



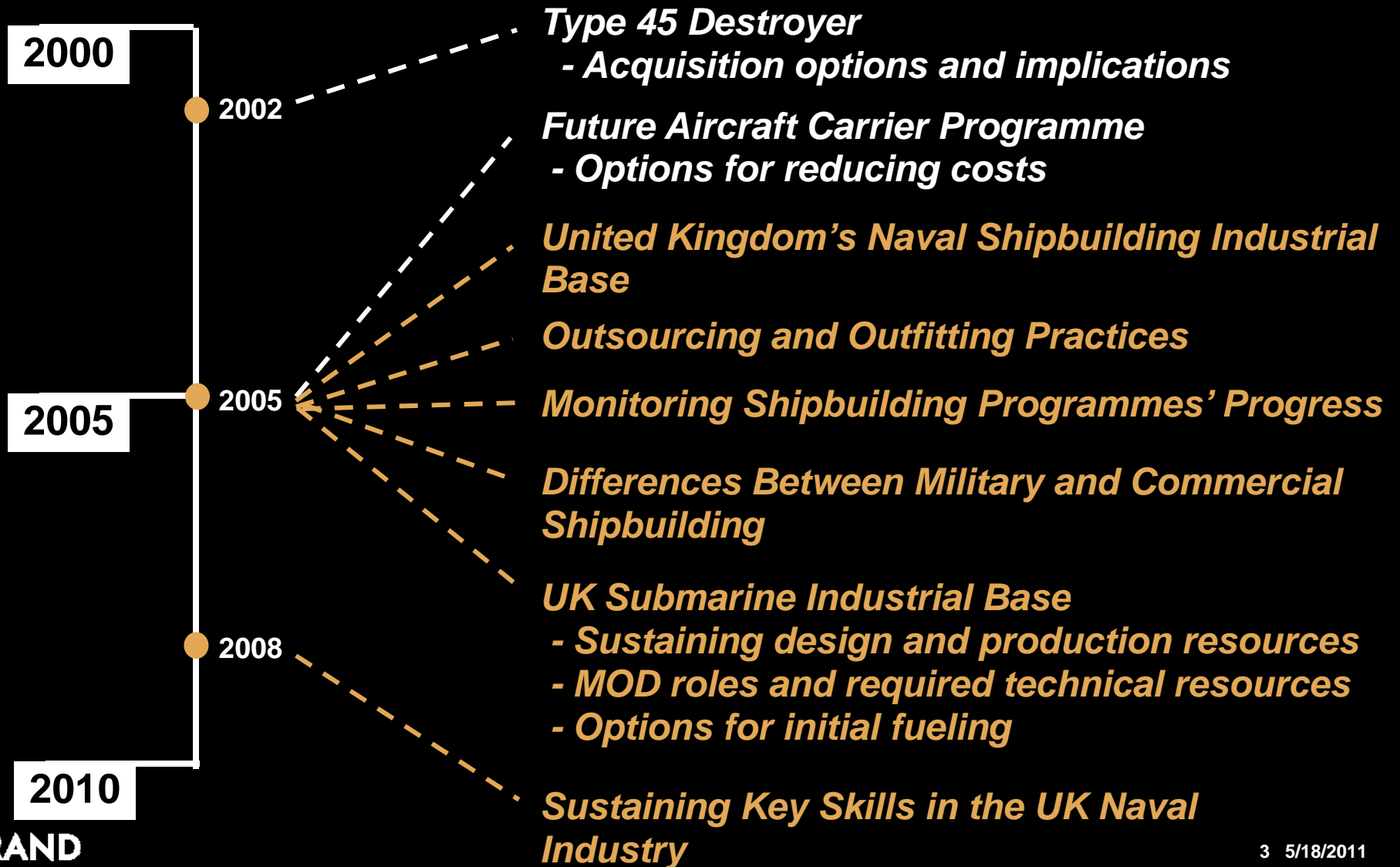
Rebuilding Naval Fleets

Lessons Learned from the UK Experience

Since 2000, MOD Has Engaged RAND to Study Major UK Warship Programs . . .



