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(Theme music)

-Bringing citizens and citizen soldiers together through the exploration of military history, topics, and current affairs. This is Pritzker Military Presents.

-Welcome to Pritzker Military Presents with British historian, author, and broadcaster James Holland. I'm your host Ken Clarke, and this program is coming to you from the Pritzker Military Museum and Library in downtown Chicago and is sponsored by Atlantic Monthly Press. This program and more than 400 others covering a full range of military topics are available on demand at pritzkermilitary.org. The first of three volumes on WWII, historian James Holland's The Rise of Germany 1939-1941: The War in the West, draws upon his groundbreaking new research to discredit many of the assumptions in the traditional narrative about the war. Covering the first few years of the war, Holland writes about more than just military history. The book also touches on social, political, and economic history and includes fascinating tactical revelations and personal stories such as those of a German U-boat captain, a French reserve officer, a son-in-law of Mussolini, an American construction tycoon, and civilians across the warzone. James Holland is the best-selling author of Fortress Malta, Battle of Britain, and Dam Busters, as well as numerous works of historical fiction. He regularly appears on British television and radio and has written and presented BAFTA short listed documentaries for networks including the BBC. A fellow of the Royal Historical Society, he has his own collection at the Imperial War Museum. Please join me in welcoming to the Pritzker Military Museum and Library James Holland.

(Applause)

-Well, thank you all very much for coming, and I have got to say what a thrill it is to be in this amazing institution and on Veteran's Day. For a British historian like myself it is indeed a rare honor. My interest in WWII really began through human drama, that immense episode where it kind of affected the lives of every person—man, woman, and child—of every single major competent nation. And it was that that kind of really drew me in. But as I kind of learned more so I started to kind of get more interested in the whys and wherefores. But I guess my kind of Damascene moment and why I started to look at this subject in a slightly different light happened some years ago—probably about eight years ago now—and it was when I started writing a series of novels actually. I mean, although, you know, I concentrate mainly on doing big, fat, serious history books, I do also write fiction as well. And the idea was to follow the fortunes of an English rifleman through the Second World War in the best tradition of Bernard Cornwell and some of those other great action adventure novelists. And I suddenly realized that I actually didn’t really know about the minutiae. I didn’t understand about the weapons they were using. I mean, I kind of knew what they were but I didn’t really know how they operated. I didn’t know about the uniforms. I didn’t—I mean, what is the fighting patrol? I really wanted to know what that was, how it operated, so on and so forth. What they were eating, what rations they had. And one of the first things I did was I went to an amazing institution in at the British Staff College in Shrivenham. It's in Wiltshire. And there they have the small arms unit, which is run by a rather marvelous chap called Lieutenant Colonel John Starling Retired. And John’s a great bloke. And you go into this amazing room—series of rooms, and there they’ve got everything from sort of Black Besses to Baker rifles to kind of AK-47s, and of course they’ve got a pretty impressive arsenal of WWII stuff as well. And as we were passing a German machine gun, what the Allies referred to as a Spandau, I was looking at this MG-42, and I went, "Well, of course you know the MG-42
was a preeminent small arms weapon of the Second World War." And John just turned round and said, "Says who? Says who?" And I thought, "Oh, gosh, I've said the wrong thing here." And in the next five minutes he proceeded to deconstruct why the MG-42 was not necessarily the best small arms weapon of WWII at all. He talked about the over-engineering, he talked about the cost of it, the fact that, you know, they went into battle with six spare barrels each of which were kind of stamped with inspection stamps up to, kind of, nine times. He talked about the huge amount of ammunition they used, the smoke they caused, the fact that, you know, firing fifteen rounds, a hundred rounds--1500 rounds a minute is great in an initial combat--you know, initial action such as an ambush or something, and it's very terrifying if you're, kind of sort of you know, a young GI kind of cowering in your foxhole; that sounds pretty impressive, but actually that rate of fire has problems as well. The use of ammunition, you know, overheating of barrels, and so on and so forth. And it led me down a path of discovery, which frankly has been revelatory to me and incredibly fascinating. But let me just start off by kind of--what do we think we know? There's a huge amount, I've realized, of assumed knowledge about WWII. I'm just touching, scraping, the very sort of top of the iceberg on this subject; it's so vast, but what I'm gonna try and do is sort of raffle through those first two years of the war and sort of pick out some of the highlights. I'm gonna talk principally about Germany, a little bit about Britain, a little bit about France, and a bit about America as well. But what do we think we know? Well, when 1939, 1940 Germany had the best army, best trained men, best hits--this huge sort of mechanized Molluck. And when we think of Germans in that opening period of the war, it's kind of Geisnelt, this fellow, that we're thinking of. He looks mean, he looks tough, he's kind of riddled with--covered in ammunition belts and so on. And of course we think of mechanization, don't we? We think of Panzer tanks and half-tracks and armored cars and just lots of mechanization. And we also think of course of the Luftwaffe, air power, and screaming Stuka dive-bombers wailing their sort of banshee siren as they sort of cause chaos in Warsaw or Rotterdam, or kind of columns of fleeing refugees. And when we think of the heroes of the Third Reich, those men, those Panzer aces and aircraft aces, you know, fighter aces, they all sort of live up to the ideal don't they? They've all sort of got square jaws and look handsome, like a Michael Wittmann here, the great Panzer ace. Or also Schepke the U-boat commander who sort of I think looks a little bit like Aragorn from the Lord of the Rings but with slightly less hair. Or you think of Joachim as Geisnelt, by crumb just look at him. He just looks mean, lean, and sort of dangerous to know, doesn't he? I mean, you know, if you're coming up against someone like that you know you're in trouble. He just oozes self-confidence and capability and well-honed military prowess. And when you think of America, United States of America, it's the arsenal of democracy and it just emerged fully formed producing 50,000 aircraft and gargantuan numbers of jeeps. And when you think of the GI it's this guy. I mean, look at him. This is August 1944, this photograph, and look at him; he's got his helmet at a jaunty angle. His top shirt button's undone; he's got stubble of sort of three days of beard. And you just know where every single WWII movie has based its characters on ever since. This is Jimmy Caan in, kind of, Bridge Too Far. It's Damian Lewis in Band of Brothers. That's the look isn't it? You know he's got great teeth. You know he's sort of strong and muscular and well fed, and you can almost see him chewing gum and eating Hershey bars. And when we think of Britain, I know certainly in the UK there is this kind of sort of slightly self-flagellating sort of view that somehow we were little Britain, David against Goliath. We have a great traditional sitcom on the BBC that was sort of made in the late 60s and 70s called Dad's Army, who are sort of hapless bunch of home guardsmen led by the sort of useless Captain Mainwaring. And that's the image that comes to mind. Yes, the few as well, those sort of gallant spitfire pilots and hurricane pilots, but basically it's backs to the wall
