



Foreword

999 is the 50th. anniversary of the establishment of NATO. The North Atlantic Treaty was signed in Washington on April 4th 1949. North America and the majority of Western European countries combined in the greatest military defence alliance the world has ever seen, in an effort to secure member countries against military attack and to create political and military co-operation.

The 50th anniversary is being celebrated in all NATO member countries. The Ministry of Defence awarded, on behalf of the Norwegian Government, the Norwegian Aviation Museum, in cooperation with several other institutions, the task of arranging the principal Norwegian celebration in Bodø.

NATO was established as a reaction to the circumstances around the growing conflict between West and East in Europe that had emerged after World War II. As time went on the conflict earned the name of "the Cold War", and affected world politics for many decades. During the Cold War NATO and the alliance's counterpart in the east, the Warsaw Pact, were the two principal opponents. This long period lasting almost up to the present day was characterised by an extremely antagonistic relationship between the two alliances. The whole world revolved around this particular conflict, which has no historic counterpart, in terms of type, extent or consequences.

The Norwegian Aviation Museum wished to use this opportunity to devise an exhibition that focused in greater detail on the period that the NATO alliance operated in for the majority of its existence: The Cold War.

The exhibition is housed in unique surroundings. At the beginning of the

1960s, Bodø Main Air Station constructed an aircraft hangar for the purpose of housing one of the two fighter aircraft squadrons in Bodø: Installation 96. The massive hangar was built into a mountain and designed to be able to withstand nuclear attack. The unique exhibition location, plus the fact that we find ourselves in a military area, contributes to giving the exhibition a unique atmosphere.

The exhibition endeavours to highlight some important aspects of the Cold War: What was the Cold War? What do we associate with it? What were the consequences of the Cold War for you and me? For technological development? For the society we live in? For our culture, and how we regard others and ourselves? We will endeavour to provide answers to these questions through text, pictures and artefacts. It is not our intention to attempt to provide a complete picture of these themes. They are too comprehensive for that. Rather, we are just skimming the surface. Selecting examples. If we succeed, we will have given you food for thought and perhaps inspire you to find out more.

In the long term the Norwegian Aviation Museum hopes to be able to build a permanent Cold War museum, the Cold War Globe. In a way, this exhibition can be regarded as a dress rehearsal.

The exhibition's idea, text and choice of pictures and objects are our work. Errors and shortcomings with these are the Norwegian Aviation Museum's responsibility. It must however also be said that without assistance and support from many sources the exhibition could not have been brought to fruition. I hope you will find both the exhibition and this little book that you are now holding in your hand, interesting and worthwhile.

The Iron Curtain descends *or*"The real war starts now" 1

From Stettin in the Baltic to Trieste in the Adriatic, an iron curtain has descended across the continent. Behind the line lies the all the capitals of the ancient states of Central and Eastern Europe. Warsaw, Berlin, Prague, Vienna, Budapest Belgrade, Bucharest and Sofia, all these famous cities and the populations around them lie in what I must call the Soviet sphere, and all are subject, in one form or another, not only to Soviet influence, but to a very high, and in many cases increasing measure of control from Moscow'

Winston Churchill, 1946²

he year is 1945 and the guns have just ceased firing. World War II is over, and large segments of Europe, not to mention the whole world, lie sorely injured. But in the ruins of the war, indeed before the war was over, a new conflict had emerged. A conflict between the allies from the second world war. Two of the world's states have gradually become so much more powerful than the others that we call them super-powers, and eventually most of the world's smaller countries ally themselves with one of the two super-powers in a confrontation between East and West. Between the Soviet Union and its allies on the one side, and USA with its allies on the other. The roots of the conflict naturally stem back further in time, as is the case with most. conflicts, they do not suddenly arise. However, the fear of Nazi Germany



bound the opposing blocs together for a while. When Germany was defeated, the confrontation flared up again with new and greater vigour. The Cold War had begun, and it would last for more than 40 years. The consequences were to last much longer.