... and to Evaluate the UK's Maritime Industrial Base and Shipbuilding Processes

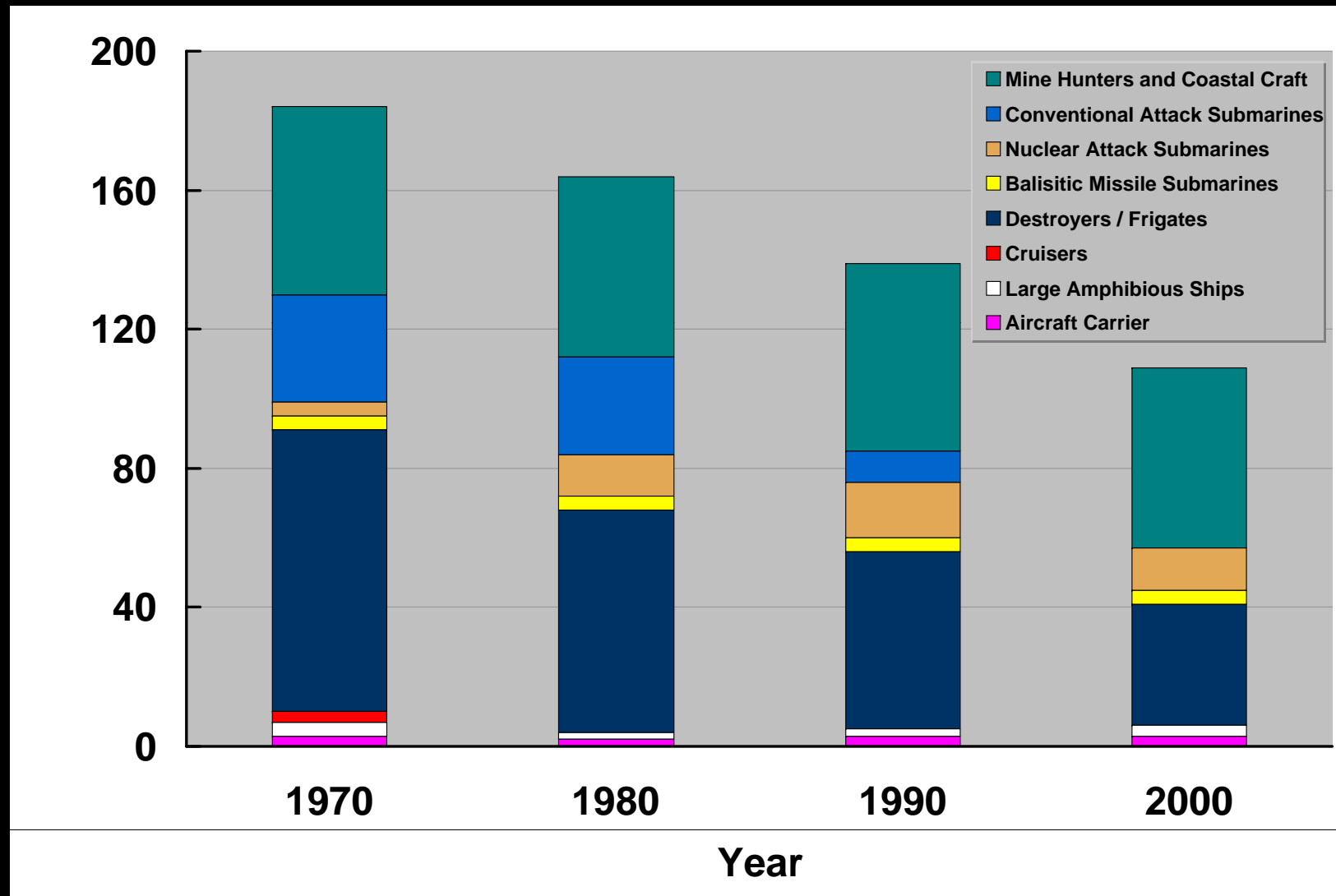


Think of Two Periods for UK Naval Programs

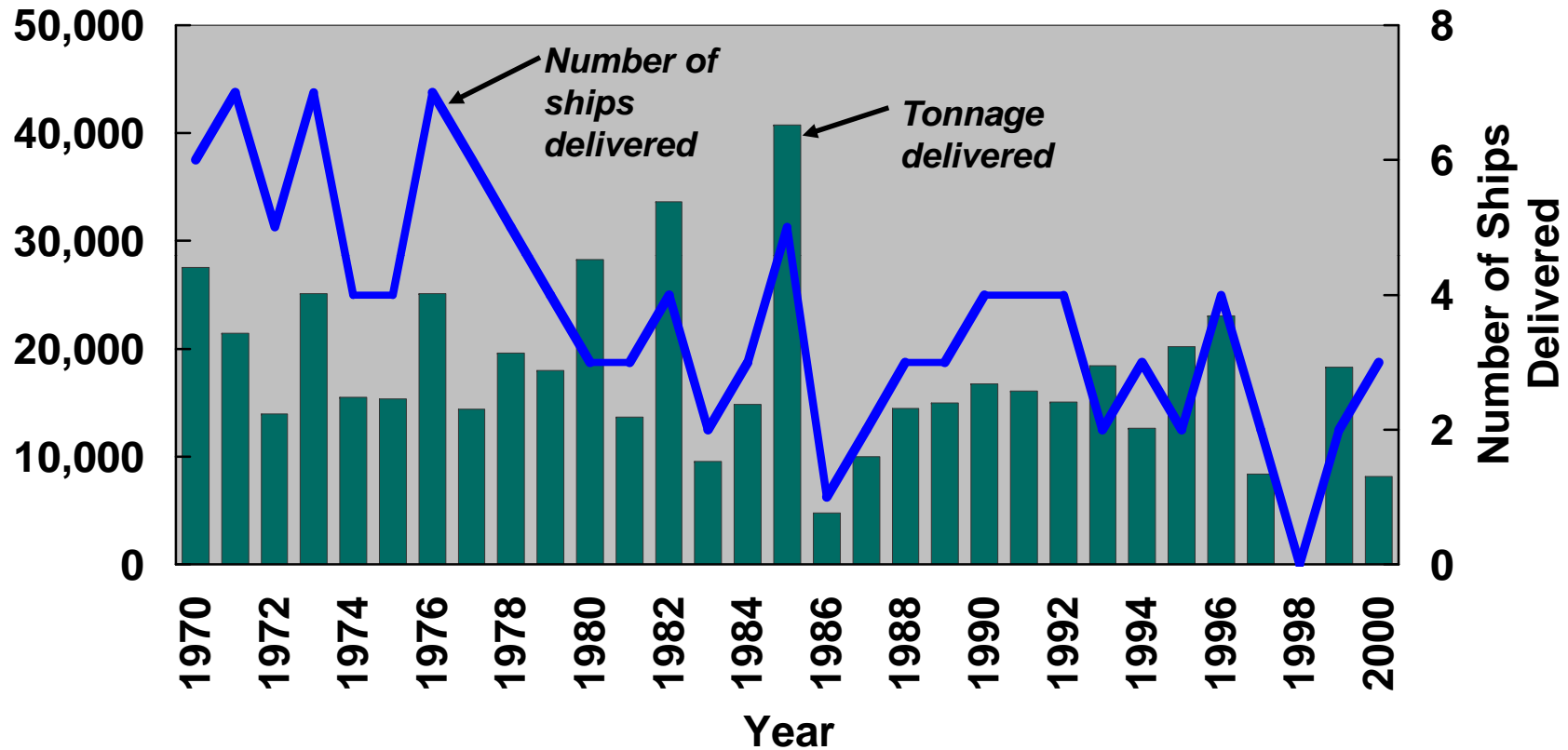
1990 to 2000

- **End of Cold War led to force draw down**
 - **Need for less capability**
 - **Money was not the issue**
 - **Competition was king**
 - **Fixed price contracts were the norm**
 - **Responsibilities shifted to industry**
 - **Decade ended with ambitious shipbuilding plans**
-
- **2000 to 2010**