amateurism, and when we think of our heroes, you know, they're not square-jawed with great teeth; they're thin and weedy and have really bad teeth, and you know that if you took off Stanley Hollis VC's battle dress that you’d be able to see his ribs and he'd be white as an oyster shell. Or they’re like this. General Carton de Wiart, sort of-- you know, he amputated his own hand in the Battle of Passchendaele, and so it itched a bit. You know, sort of unbelievably tough and hearty but somehow a kind of throwback to an earlier age-- a sort of sense of faded empire of looking into the past. I think most of that is--it's a misplaced image I think, and then I think it's time to kind of readdress what we know about WWII. And one of the things that is really interesting about it is in the narrative of our understanding of the war--war is sort of understood to be sort of fought on three levels. The top you've got the strategic level. Strategic level is the big picture, the overview. The national aims. Get to Berlin. Conquer Britain. Whatever it might be. Then you've got the tactical level and that's the sort of bloke in tank, chap in spitfire or mustang, GI in foxhole--it's the coalface. It’s the fighting, tactical--it’s that edge; it's the actual clash of arms at the front. Then the third level is the operational level, and this is the more sort of complex one. This is the sort of nuts and bolts. It’s the sort of economics of war. It's the supply of war. It's making sure you've got enough replacement tanks, that you've got enough spitfires in your squadron. It's getting three square meals a day, getting those rations up to the front and camels and Lucky Strikes and all the rest of it. And actually that's the level that is generally left out of narrative histories of WWII whether it be a documentary, whether it be a book. And once you put that level back in and actually give it a kind of level of importance it deserves, then quite a different picture starts to emerge that affects how you understand those tactical and strategic levels as well, and that's what struck me and that's why I felt compelled to start writing this series of books. So let's just have a look at the Germans in the start of the war, 1939, 1940. This is taken in France in June 1940, and as you can see it's a Panzer Mark 1. It's pretty small, it's pretty feeble, it's under-armored, it's under-padded. It's got a brace of machine guns; that's it. It’s about six foot high, and as you can see these bunch of Wehrmacht soldiers are sort of crowding all around it. There is a perception that Germany was this sort of great mechanized Molluck and this was very, very carefully orchestrated by German propaganda, so much so that not only did German people believe it, so did the whole world. And they were very careful. They made sure when they took photographs, when they took film footage it was always of those ones that I showed earlier on, of tanks coming over hills and lines of armored cars and so on. They never showed people walking, you know, on their own two feet or on horseback, which was much more common. And an actual fact in 1939 on the eve of war there were--you know, German was one of the least automotive societies in the western world. This may surprise you, but there were forty-seven Germans for every motorized vehicle in Germany on the eve of war in 1939. That figure was around ninety for the Italians. But it was fourteen in Britain, and nine in France, making France the most automotive society in Europe--and that figure was four in America, perhaps no great surprise there. But surprising how low on that list Germany is. And that is interesting because of course the problem is if you don't have an awful lot of motorized vehicles--trucks, cars, motor bikes, or what have you--what that means is you don’t have a lot of factories making them, and if you don’t have a lot of factories making them you don’t have a lot of garages to prepare them, and if you--repair them rather. And if you don’t have a lot of garages repairing them, you don’t have a lot of gas stations to fill them up with, and you don’t have lots of people who know how to repair them--how to even drive them. And you can't just snap your fingers and suddenly become mechanized, so it's a problem for Germany. And this is much more the common view. You know, of the 135 divisions-- a division is around sort of fifteen, 16,000 men in 1939, 1940--of those 135 divisions that the Germans used for the
starting of the blitzkrieg in May 1940, only 16 of them are mechanized, motorized. The other 119, this is them here, walking on their own two feet or on horseback. I mean, look at this picture here. It's amazing. This is taken in June 1940, and it's an artillery crew with its horses. But if I told you—if I hadn't told you that first and I said that's from 1889, I don't think many of you would have doubted it. It just looks so old-fashioned, doesn't it, but that is the reality. The other thing of course is Germany is a continental power, and its main leaders, whether it be Hitler, whether it be serious commanders, they're looking at it from that narrow world view. They're thinking in terms of continental power. And when it comes to naval power, Germany's got a problem because it's stuck in the middle of Europe but it's got the Baltic Sea which is a sort of tangled web of narrow straits to get out into the world's oceans, and they've got a little bit onto the North Sea between Denmark and Holland, but basically it's kind of largely landlocked, and that's how they look at things. And when they are rearming in the late 1930s they start something called the Zed Plan. The Zed Plan is designed to create a large surface fleet. Yes, they're gonna build some large U-boats as well, but it's mainly aircraft carriers and battleships and cruisers, and this makes no military sense whatsoever because in the run up to the Second World War they haven't got a hope at all of creating an army that is gonna rival France let alone Great Britain. So they're on to hiding to nothing. What they should have been doing is building vast numbers of U-boats because as they repeatedly said in their prewar rhetoric, they're most