The first conflicts between East and West after World War II concerned international borders and the fight for

"German racist theory led Hitler and his friends to the conclusion that the Germans as the only worthy nation, should rule the other nations. The English racist theory leads Mr. Churchill and his friends into the following conclusion: that English-speaking countries, as the only worthy nations, should govern the other nations of the world. ... Undoubtedly, Mr. Churchill's aim is war, a war with the USSR."

Josef Stalin's reply to Churchill, 19463

influence in Eastern and Central Europe, the policy of occupation of a Germany in defeat, boundary demarcation in Eastern Asia, withdrawal of Soviet forces from northern Iran and the fear of the spread of the opposing side's ideology and social system. We were gradually presented with a distinct division of Europe in two parts, with the 3rd World

There is grave danger of war ... CIA report to the American president, 19504

as the "grey zone" and an arena for rivalry between the super-powers.

The Cold War was both lengthy and all encompassing.

Throughout the entire post-war period, every country in the world has had to take the conflict between East and West into consideration. The consequences have been major. The Cold War



BAC (English Electric) Canberra, a British bomber and reconnaissance aircraft frequently used from 1950 to 1960. But in fact also used right up until recent years as, among others, a training aircraft. Photo:NL

has been so exceptional that we had to find a specific name for the confrontation: Cold War! A situation with two parties that were uncompromising towards each other and in every way were at war with each other except for one: They did not fight. The Cold War never became "hot".

So, what was the Cold War? What makes it so different from previous conflicts?

The Nuclear Arms Race

"Here it comes, the mushroom shape that Captain Parsons spoke about. It's coming this way. It's like a mass of bubbling molasses. The mushroom is spreading out. It's maybe a mile or two wide and a half a mile high. It's growing up and up. It's nearly level with us and climbing. It's very black, but there is a purplish tint to the cloud. The base of the mushroom looks like a heavy undercast that is shot through with flames. The city must be below that." Sergeant George Caron, who was on the bombing raid to Hiroshima 06 August 1945. The first time nuclear weapons were used in the war. Nagasaki a few days later was the second and until now the last.5



ost conflicts in history have been distinguished by an arms race, where the parties build up their weapon arsenals in order to stand prepared to vanquish the opponent. The parties in the Cold War did the same. Colossal amounts went to armoured tanks, aircraft, battleships, guns, and so on. But nevertheless, there is one thing that makes the Cold War different: The nuclear weapons.

Possibly that was what scared us most about the Cold War: That for the first time, Mankind was capable of annihilating itself and all life on the planet ..several times over.

SIPRI has estimated that USA in 1979 had approximately 10,000 nuclear warheads on missiles and in aircraft. while Soviet had approximately 5,000. Meanwhile, what was in the reserve stockpile is not known. In 1974, while the SALT negotiations were in progress, it emerged that USA, at that point, was capable of sending 36 nuclear charges over every Russian city with 100,000 inhabitants or more. The Soviet Union on the other hand, had the capability of striking all American cities with a population of more than 100,000 with 11 nuclear devices. This reveals a little about the size of the two nation's nuclear capabilities. Hiroshima had 260,000 inhabitants in 1945 and was decimated by one bomb.6

Both parties looked upon nuclear weapons as a vital part of their military strategy. The arsenals contained both tactical nuclear weapons for use directly on the battlefield, and strategic nuclear weapons for use against the opponent's civilian concentrations. In case of war, nuclear weapons would more than likely have been rapidly dispatched. The knowledge



WE 177. British nuclear bomb. Designed as a free-falling gravity bomb to be dropped from Tornado bombers. Was in operative service from 1966 to 1998. Foto: J&S

that nuclear weapons would be employed was intended to keep the opponent from launching an attack – a deterrent . At the same time, the fact that both sides had nuclear weapons was supposed to scare both from using them – the threat of mutual annihilation, the terror balance, or MAD (Mutual Assured Destruction).