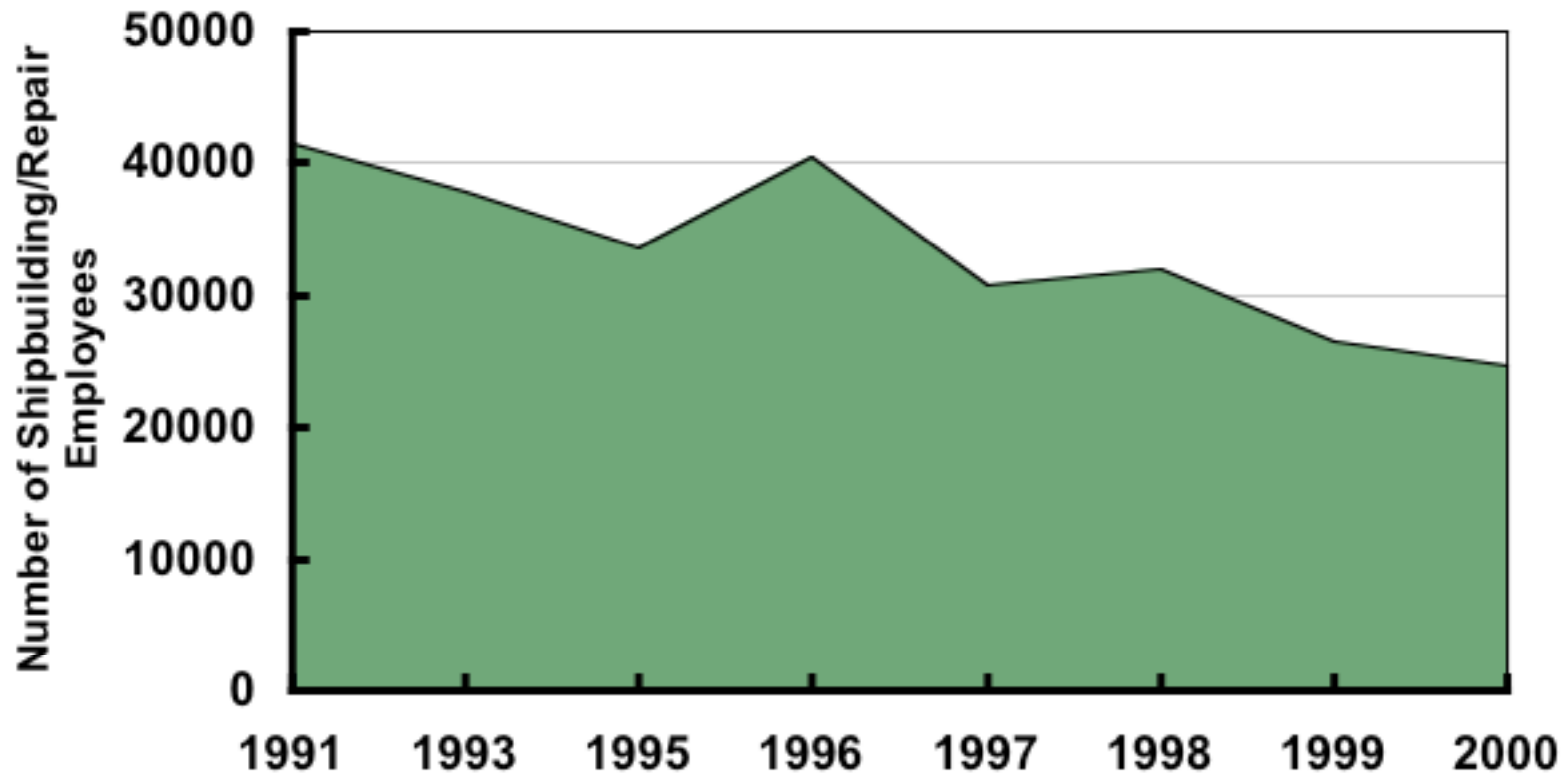
Post-Cold War Force Reflected Lower Requirements



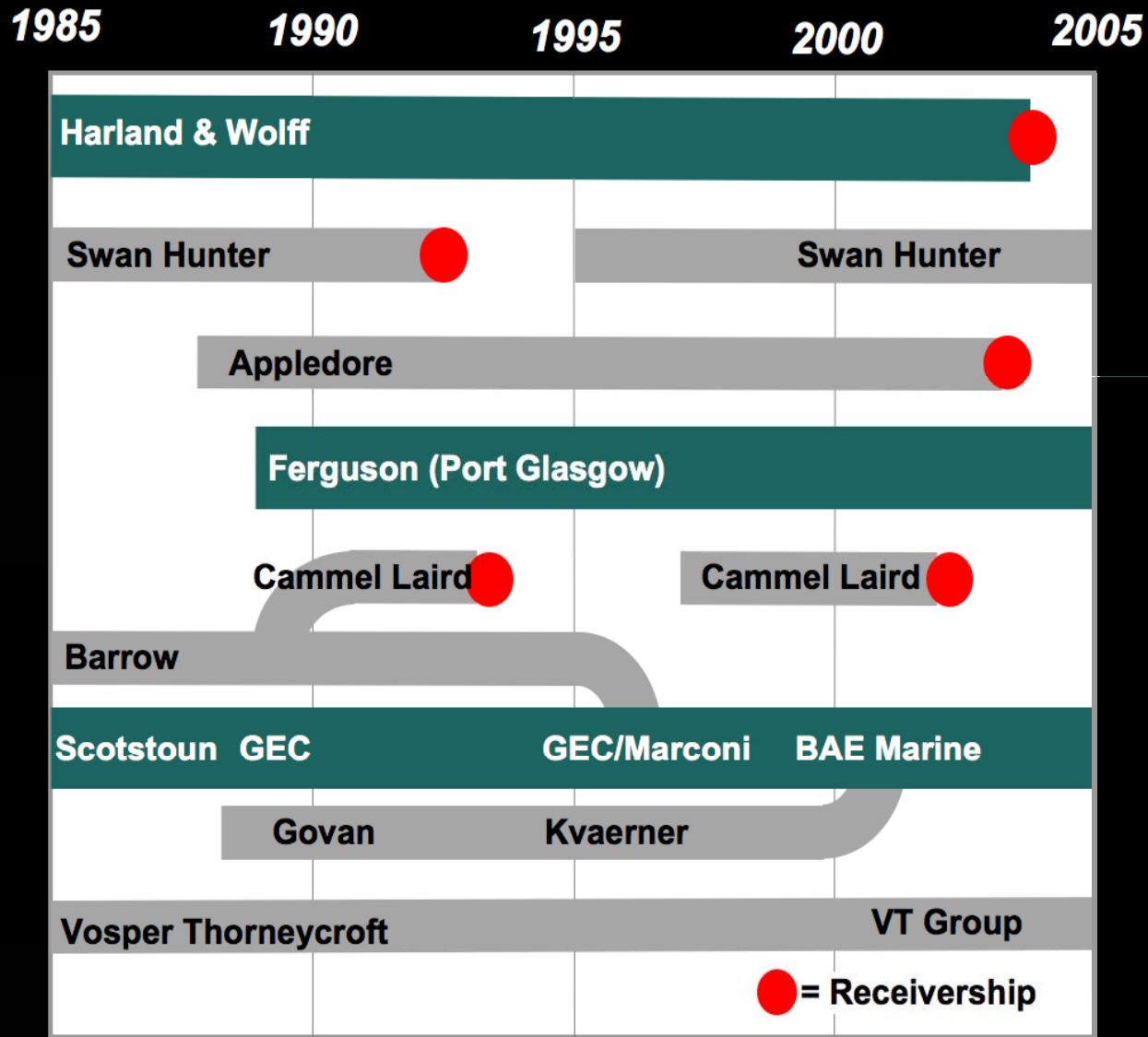
And Led to Declining Combatant Deliveries...