dangerous enemy is Britain. Britain, because Britain they're the world's largest empire at the time, has the center of the world's largest trading hub, and of course it is on very friendly terms with the United States which, although isolationist, is very much instinctively on the side of the Western Allies. And Germany for longevity of control in Europe and the wider world and to fulfill all of its ambitions needs Britain out of the way. And Britain out of the way then means that the USA with all of its economic potential is also less of a threat, so this is really, really important. And if you want to beat Britain, the best way to beat Britain is not to worry too much about its army; it's to strangulate it. Britain being an island, most of it doesn't have that many resources. It has a few more resources than Germany does, but it still doesn't have that many. It gets its resources from it's huge naval, you know, overseas trade. So the best way to get that is to sink it with submarines, with U-boats. But no, the Germans don't do that; they create as many service vessels as they possibly can—capsule ships, battle ships, and so on. And the main reason for this is because they look more impressive so that's why Hitler goes for it. There's no sort of military logic to it; it is really because this makes him feel better about himself. You know, where's the fun in a U-boat? Around half the time it's under water; you can't even see it. What you really want is something like this, the Bismarck, which is sort of impressive and enormous and makes everyone go, "Wow". But of course—I can't be sort of rubbing the Germans too much. They do get quite a lot right in those early years of the war. That is for sure. And one of the things that is really interesting is the development of the Panzer Division, and you'd have to say that the Germans get this right in a way that the British and the French don't. It's important to understand that the Panzer Division is not just rammed full of Panzers, i.e. tanks. The genius about it is that it has equal weight in motorized infantry, motorized artillery, and of course the tanks themselves. And it's kind of roughly done on a sort of third/third split. The other point about it is that the Luftwaffe has grown up organically to support the ground troops. It's not there to operate on its own volition. It is there to support the ground forces, and so it's a kind of fourth army. It's aerial artillery. It's what we today would call close air support, or a tactical air force rather than a strategic air force, which operates on its own. And what this could do is sort of pave the way. It can get rid of those columns of enemy coming towards you. It can smash factories, it can hit railroad, it can disrupt supply columns so that the opposition when you get to it with your Panzer
army—your spearhead is kind of already on the back foot, and that's the great value of it. The fourth great component of the Panzer Division is the radio, and the interesting thing is while Germany was one of the least automotive societies in the western world in 1939 it was the nation with the most radios per person in the world, and that includes the USA interestingly enough. And this is because what they realized—the Nazis realized very early on is that radio was a great tool of propaganda. I mean, Goebbels' great mantra was, "Repeat, repeat, repeat," and so you just pump out this stuff all the time, sort of marshal marching bands and kind of propaganda and lots of stuff about how brilliant Germany and how it's sort of getting back on its feet and autobahns and tanks, and so on and so forth. And what they realized is the way to make everyone—get everyone to have a radio is to make them cheap and to make them small, and that's what they do. And almost everyone has one, and even if you don't have one they're there in the foot worlds of apartment blocks, they're there in restaurants and town squares. You know, you just simply cannot escape this stuff. And of course what the Wehrmacht—the German armed forces are going, "Wait a minute, this is great because we've been wondering how we're going to coordinate our artillery and our motorized infantry and our tanks, because in my tank it's jolly noisy, but here's the answer." and these radios are small enough that they can fit in the tank turret. They can even fit on a BMW motorbike and sidecar. And so everyone's got one, so everyone is mutually supporting and able to communicate with each other. And of course when you can communicate with each other really well you can speed up your whole operations, and that is really, really important. What I should also say is the German modus operandi of war that they use in the Second World War is one that they had been using, the Prussians had been using, for centuries. There's nothing new about it whatsoever. There is nothing new about the means by which they enact the blitzkrieg, as it became know. What they Germans understand is something called Bewegungskrieg, and Bewegungskrieg is the operational art of maneuver, and they have to do it fast. And the reason they have to do what they do fast is because they are so resource-poor. They know this. You know, they don't have the things you need for war. They don't have oil, which is what you need in the mid-20th century. They don't have lots of bauxite and copper and iron ore. It all has to come in from somewhere else and because of their unique geographic position, stuck in the middle of Europe and not much access to the world's sea-lanes, they have to do things quickly. So the idea is that you overwhelm your enemies, you attack your point of attack, the schwerpunkt, you hit it with overwhelming force. You do the Kesselschlacht, the cauldron war, you circle your enemy, and then you annihilate them. It's a complete annihilation job. That's how they've been doing things forever. That's what Frederick the Elector did. It's what Frederick the Great did. It's what they do in 1864 against Denmark. It's what they do in 1866 against Austria. It's what they do in 1870 against France. It's what they try and do in 1917, and it's exactly what they do in 1942. The whole point is these wars have to be short, sharp, to the point--complete wars of annihilation—get them over and done with quickly. They're not in the business of a long, drawn out war, and if anyone's doubting that just go back to 1918 and realize what happened—you know, war on two fronts, dragged out, attritional, they run out of money, they run out of steam, run out of will, and it was curtains. So they're determined never to make that mistake again, and what the Panzer army gives them is that spearhead. Okay, so the shaft, the wooden shaft is your guys on your horses and on their own tow feet but the spearhead is the bit that's gonna do the damage with the help from those radios and with the help from the Luftwaffe. And that's gonna do the job, and it's their only possible chance of victory as they see it in 1939, 1940. But its interesting that, yes, there is a certain amount of confidence in what they've got and that they believe their Luftwaffe is pretty supreme. They believe that their tactics are good, that the training certainly of the elite troops is