The fear was however that the other side might consider using nuclear weapons regardless. The first to strike could possibly manage to knock out the other's weapons (so-called first strike capability), and thereby be the only one that remained with nuclear weapons. What happens then? Then it was a matter of having sufficient numbers of weapons so that it would be impossible to knock them all out (in addition to placing as many weapons as possible on submarines that could hide and constantly change position). One had to have enough remaining to be able to knock out the opponent even after the other side had tried as best he could to launch a deadly attack (second strike capability)!

Development of the nuclear arms race

1945	First nuclear test in USA	1962	Cuba crisis
	Hiroshima and Nagasaki are destroyed	1963	USA and Soviet sign an
1949	First Soviet nuclear test		agreement that prohibits nuclear tests in the atmosphere and underwater (partial test ban)
1952	First British nuclear test	1964	First Chinese nuclear test
	USA holds nuclear tests on its first Hydrogen bomb	1967	USA implements its strategy "Flexible Response" (massive
1953	Soviet holds tests on its first hydrogen bomb		retaliation has proven to be unsuitable in practice)
1954	USA implements its "Massive retaliation" strategy for use of	0.00	China holds nuclear tests on its hydrogen bomb
	nuclear weapons: A Soviet attack, regardless of location, shall be	1968	Non-proliferation agreement
	returned with an immediate, massive nuclear attack on Soviet Union itself.		France holds nuclear tests on its first Hydrogen bomb
	USA sites Honest John nuclear rockets	1972	USA and Soviet signs first disarmament agreement: SALT I
		1974	First Indian nuclear test
	USA launches first nuclear operated submarine: USS Nautilus		USA and Soviet in agreement on weapon missiles (ICBM) restrict-
1956	USA sites intercontinental nuclear		ions: Vladivostok Agreement
1957	Soviet tests ICBM	1979	USA and Soviet sign SALT II
	Both USA and Soviet experiment with nuclear missiles launched	1983	USA announces its SDI (Star Wars) Programme
	from submarines	1987	USA and Soviet sign INF
	Great Britain holds tests on its first Hydrogen bomb		Agreement on drastic reduction of both sides' nuclear weapons arsenal
1960	First French nuclear test		First truly successful disarmament agreement

Crises and Conflicts

Even if a direct, "hot" war never broke out, the Cold War was nevertheless characterised by the relationship between the two parties, NATO (USA and allies) and the Warsaw Pact (The Soviet Union and allies) was antagonistic. The conflict alternated between periods marked by acute crises and periods of détente.



The Berlin Wall is erected. Photo: NATO Media Library.

But one thing is significant: Only twice did the two parties face each



other in direct conflict. Direct armed confrontation never resulted from these conflicts but at the time of the Berlin blockade and the Cuba crisis, the whole world waited with bated breath. While the Cuba crisis was on, many compared the globe's fate with a clock ticking towards destruction, and now the hands were just a few minutes away from striking twelve.

The two parties had such utter respect for each other's military might that both sides exerted self-control to the





An American F 86 Sabre fighter aircraft and a Soviet MiG 15 fighter aircraft. Representatives of confrontations between the super-powers. The aircrafts represent the ultimate in fighter aircraft developed by the two super-powers, in the early 1950s. They met for the first time in dogfights during the Korean War. Photo: NL

The most serious crises and conflicts

1948/The Berlin Blockade:

1949 Disagreement on the administration of Germany's occupied capital between the Soviet Union on the one side, and the western powers on the other. The Soviets block all roads from West Berlin to the west in order to force an undivided Berlin under Soviet supremacy. The Western allies started the greatest airlift operation of all time to bring supplies to West Berlin and demonstrate that the blockade was useless. The Soviets abandoned the blockade after a year. The states of East and West Germany are formed. Berlin's *de facto* split.

1950- The Korean War:

1953 Korea was also split in two after World War II. Communist North Korea invades South and is on the verge of conquering all of Korea when USA, after UN's Security Council resolved to intervene, enters the war and drives North Korea back (The Soviet Union boycotts the UN in protest that Mao's China was not allowed to take over Taiwan's seat in UN, and thereby could not submit a veto). Finally, China sides with North Korea and the war is concluded after peace talks in 1953. The borders remain unchanged on the whole.