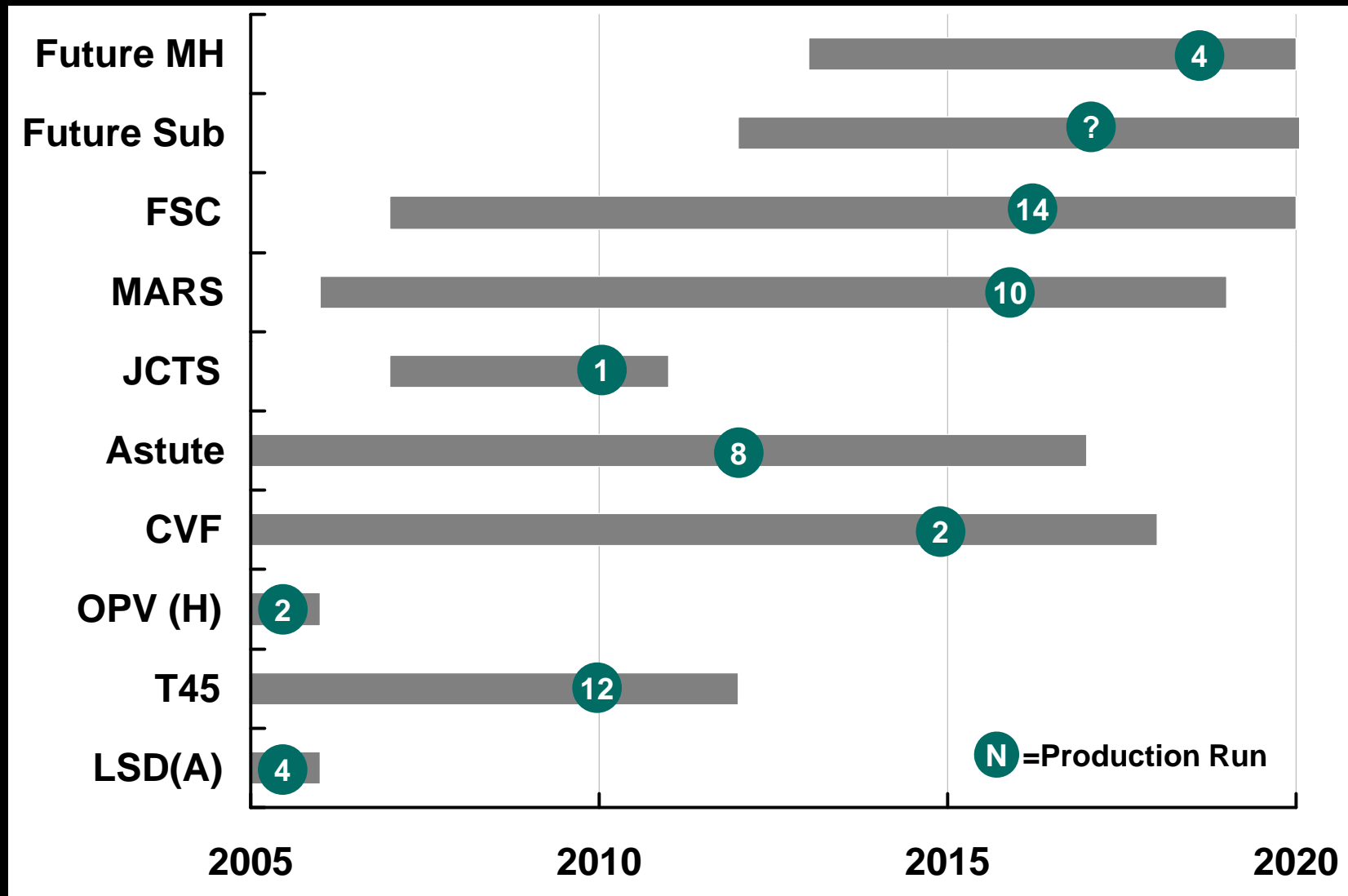
... And Declining Shipbuilding and Repair Employment...