pretty good if not that the rest of them leaves a little bit to be desired, but it is interesting. Just think about Norway. This is some German troops in Norway, and when we look back on that it just seems completely one-way traffic. You know, demark gets conquered in about fifteen minutes. Norway takes a little bit longer but it's a great victory for them certainly on the ground. But is it? I mean, let's just think about this. What they've got coming up in May is the war--attack against the west, against the combined weight of the superpowers of France, Britain, and also not to be sniffed at Belgium and the Netherlands as well. And for this they're gonna need all their resources, all their assets for this big, mighty clash. And there's lots of people in the German high command who think this is absolutely suicide—that, you know, at least it's better go out with a sort of blaze of glory rather than another sort of long, attritional affair, but there's a lot of doubts amongst the German high command that the Blitzkrieg is gonna come off. So why on Earth are they putting all this effort into Denmark and Norway, because if they win in the west they're gonna just be able to walk into Norway. You know, they don't have to bother having a war and wasting kind of key resources. And of course there's not all one-way traffic. Yes, it is on the ground, but at sea that policy that they've had earlier on in the late 1930s of building up a large surface fleet has been shown up for the kind of missed opportunity that it is because they suffer huge losses. So, yes it's a victory on land, but it's very much a defeat at sea, and I think it's important to remember that. You know, we're very used to thinking of WWII in terms of the land operation, not naval operations, and of course the bottom line is it's all completely linked together and you can't isolate these things. You know, naval power is every bit as important as land power. So what about the French? Well, this is an interesting one. I mean, there's Gamelin in the middle next to Lord Gort who's the British commander. Gamelin is old for a battlefield commander. He's in his sort of mid-sixties, and for a front line commander that's got to kind of not get much sleep, that's got to make snap decisions all the time, that's not a good age. And he's stuck in the past like most of them, they're sort of defensive in their mindset, and they're very, very sort of top heavy. It's an army and armed forces, that stifles initiative in the lower ranks, and this is a problem. And basically what they think that any future war such as the Second World War is gonna be much like the first. It's gonna be long, it's gonna be attritional, it's gonna be drawn-out, and it's gonna be static. And they're kind of half-right or half-wrong, depending on which way you look at it, because it is of course long and drawn-out in the end but it's certainly not static. The Second World War is a war of maneuver, and so they get that one wrong. And the bottom line is is they can't really operate with speed, and that's where German Bewegungskrieg, that new--what is new is that Panzer Division. It is that strike force, that sort of spearhead operating with radios, with the Luftwaffe; that is what is new--not the principle of attack, it is the way they enact that attack that is new about the blitzkrieg in 1940 and 1939. And here are some Char Bs, now take off the turrets and they look just like First World War tanks, British First World War tanks, and that tells in a way you all you need to know about the mindset of the French. These tanks actually, these Char Bs, these are the most powerful tanks of 1940. They've got the best armor, they've got the best guns, you know, they're pretty powerful beasts. They're slow and ponderous but these are kind of the cream of the French armed forces. And what's interesting--let me just give you one example. The French Armored Division, on the morning of May 15, 1940 it wakes up and it's got 176 tanks. By dusk that night it's got just thirty-six. By lunch the following day it's got sixteen. And you might say to yourself, "How did that happen?" Because it comes into contact with primarily the 5th Panzer Division but also the 7th Panzer Division commanded by Erwin Rommel. But I just told you German tanks aren't much cop, and I showed that picture of the Panzer Mark 1 with its braced machine guns and its flimsy armor. So how did they do it? Well, I'll tell you exactly how they do it. What
happens is those Panzer, those flimsy Panzers, come forward, and they literally waggle their hands at the Char Bs, the French armor, stick out their tongues, and say, "Come at me if you dare," and then they beep off. And these big things sort of clunk out, you know, and clunk towards these panzer that are gouging them towards them, and then they scuttle back into some woods and get onto their radios and go, "Okay, mate, are you ready? Go." And behind them into those woods, in those woods, are a screen of anti-tank guns, and they're not equipped with little pathetic machine guns; they're equipped with high velocity guns which make very short work of those Char Bs. And that's how they get rid of them. And it's just a master class of communications and greater tactical thinking, and that's why they win. And of course overall that's why the French are overrun because they just can't respond quick enough. They don't have radios, they have dispatch riders and they have landline telephones. You know, a Stuka comes in, breaks a couple of telephones, tapping the top of his phone, can't get through, and so he sends a dispatch rider but there's lots of refugees on the roads and he can't get through. So you can see how the whole thing--they just can't coordinate anything. They can't move quickly and that's why they get overwhelmed. And because the French is created in such a way that they stifle initiative, those guys at the bottom--"Well, what are we supposed to do? What do we do now? Okay, fine, I'll just put my hands up." that's why it all goes so horribly wrong. But it isn't all one-way traffic for the Germans. The Luftwaffe, the mighty Luftwaffe, does get a bit of a pounding, and not least on that opening day of the offensive, the tenth of May 1940. I was absolutely gob smacked when I discovered that the Luftwaffe lost a staggering 353 aircraft on the tenth of May 1940. Now, that's not-- that's a bad record that's not beaten until sometime in the middle of 1943. It's absolutely incredible. At no point the Battle of Britain for example do they get close to that, and what happens--most of them are transport planes like this one, this Junker 52 transport planes. And the only reason they've got so many of these transport airplanes is because they've scoured the civilian airlines, they've scoured the flying schools and put everything, all their eggs in one basket for this major operation. Well, that's absolutely fine if you're gonna win the war. But it's not fine if the war goes on, and they so nearly do because France surrenders, Britain scuffles off, Belgium surrenders, Holland surrenders, and you know, British army's been humiliated and then gone back to Britain with its tail between its legs. They're so nearly there but not there enough, and therein lies the problem and the failure of the Blitzkrieg. So