1956 Soviet invades Hungary: Hungary revolts against the Soviet- aligned regime in the country. Soviet invades in order to reinstate a Soviet-loyal regime. The Suez Crisis: Egypt nationalises the Suez Canal.

Great Britain, France and Israel invade, but withdraw shortly after with unfinished business, among others, due to USA's strong protests against the invasion.

The shooting down of the U2: 1960 The American spy aircraft U2, on the way from Pakistan to Bodø, is shot down over Soviet territory.

1961 New Berlin crisis – The Berlin Wall is erected: The Soviet Union does not accept Western-Allied control of West

Berlin, but does not achieve approval for establishing Berlin as a free state.

1962 The Cuba Crisis: American U2 spy aircraft detect Soviet nuclear missile bases in Cuba. USA threatens with sending atom bombs against Soviet if the bases are not dismantled and that Soviet ships on their way to Cuba with nuclear missiles do not turn back. The Soviet Union finally backs down. The ships turn back and the bases are dismantled in return for an American promise to not attempt to depose Fidel Castro's new communist regime in Cuba.

First The "new" Cold War:

half

of

The Soviet Union invades Afghanistan (1979-86)to quell an anti-Soviet regime in what the Soviets 1980s regarded as its sphere of power, but in the end must withdraw, badly maimed and without achieving their goal. USA announces the "Star Wars Programme" (1983), an attempt to create an anti-nuclear missile system. The Soviet Union sites SS-20

missiles in Eastern Europe. USA stations Pershing II missiles in Western Europe (double initiative). Soviet shoots down a South Korean passenger aircraft. 269 passengers killed. USA invades Grenada in order to depose a newly elected left-wing radical regime.

extreme in order to avoid direct, armed conflict. In all of the other conflicts where the two sides were involved, only one side made a direct move. The other settled for fighting through "middle men" by supporting one side in the war with weapons and material.

The many minor wars that the two

parties were involved in, were often not started or initiated by either of the sides. NATO, as a rule USA, or the Warsaw Pact, as a rule the Soviet Union, were often drawn into local conflicts because no conflicts in the world could be fought without "taking consideration" of the Great Conflict.





Ideological conflict

The Cold War was also a conflict between two different ideologies, two distinct social systems.

The West feared that communism would spread, and with that – Soviet power. Ever since the revolution in 1917, the Soviet Union had had the objective that communism should, in fact, would spread to the rest of the world, almost of its own accord. The establishment of communist regimes in Eastern Europe, China and other countries in Asia, Africa and Latin America, plus massive com-



Lenin, founder of the Soviet state, looks towards the shining socialistic future, together with representatives of the different trade and professional groups in the Soviet Union. Soviet propaganda poster. Photo: NL.



Early 1980s: USA's President Ronald Reagan and Great Britain's Prime Minister Margaret Thatcher. At this time, the ideological distance between East and West was at its furthest span, with conservative governments in USA and Great Britain. Photo: NL.

munist parties in Western Europe just after World War II created anxiety. This resulted in the fight against the Soviet Union also exposing the destructive and suppressive aspects of Soviet communism.

But fear of the West was as strong in the Soviet Union. The West had sent military forces to quash the revolution in Russia. Many in the Soviet Union had also looked upon Nazism as another Western attempt to crush the Soviet state.

The struggle for power

From the first conflicts between the Soviet Union and the Western Allies in the wake of the Second World War, the Cold War gradually spread to the rest of the world. In the first two years after World War II, the Soviet Union established loyal communist regimes in its occupation zones in Eastern Europe and North Korea. In China, the conclusion of many years of civil war in 1949 brought a quarter of the world's population under communist control. At the same time the West ensured that communist parties outside the control of the Soviets were kept in rein.

When the European colonies began to dissolve, the conflict spread to Africa, Asia and Latin America. The whole world was gradually drawn into the Cold War and forced to choose sides. Wars of independence, civil wars and lesser local conflicts often became more serious, were lengthier and received more international attention than they perhaps should have done, as the East and West were almost automatically opponents in

Carmela USA

practically all conflicts.