... That Occasioned Bankruptcies and Consolidation in UK Shipbuilding Industry



In 2000, the UK Announced an Ambitious Shipbuilding Plan



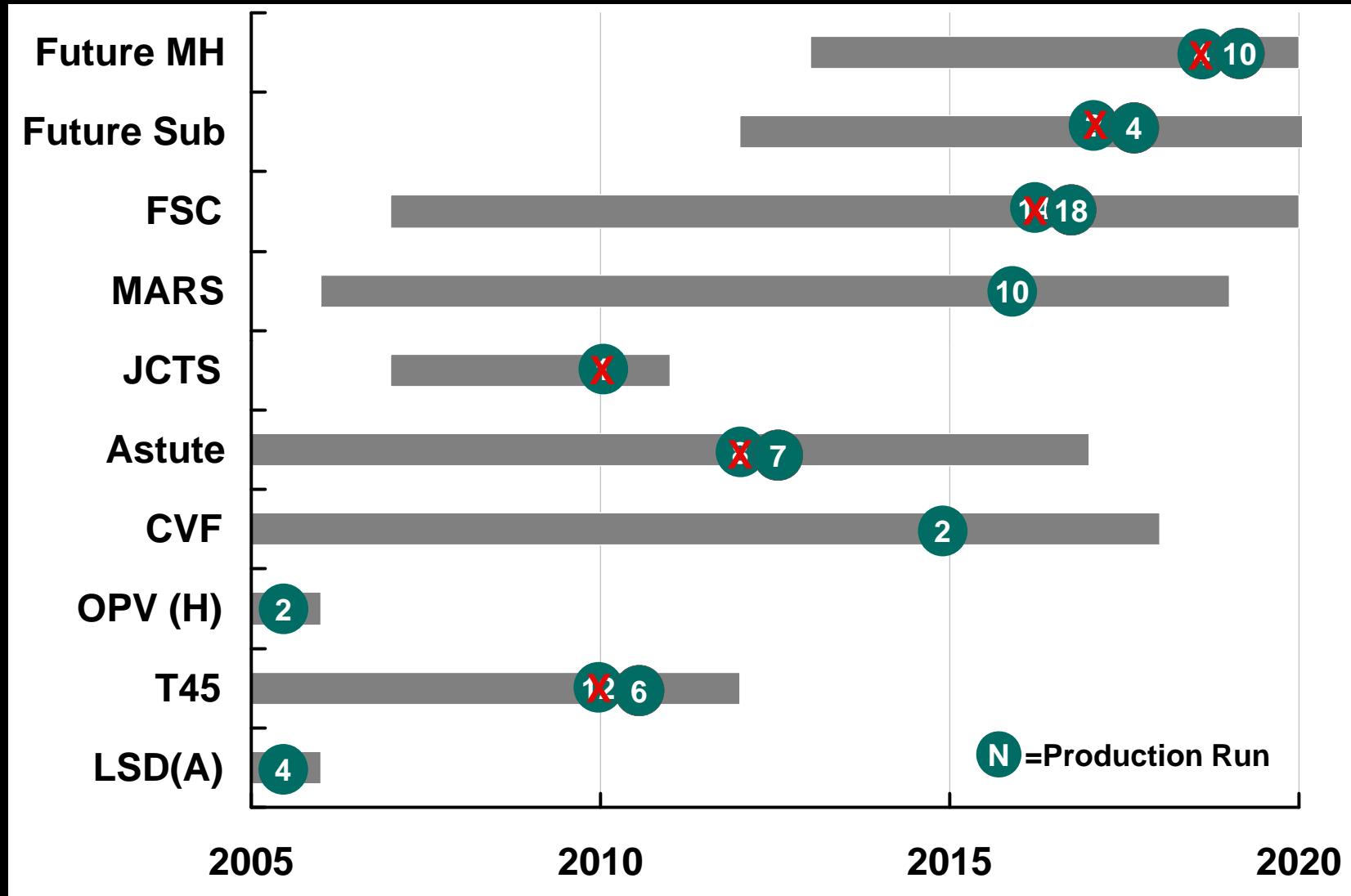
Think of Two Periods for UK Naval Programs