what about Britain then? Well I've already mentioned that Britain has the largest navy in the world in 1939, 1940. Naval power is very much at the center of British military structure. It has been for a long period. It's called the Senior Service in Britain, and that's for a reason because it is. And there is no one to touch it in 1940 to touch it at all, not even the Japanese, not even the United States in 1940. And of course Britain also has this incredible global reach. It's hard to imagine it now in this sort of age of post-empire and decline of Britain as a great power in the emergence of America ever since 1945. First the Soviet Union, and more recently China. Britain seems pretty small beard but back in the day Britain was a major, major player. We had the world's largest merchant shipping fleet, some thirty-three percent, and we had access to around eighty, eighty-five percent of the world's merchant shipping. Now that is really good news if your war isn't all over in six weeks, and actually it's gonna go on for a little bit. And just look at this--okay, the red vertical, almost pink, obviously is the empire. But what I always think is interesting about this map is what isn't in the empire. Look at those little line of ants going between Argentine and Britain for example down in South America. Argentina is not part of the British Empire, but, boy, it's mainly owned by Britain. British business owns the railways, it owns most of the ports, it owns large numbers of those farms, and that is really, really handy. Who are the world's biggest oil producers in the Second World War? They're all in the right side of the
Atlantic for Britain. It's America; America is the number one oil producer in 1939 to '45. The second biggest producer is Venezuela. Third is Baku Azerbaijan out in the USSR. You know, Romania, the Middle East, Iran, Iraq--they're way down on the list, and Germany only has access to Romania and only from the 27th of June 1940 onwards. So Germany's got a big problem. Where is it gonna get its oil from? There's a reason why it's one of the least automotive societies in the western world. It's because it doesn't have the things that you need to create a large automotive society, namely fuel. And just a reminder of Germany's position--I mean, look at it here. You can see very clearly, I think, just how it is right in the heart of Europe. It's vulnerable. It's vulnerable from the south, from the east, from the west, and look at that narrow coastline. That's a problem. All the world's greatest empires, greatest trading empires, have always had access to the world's sea-lanes, even the romans back in the day. The world then was the Mediterranean, but they had control of it. America has the pacific and the Atlantic. Even China today has the Pacific. Germany never has that, so where is it gonna get all its stuff from? So it's a massive problem. And it's a really big problem for Germany in 1940 because Hitler's come back in triumph, he's done his tour of Paris in June, he's then gone back to Berlin, had this great triumph, and this is kind of as good as it gets. Everyone's cheering, everyone thinks the war is over, everyone's hailing our mighty Fuhrer and all the rest of it. And it looks like happy days. But what are you gonna do because Britain's not coming to the peace table. And there's a very good reason why Britain's not coming to the peace table, because actually it's got an awful lot in its favor. It's got a lot to say for itself. It's got resources, it's got purchasing power, it's got America on the right side of the Atlantic whose also already making very positive noises in terms of helping them out, and it's got the world's first fully coordinated air defense system, and that makes it a very tough proposition. That channel, that English Channel, is not a river crossing. It is a major, major obstacle that--just think about D-Day in 1944. Think about what a difficult proposition that was with air superiority, with naval superiority, with intelligence superiority, and manpower superiority, mechanization superiority. It was still a huge gamble, a huge risk, and everyone was seriously nervous about it. Think about Germany in 1940. They don't have landing craft, they don't have control of the air space, they don't have the superior navy. How are they gonna get across Britain? It's a big, tough nut to crack. But because Hitler is thinking of things in terms of continental land power he thinks that because Britain has lost its very small army at Dunkirk, its ten-division army compared to the 105 in France, twenty in Holland, 135 of the Germans, he thinks that that's such a humiliation they must surely come to the peace table whereas Britain's thinking, "Well, no, we're a naval power principally, and we can--as long as we've got our island nation we'll hold on. We've got lots in our favor." and this first fully coordinated air defense system is actually a big, big deal. You know, it's not just about radar; it's also about the observer call. It's about high-frequency direction finding. It's about ground control. For the first time there is a ground controller who is talking to the pilots in the planes saying, "Okay, I can see this raid coming. You need to get to 24,000 feet on a bearing of 0-3-0. Any minute now you should see them." "Yup, Roger, snapper leader. We're going in, tally-ho." That is completely revolutionary. That is completely new to the world. No one has ever done this before. And of course the Luftwaffe who have been operating in Poland and Scandinavia and in France, you know, they've had it really easy because there has been no radar, there has been no air defense system, so they can just choose when they like to attack, and half the time they're shooting up the enemy planes--the French and British and all the rest of it--on the ground. Well, they can't do that against England. It's a completely different kettle of fish. And so as the battle of Britain progresses they find that they've actually got a much tougher nut to crack then they thought they had. And air production, aircraft production in Britain, is also way
ahead of Germany. And just look at the size of this airfield. This is Hawkinge. It's a hundred-acre sight, it's absolutely enormous, and that requires a huge amount of ordinance to knock it out of action. So twenty Heinkels coming over and bombing at it, that's just not gonna cut it because the RAF have already thought of that and they've got huge piles of scalings and soil and bulldozers at the edge, and when they go they simply fill in the craters and the spitfires take off again, and it's as simple as that. That's why the in the whole of the Battle of Britain only one airfield is knocked out for more than twenty-four hours. The Luftwaffe are a long, long way from defeating the RAF in the summer of 1940. So what about America? Well, America's really interesting because again we have this view that the arsenal of democracy just emerges fully formed in Britain's hour of greatest need in the summer of 1940, and it's simply not the case at all. Britain--USA on the eve of the Second World War is nineteenth largest army in the world. It only has around 189,000 men, which is big by UK standards today I can tell you but is absolutely tiny