Towards the end of the 1940s the West decided to form a system of alliances in order to prevent further spreading of communism, and possibly diminish it in some places. In 1949 USA, Canada, and large segments of Western Europe entered into the NATO Alliance. SEATO was formed in 1954 between the USA and a number of states in Southern Asia. In 1955, several Middle East countries and USA entered the Baghdad Pact (from 1959: CENTO).

The Truman Doctrine
At the present moment in world
history nearly every nation must
choose between alternative ways of
life. The choice is too often not a free

choose between alternative ways of life. The choice is too often not a free one.

One way of life is based upon the

will of the majority, and is distinguished by free institutions, representative government, free elections, guarantees of individual liberty, freedom of speech and religion, and freedom from political oppression.

The second way of life is based upon the will of a minority forcibly imposed upon the majority. It relies upon terror and oppression, a controlled press and radio, fixed elections and the suppression of personal freedoms.

The free peoples of the world look to us for support in maintaining their freedoms.

If we falter in our leadership, we may endanger the peace of the world — and we shall surely endanger the welfare of our own nation.

President Harry Truman, 1947⁷

...The proclamation of this doctrine (the Truman Doctrine) meant that USA has moved towards an attempt to impose its will on other independent states, while at the same time obviously using the economic resources distributed as relief to individual needy nations as an instrument of political pressure.

. Soviet's Deputy Minister of Foreign Affairs Andrej Vyshinsky, 1947⁸

In the beginning, NATO was mainly a form of political assurance from USA to Western Europe that they could rely on USA's protection and concentrate on economic recovery following World War II. After the Korean War American military budgets increased drastically, as did USA military support to Europe. NATO was therefore rapidly converted to a solid military alliance.

The member countries' military forces and military strategies were built



Signing of the North Atlantic Treaty. Photo: NATO Media Library.

up and co-ordinated within the framework of this co-operation.

In the period between the two world wars, the Great Powers' leaders had hesitated in "giving as good as one got" too early in the piece with Hitler. This was no doubt one of the major factors in the great difficulty the allies experienced in beating Nazi Germany in armed conflict. This Was a mistake that the West, first and foremost that the USA and Great Britain were extremely concerned with not repeating again. An important reason for the formation of NATO was therefore to show the Soviets a united western front, because one feared that the Soviets, who after Germany's fall had massive military forces based in Eastern Europe would try to gain control over Europe. For 50 years, longer than any security-political and military alliance ever, NATO has thereby bound North America and Western Europe together in a shared destiny. For better or worse.



NATO exercises in Northern Norway. Photo: NATO Media Library

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all.

From the Atlantic Treaty, article 59



Soviet soldiers in Eastern-Europe. Photo: Vaba Hummuseum

In 1955 the Soviet Union and the Eastern European communist states signed the Warsaw Pact. Eastern Europe committed its military forces to the Soviet Union, and NATO's adversary was born.

Another significant political development occurred in the post war period, alongside the Cold War. The old colonial powers were no longer capable, and often uninterested in retaining their extensive colonies around the globe. Europe was no longer the world's centre of power, and a long line of independent states emerged. As neither Soviet nor western countries, the new states regarded themselves as a "third world" that initially had no interest in being drawn into the conflict between East and West. Both East and West however were keen to increase their spheres of influence and hold the opposing party in check.

Many of the new states also had their own conflicts to deal with. They soon found out that the super-powers were willing to support them in order to secure power. For example, USA supported Israel, Soviet then found out that it could gain power in the Middle East by supporting Israel's Arab neighbours. Boundaries in the Third World however were never as defined as those in Europe. Countries like Egypt and Ethiopia discovered that it was possible to "jump" from one super-power to the other.

Less visible were the internal struggles for power in many countries. Where a country's government declared itself pro-Western in the ideological conflict, Soviet or its allies willingly supported the rebellious factions against these governments. The West did the same in states that declared themselves communist.



.... But first we say "democracy!!