1990 to 2000

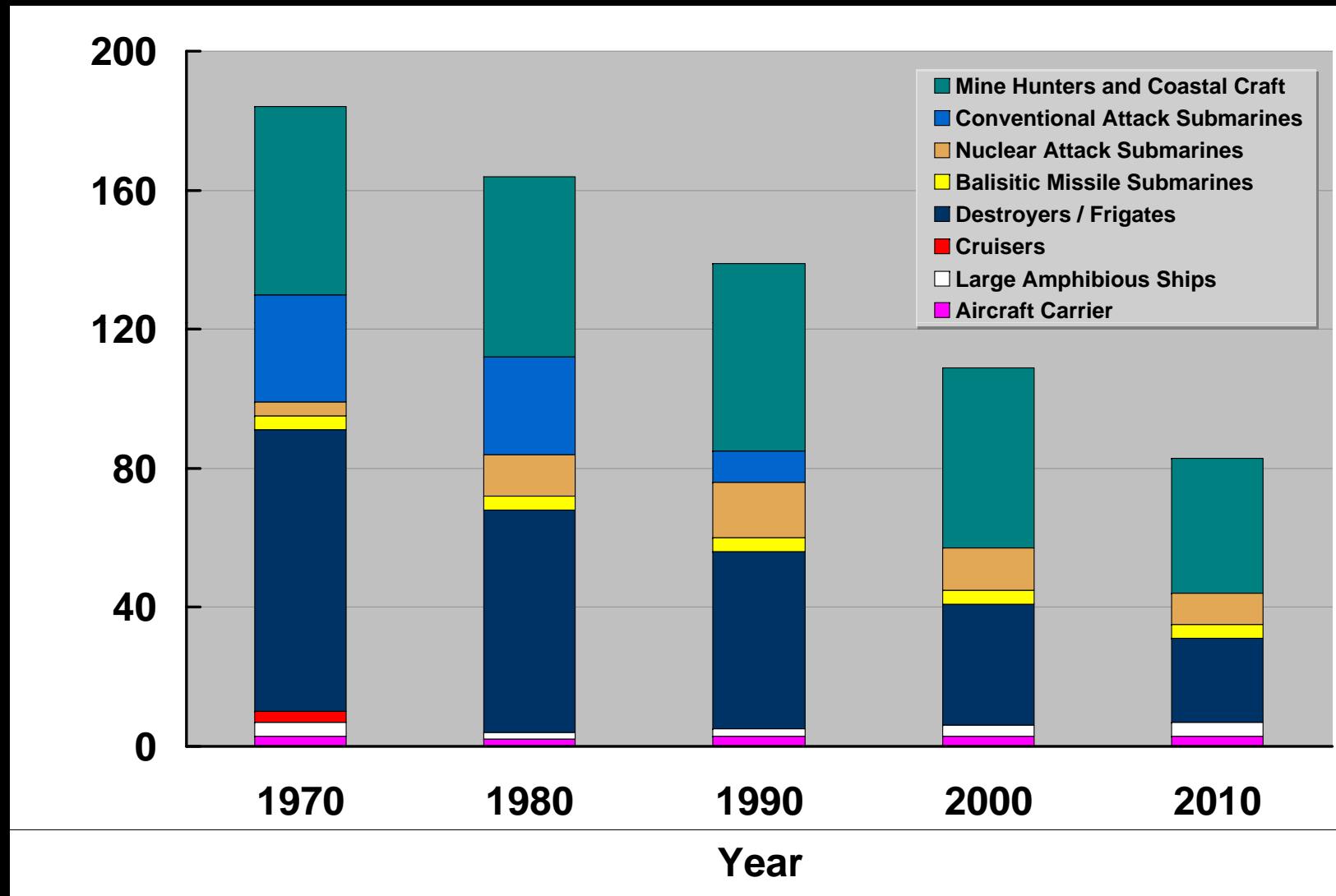
2000 to 2010

- **Competition wasn't working**
- **Cost and schedule problems**
 - **Astute**
 - **Type 45**
- **Money became tight**
- **Defense Industrial Strategy; Maritime Industrial Strategy**
- **Industry consolidation**
- **Terms of Business Agreement**