by 1939 standards. And in terms of fighter plans I think there's around seventy-four in the whole of the US Army Air Force. Seventy-four. And just think of how big it becomes by the end of the Second World War, and think of how tiny it becomes then. And there's no concept of all arms combat, there's hardly any tanks, in the Louisiana Maneuvers of 1940 the plans are coming over dropping bombs, which are sort of sacks of flour. They still got their kind of Boy Scout hats. The whole way they're thinking about things is really backward. The only arm of the United States Armed Services which is sort of remotely modern and up to speed is the navy, and that still needs to do quite a lot more ship building to get up to speed and be the dominant power that it's gonna become. So it's a little bit behind. And it's just simply not the case that America is ready for war even if it wanted to be involved, which clearly it doesn't in those first couple years. The big change happens in kind of sort of May/June 1940 when it's clear that crisis is happening on the continent. And Roosevelt is really interesting. I'm a big admirer of Roosevelt. I think he's-- I think Britain and United States have many advantages over their Axis competent opponents, but two--one of those big advantages is the statesmanship of Churchill and Roosevelt and I think that's probably where the myth of--the of how we view the Second World War is really bang on. And Roosevelt's really interesting because of course he's come to power in 1932 on an isolationist ticket. You know, it's all about kind of sorting out the Depression and getting America back on its tracks. It's a sort of--you know, they have a very small arms services and armed forces, and there's a reason for that. Because if you have a small armed forces you tend not to use it, conversely if you do have a large armed forces as you all well know of the last fifteen/twenty years you do tend to use it. And so that's why they're so small, but Roosevelt has been thinking right from 1938 when Hitler starts to flex his muscles, taking over the Anschluss, taking over Austria, taking--going into Czechoslovakia, he's starting to realize that actually this is quite a serious threat. And he believes that actually the Atlantic is not the great barrier that it is perceived to be and that actually they've got a big problem on their hands potentially because air power is developing so quickly and naval power is developing so quickly. Very soon the unite states might well be within range from Europe, and then it's in trouble. So it's in interest to make sure that Britain and France stay in power. And then of course when France loses in June 1940 and Britain's army is defeated, suddenly he's sort of having this panic of what's he gonna do. And he's really strongly believes that he is the only man that can lead America through this troubled water ahead, but that means sort of making himself president for a third term which is unprecedented, and you know-- is he gonna pull that off? And he's not gonna pull that off if he's beating the drum for war because America is so isolationist in culture and concept and history and all the rest of it. And so he's got a very, very difficult line to tread. Now, in April 1940 there's a really interesting bit of legislation, which is
passed by Congress, and this is the Government Reorganization Act. And it sounds really dull, and it sounds really boring, but Roosevelt has been fighting for this for the last two years. Again, it just demonstrates his foresight because what this does--this gives a new executive office of the president, and what this does is basically allows him to operate entirely independently of anyone else. It's basically he's the top dog and he can do what he likes. Within this executive office comes the joint chief of staff, which is really important and also some other bureaus and interesting little organizations, which are gonna be very, very helpful in a time of war to have that complete control over. And he also creates the office of emergency management, and this he doesn't enact immediately, but he does in the last week of May 1940 just before the Dunkirk evacuation is about to start and where it's clear that France is gonna lose. And what he does is he organizes something called the National Defense Advisory Commission, and it's very deliberately called an advisory commission when in actual fact it's nothing of the sort. And what he does is he gets along loads of businessmen--Edward R. Stettinius, you know, the chairman of the Steel Corporation. He gets this chap, Bill Knudsen, a Dane who's emigrated to United States in 1900 and who's risen to become the chairman of General Motors in 1937. And Bill Knudsen knows an awful lot about mass production. You know, cars are his business. There's a reason why there's four Americans for every motorized vehicle in the USA, and Bill Knudsen's got a huge part in that. And what the president realizes is he's gonna get these businessmen to do that difficult job, get America going. And you might think that kind of factories and economics and logistics are really boring but trust me they're not. This is just some of the most amazing characters some of the most amazing drama that you'll ever come across because while America has all the potential to create 50,000 aircraft a year and all the rest of it, and 74,000 Shermans, that potential is not guaranteed by any stretch of the imagination in 1940. And of course what Knudsen points out is that mass production is the key because if you keep things simple, then--it's not about cutting corners; it's about making things simple. If your equipment is simple, your tank is simple, your aircraft is simple, then it's easier to put together. It's cheaper to put together. It's quicker to put together. So simplification is the key. And then you can have your shadow factories, and you can get General Motors and, you know, Chrysler and Ford and all those other ones doing more work because all they've got to do--the guy on that line, all he's got to do is fit that particular bit that he's been told to fit. But all this is gonna take time because first of all you've got to create machine tools, and those are the tools that make the bits, and they're incredibly complicated pieces of care, and there's no avoiding that. And that takes about six months. Then you've got to train people up to make these new bits of weaponry. And then you've actually got to do the crossover between civilian manufacturing and war manufacturing, and that's about eighteen months, which is why America is not in a position to really stop going for gold in war production until the very end of 1941, conveniently when it enters the war. And so for all that time Britain is very much on its own. Yes, America is manufacturing things for Britain, but not at the speed of which Britain would like. And Roosevelt is able to get away with this by hiding it under this advisory commission to start off with and also by saying, "All I'm doing is helping our friend Britain. You know, it's not for us. We're not going to war." And of course he gets elected in 1940 for the historic third term, and, you know, the foundations of labor. It's really interesting. It's a really, really rocky road. I'm not gonna go into too much here, but it's a very rocky road. More labor strikes in 1941 in the US than any other year in American history. So it's a great story, it really is; you're just gonna have to trust me on this. I'm gonna rattle on because I'm in danger of going beyond my fifty-two minutes and three seconds. But Mussolini-- well, the interesting thing about Italy is if Germany is resourceful than Italy doubly is. It's about fifty years behind in terms of industrialization