Internal dissension

E ast against West and bloc against bloc. But internally, the blocks were not always united.

Dissension in the communist camp

After the Second World War.

Soviet troops occupied Eastern Europe. The war had convinced the Soviets that Eastern Europe's loyalty was vital for the Union's security. Hundreds of thousands of East-Europeans had marched at Nazi Germany's side into the Soviet Union during World War II. The East European countries that had resisted Germany had proved to be too weak to offer any significant opposition.

But how did one secure Eastern European loyalty? Yes, by ensuring that all East European countries implemented a political system modelled on the Soviet Union, with leaders who recognised the Soviet Union as its protector and guiding star, and thereby would be willing to let its economy, military apparatus and political system be integrated in a Soviet Union-dominated system.

But to make this a reality was not simple. Rightly enough, the Soviets were superior in military terms. But initially, communism did not have a solid footing in Eastern Europe. The Romanian Communist party had for example, before the war, under one thousand members. Eastern European communist leaders were therefore completely dependent on Soviet bayonets to retain their seats of power. Many of these countries had also looked upon the Soviet Union as a traditional threat. Neither were the Soviets capable of "greasing" Eastern Europe with financial subsidies (on the contrary: The Soviet Union was so devastated after the Second World War, that financial support went in the opposite direction).

The "brotherhood" of Soviet Communism had therefore in many states to be forcibly introduced and maintained, and the pact states kept on a tight rein. Democracy and government by consent would have presented too great a risk . So the foundation was laid for subsequent problems. If Soviet control should relax (or appear to relax) unrest and protests could easily break out – and frequently did.

Yugoslavia was one of the few countries in Eastern Europe that was not forced to accept a communist regime, but established its own system, based on the resistance movement against the Nazi occupation and under the leadership of Josip Broz Tito. But Tito refused to dance to the Soviet Union's tune in everything. He occupied himself with plans to gather the Balkan countries Yugoslavia, Greece, Bulgaria, Romania and Albania in a union. A union of this size would be difficult for the Soviet Union to control. Yugoslavia was therefore excluded from the Soviet controlled international communist co-operation organisation Kominform in 1948. But the Soviets could not force Yugoslavia into the fold. Yugoslavia was too powerful for that and Tito too autocratic. Therefore Yugoslavia went its own way, with its own brand of communism.



Revolt in Poland in 1970. Photo: Stanislaw Czartoryski.

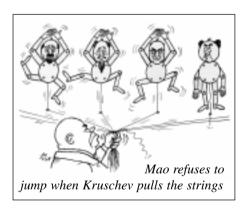
Next page: From the Soviet invasion of Prague. Photo: Johnson & Schjesvold



On Stalin's death in 1953 an uprising broke out in East Berlin. It was quashed. In 1956, after the new leader of the Soviet Union, Kruschev had attempted overtures towards Yugoslavia, and accepted Yugoslavia's ambition to follow "its own path to communism", Hungary attempted political reforms but these were rapidly quashed by a Soviet invasion. The Hungarian reforms were too ambitious, and the Soviet Union feared that Hungary was on its way out of the Warsaw Pact. Czechoslovakia's attempt at reform 12 years later, in 1968, was also dealt with by an iron fist. Poland was also an eternal cause of anxiety, with constant rebellions, in 1953, 1956, 1970 and 1981. In later years a military junta ruled Poland, when this appeared to be the only way to secure a Soviet-friendly regime in a heavily anti-Russian country. But in the end. Poland was the first to break with the communist power monopoly in a peaceful manner in 1989. The independent union, Solidarity and the military regime started round-table talks with a view to a transition to a multi-party system.

In 1960, at about the same time as the establishment of Castro's regime in Cuba gave the Soviet Union its first foothold in the Western hemisphere, China broke out of the Soviet Union aligned camp following strong ideological disagreement. China took Albania and North Korea with it. When China also tested its first nuclear weapons in 1964, the Soviet Union suddenly found that it had a new enemy on its south-eastern flank.