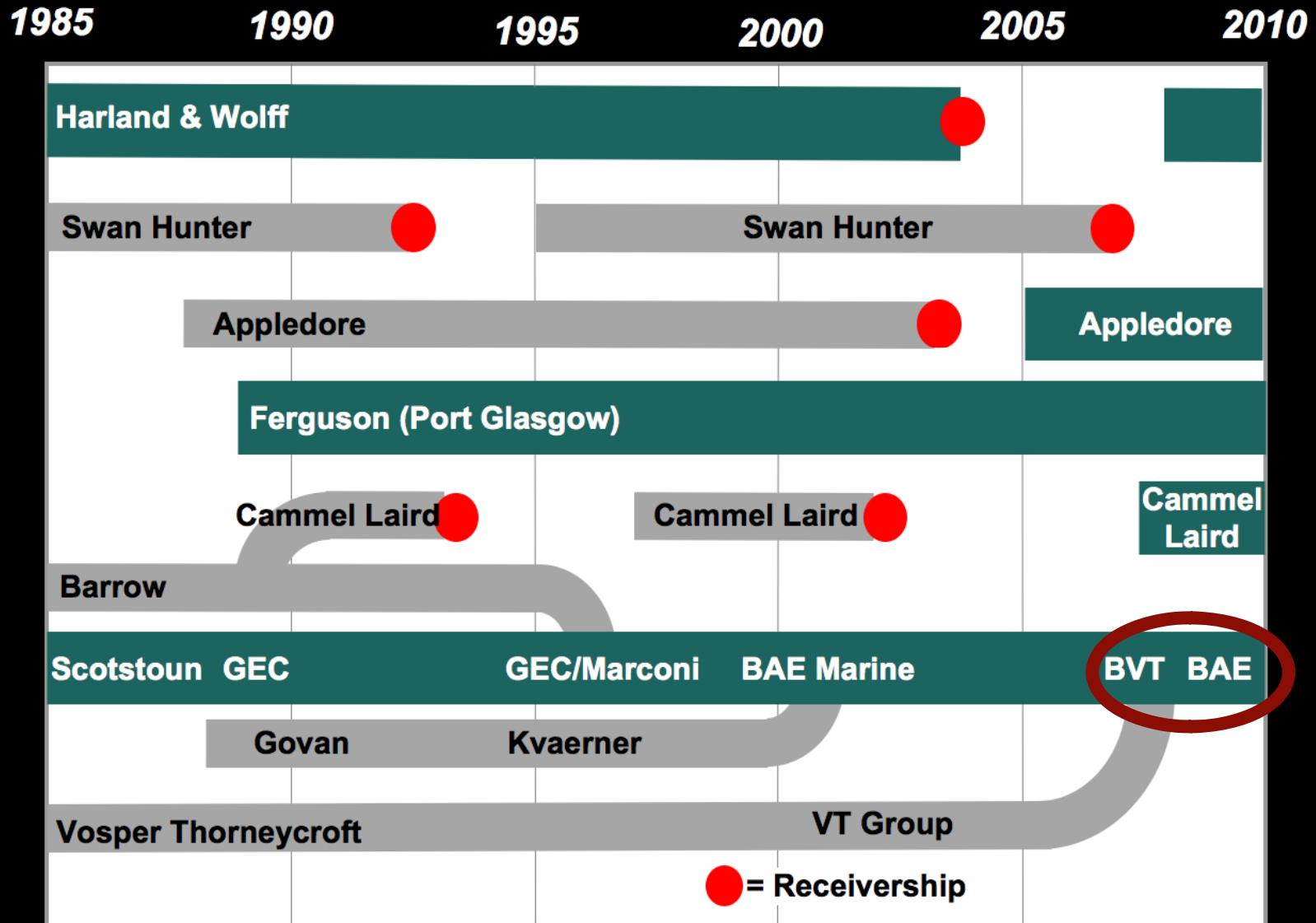
Ambitious Plans Have Been Scaled Back



And the Fleet Continues to Shrink



As Shipbuilding Industry Base Consolidated



What Should US Defense and Industry Leaders Take Away from the UK Experience?

- **In recent past, UK defense policymakers**
 - **Didn't pay close-enough attention to nor act upon long-term needs**
 - **Let government technical and program management skills atrophy**
 - **Shifted too much responsibility and risk to shipbuilders**
 - **Held a laissez faire economic attitude regarding shipbuilding industrial base**
 - **Mergers/acquisitions**
 - **Bankruptcies**
- **Today, MOD is playing catch-up to redress these shortcomings**
 - **Redressing these issues simultaneously and quickly will be challenging**

Lessons for the U.S. (?)

- **Take a long-range strategic view**
- **Use consolidated plans not program specific**
- **Sustain key resources**
- **Choose when to use competition**
- **Choose when to use fixed price contracts**
- **Be prepared to close shipyards**

Our UK Ministry of Defence Work Has Covered Broad Range of Issues