from Britain, France, and Germany, and certainly America. A third of the population have not done--are illiterate. Only eighteen percent of Italians have gone beyond primary school. It is still a kind of geographical concept more than a nation state. It is very insular. Most Italians do not--are not interested in being in a war. And of course Mussolini lacks that kind of world vision, that geopolitical understanding that Roosevelt and Churchill has. He completely lacks that. He just doesn't have that worldview. He's very kind of narrow, a bit like Hitler. And his problem is is that what's he gonna do, because what he's worried about is actually--he's very dependent on Britain. Britain allows iron ore from Sweden to reach Italy. You know, Britain provided most of the coal for Italy. So he's dependent, but at the same time what he doesn't want to do is become consumed by the Third Reich. He doesn't want to become a vassal of Nazi Germany, so he sides with Hitler because politically obviously they're closer together than the democracies, and then he bides his time. And he waits for a point to get into the war until it seems like Britain has lost as well. But then of course Britain doesn't sue for peace and suddenly he's face with his problem of having to actually fight a war. But the problem is is that his armed forces are really behind. He also isn't as powerful as he would like. He's a dictator, yes, but there's still a king in Italy. He's still answerable to the Grand Fascist Council. He's answerable to the Armed Services. He's answerable to the Italian people, and he knows he's got to keep them sweet, which is one of the reasons why he doesn't import arms from America or from Britain. He makes it himself, so Fiat and Ansaldo have a little sort of monopoly, and most of the stuff they produce is rubbish. You know, they have a--it's just not geared up for war. The officer class is absolutely hopeless. The military secretariat, which is the main sort of process of government, they knock off at two o'clock every day. And after the tenth of June 1940, they--"Hang about, chaps, perhaps we ought to kind of try to work a little bit harder here. Let's knock off at four instead." And they go, "Mm, yeah, alright," sort of reluctantly. And by July they go, "Do you know what, should we just go back to two o'clock?" And everyone goes, "Yeah, why not?" And that's what they do. It's amazing. For the rest of the war the main feature of government is knocking off at two o'clock. It's absolutely extraordinary. I mean, imagine Americans working that slackly. Never happen. And also their navy is the most advanced of their three arms of the armed services, and yet they haven't got radar, they haven't got aircraft carriers, so even that is behind inadequate. And as soon as they come up against the British they really come a-cropper. Britain may be kind of playing second fiddle certainly on land to Germany but not to Italy. And of course disastrously they go into Greece. They think Greece is gonna--is only 30,000 strong, the army in fact is about--I'm sorry, 300,000 strong actually is about 3 million strong. They completely underestimate the strength. When they run out of boots they send a vast consignment of new boots, and they're all left-footed. I mean, this is the kind of sort of level of incompetence on which they're operating, and it all goes horribly wrong. And in the western desert, you know, 36,000 British troops manage to defeat two armies of 160-plus-thousand, 133,000 of them quickly find themselves in a bag. And it's really bad news. And this is very bad news for Hitler as well, because he's gonna have to--suddenly his southern flank is dangerously exposed. Britain is there because it's convenient. Because it's got oil from Iraq and from Persia, Iran--and so that's got a ready supply to feed that particular theater. It's got lots of troops that are there; it's a very good for convergence point for troops from the dominions, from South Africa, from New Zealand, from Australia, from India, and it is those dominion troops that make up the bulk of the western desert force and the embryonic egg farm as it becomes. And it makes good sense, and who knows? We might--Britain might knock Italy back. They might get out of the war. We might sort of draw in the Germans. We might get some valuable experience here. We'll hold our heads up high. We can show the British people
and the world that we're still fighting. So there's lots of good reasons. It's a theater of strategic opportunity for Britain, and that makes perfect sense. But of course for Hitler this is a disaster. This is the last thing he wants. He's lost the Battle of Britain. He's now already starting to look east because east is— only in the Soviet Union that can he find these resources. He needs primarily food but also of course fuel, and that's where he's got to get it, so he's got to turn east. But he's not quite ready yet, but on the other hand he's just had this amazing victory against France, and France is a superpower so how hard can it be up against a part of Untermenschen and Slavs? So really it should be easy peasy. And yet he needs to focus on that because one thing he's completely aware of is that the Red Army is huge and the Soviet Union itself geographically is absolutely enormous. And so really he needs all his resources pumped into that one big effort. What he doesn't want to be doing is dispersing his resources by little sideshows in the Mediterranean and propping up his Axis partner. He's frankly turning into a complete deadbeat. And so that's a quandary. So he does send over two armored divisions, Panzer divisions, to North Africa by commanded Erwin Rommel, and you know, two Panzer divisions later become three. On the face of it that doesn't sound like a huge amount but let me just tell you in Operation Barbarossa, the invasion of the Soviet Union in June 1941, they still only have nineteen Panzer divisions, so two/three is quite a big number. You know, they would be really useful in the Soviet Union. So it's a pain for Hitler. And what's really interesting is, you look at the Balkans, you look at Greece, those two last great blitzkrieg victories of the spring of 1941, and they really are that kind of sort of effigy of blitzkrieg. And yet, and yet, what a waste of resources they are. You know, Hitler needs this like a bolt in the head. His planning staff, you know, General Halder and von Brauchitsch and all the rest of them, they just don't need it. And again it looks like one-way traffic for the Germans but actually it's a real bore for them. It's a real problem, and it's—we look at it as another great victory, but actually not only that, you've then got to tie up the Mediterranean, you've got to pump resources into it, you've