): and swing towards civilian control, not just legal but physical control (separable bomb cores)
 - Eisenhower: movement towards military custody (sealed bomb cores) with nominal (but u enforced) civilian control, "predelegation," lots of overseas basing
 - Kennedy: enforcement of civilian control through technical changes (e.g. PALs) and organizational changes (e.g. SIOP)
 - Later administrations: more or less the same mold, but with more technology? (many uncertainties!)

American C3 today

1. How to launch nuke in USA
 - POTUS → Chairman joint chief of staff/STRATCOM? → C3 → Launch Officers → Nukes
 - If anyone says no, then it can maybe be stalled or stopped
 - *This is approaching War Games territory, but I mean if you believe that the launch officers will not say no, then should we just cut them out and replace them with a computer? As in give the previous level (C3) a direct line to the nukes, not as in "implement AI like in the movie."*
 - *Has it ever been debated about not making nukes weak so that if they are being launched and a country is trying to shoot it down, it will be rugged enough to withstand this? Or is the counter of this to always err on the side of caution?*
2. C2 in the 21st century
 - Civilian control, military ownership
 - On safety/security, "Never" heavily emphasized
 - On authority to use, "Always" emphasized

3. Who can authorize nuclear weapon use?

- *Has there been any effort for the nations to meet and come up with worldwide standard for who decides and how nuclear weapons are used?*
- *Out of all the military people (i.e. launch officers) who you've talked to who said they would not say no to a nuclear launch, was this in reference to a retaliative or preemptive strike?*