got to back up the Italians and make sure they don't lose again, and, you know, it's a complete waste of time. But it's not as much of a waste of time as the invasion of Crete in that third week of May 1941. And again we all know it was a close-run thing that the British nearly held out and in fact should have held out—it was not Britain's finest hour, it has to be said. But again, you know, these are Fallschirmjager, Fallschirmjager paratroopers; they're the elite. They're the best-trained troops in the German armed forces, and what are they being delivered by? They're being delivered in those transport planes, those Junkers 52s. How many do they lose? They lose two hundred and fifty. And boy are they gonna want those when they go into the soviet union, and they're not gonna be there because once they've gone, they've gone. And of course the point is, look at Crete. You know, what's the value of that? What's the strategic importance of Crete? A couple of months after the fall of Crete—and it has to be added that most of the British as well get away—a couple of moths after that in in July 1941 combined free French and British take Syria plus those airfields. Now the major target for an air attack from Crete for the Luftwaffe is Alexandria and the Middle East, and yet Syria is--Alexandria rather is equidistant between Crete and Syria so the Allied capture of those airfields in Syria rather negates the value of Crete. And I just remind you again, that was just a few weeks before operation Barbarossa which is without a doubt gonna be the biggest clash of arms ever in the history f warfare and one in which Germany is not guaranteed to win at all; in fact it's still a massively long shot for reasons I'll explain in a second. And of course the other thing is while they're doing all this they are neglecting the battle of the Atlantic, that key battleground which seems to have been forgotten by the Germans. I mean, it may stagger you to know that in the whole of 1940 the most U-boats that were operating at one time in the Atlantic was fourteen. Most of the time it was half that. You
know, again we think of these convoys being mashed. Eighty to eighty-five percent of all convoys got through unscathed. In 1940 the British sailed 18,772 individual shipments, of which 127 were sunk. That's 0.7 percent. So, yes, in that "happy time" as the U-boat crews called it there were sinkings of 350,000 tons one month, 450 another month and so on. But once the Royal Navy was off anti-invasion watch, so those convoys got protected, and by the spring of 1941 things were going really badly wrong for the U-boat force. Three of those aces had gone--those big, big aces had gone by May of 1941. Gunther Prien, one of the great U-boat aces here; he was lost in March 1941. Otto Schepke, that chap I showed you in the beginning who looked like Aragorn; he was killed--crushed--in May. Kretschmer, Otto Kretschmer, was taken prisoner. They captured an enigma machine and codes, and of course the Bismarck, the mighty Bismarck, was sunk. Yes, it had got HMS Hood beforehand, but you know Britain could afford that loss. It was a big blow, but it was a loss they could absorb. The loss of the Bismarck, I'm not sure. It's a massive blow. And they're already losing, and they're losing the technological race. They're losing the intelligence race. They're losing the technology race. By this time Britain has developed the cavity magnetron, which means that you can make radars very small, and you can put them on destroyers, you can put them in aircraft. The net is already tightening around that fledging U-boat force. You know, what they really needed in 1940 was three hundred U-boats, because you have to work on the third-third-third principle--a third operating at sea, a third getting there to and fro, and a third's kind of training and refitting. And of course the problem is because the U-boat army is so small in the first place when you suddenly want to expand it that experience is gone. It's not like the royal Navy, which is really vast, so when the royal navy wants to expand massively you can do so because we're an island nation. Britain likes messing about in boats. They know about clove hitches and reefs and tides and all the rest of it. So when you want to suddenly expand you can put those experienced sailors--you can spread them out, bring in the new raw navy volunteer reserve of people who've been sort of sailing around the solent all their lives or whatever, and you're in a good position. For the U-boat fleet you can't do that. You've got to get land lovers in, and it's a real problem. So they're already battling against it in the spring of 1941. And again when you look at the war it looks like--America's not in yet, it's not manufacturing to a great extent, there's humiliations for Britain in Egypt, in Greece, and it all looks like it's one-way traffic. But actually stand back and look at it again, and actually things look an awful lot more rosy. And of course on the eve of Barbarossa--this is what's really, I always think is so interesting, is the key to understanding Bewegungskrieg is there is an operational reach. In France it's kind of 250 miles from one side of the border to the Atlantic coast, and that's a kind of a--that's a reach in which the whole spearhead and wooden shaft of people on feet and with horses can operate very neatly, and it's fine in France. Because it's the most automotive society in the western world, your Panzer runs out of gas, you just go into the gas station and say, "Fill him up, Rene," and the sulky Frenchman does so. You can't do that in the Soviet Union because it doesn't have that infrastructure. It doesn't have rows of petrol stations and so on. So actually its Untermenschen-ness, its Slavic-ness that the Germans have kind of seen as a weakness is actually a strength. And the only way Germany is going to win is if it can defeat the soviet--the red army within kind of five hundred miles absolutely-max because if it doesn't the wheels are literally gonna fall off. You know, when your gasket blows, where do you get a replacement from? How does that fuel come up to the front line? And of course the gulf between those on foot and using horses and those in motorized vehicles, whether they be tanks or trucks or what have you, is getting wider and wider and wider. And I'll give you this last thought. On the eve of Barbarossa Germany has one enemy, and that's Great Britain. On the eve, New Year's Eve 1941--and I'm jumping the gun a bit from this
book--it has three enemies; it has Great Britain, it has the USSR, and it has the United States whose gold button armory armament is just about to go into overdrive. Thank you (Applause)

-Thank you to James Holland for an outstanding presentation, and thank you to Atlantic Monthly Press for sponsoring this program. The book is The Rise of Germany 1939-1941: The War in the West, Volume I, published by Atlantic. To learn more about the book, our sponsor, or the Pritzker Military Museum and Library visit in person or online at pritzkermilitary.org. Thank you, and please join us next time on Pritzker Military Presents.

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(Theme music)

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