When Mikhail Gorbachev, towards the end of the 1980s introduced his reforms in the Soviet Union, with more political openness – Glasnost, and attempts to introduce economic and bureaucratic reforms – Perestroika, he loosened Soviet Union's iron grip on Eastern Europe. In the space of a short time the communist regimes in the East Bloc countries fell like a house of cards. Eastern Europe tore itself loose. The Warsaw Pact disintegrated. Yes, even the Soviet Union itself ceased to exist during the early 1990s. In April 1999, three of the former East Bloc countries had in fact become NATO members.



Opposition

The need to present a united front to a hostile-minded world made potential oppositions to a threat. Other political opinions, other loyalty ties were opposed. Entire groups of peoples were at times regarded as suspect: Jews, almost always, Germans Tartars and Baltics – during and after the Second World War.



Several of the smaller nations in the Soviet Union were dissatisfied with the Russian dominance. A common way to express their annoyance was through underground newspapers, like this example from the Latvian independence movement.

Religion was only partially tolerated. Especially Catholicism was suspect, due to Catholic loyalty to a leader resident outside the Soviet Union, the Pope, who was outside Soviet control.



Soviet labour camp for dissidents. Photo: Amnesty International.

Many persons were under constant surveillance, many were sent to the labour camps in Siberia, and many lost their jobs. To hedge your bets on the wrong horse during the many power struggles in the Soviet leaders' stall could be fatal. Under Stalin massive "purges" took place, amongst opponents both real and imagined After the Stalin regime dissidents did not risk their lives to the same degree, but dissidence was still dangerous .



Andrej Sakharov, Soviet nuclear physicist and dissident. He was placed under house arrest for many years. Photo: Amnesty International

Contention in the West

There was also disagreement and internal conflict in the Western Alliance and among countries loyal to the USA. With the Suez crisis in 1956, Israel, Great Britain and France were strongly criticised by the UN for having occupied the Canal Zone. One of the loudest critics was USA. The USA had traditionally been an opponent of Europe's attempts to make the world its colony. During the break up of the European colonies, the

USA supported the independence movements in several of the colonies, for example, when Holland was unwilling to let its former colony Indonesia have independence.

When Fidel Castro's revolution seized power in Cuba in 1959 and brought down the dictator Batista, the USA lost its former dominance over the island. Neither could the USA prevent Cuba turning to the Soviet Union shortly afterwards. This resulted in, the arch-enemy gaining its first ally in the Western Hemisphere. Cuba's severance from Western hegemony also shook USA's hegemony in the rest of the Western Hemisphere. An example of this was Mexico, which maintained diplomatic and economic relations with Castro's Cuba despite protests from USA.

Not long after Soviet "lost" China, France pulled out of NATO's integrated military structure in 1996 and the Allies' headquarters had to be moved to Belgium. Even though there was scarcely any doubt that France would be found on the American side in the event of a major European war, the country's aim was to have foreign affairs policy that was neither pro-USA nor pro-Soviet but first and foremost French. In her ambition to achieve greater independence from the super-powers, France vetoed Great Britain's entry into the European Common Market as she saw the British as being strongly USA-aligned.

A greater loss for USA came with Vietnam's fall to the communists in 1975. This region was in itself of no vital importance to American interests, but the country had fought a major war to avoid this. The odds were high, and defeat was very demoralising. It also created a widespread anti-American

feeling across most of the world, including among the country's allies, as well as being a source of political conflict on the home front.

In Nicaragua, a communist rebellion movement replaced a pro-American military dictatorship. And in Iran the pro-American Shah was deposed by a fanatical anti-Western autocracy in 1979. Conflicts between Greece and Turkey, both NATO members, have also put the Alliance to tough tests.

USA – internal conflict and direction

There was also contention in USA about the role the country should play internationally. Anticommunist feelings spread in the 1950s. It was Senator Joseph McCarthy who systemised the witch-hunt for communists. Politicians, scientists, artists and several others were interrogated, many were put under surveillance and encountered problems in their working life. Persons with real or alleged communist sympathies could, both in the USA and other Western countries, encounter problems and meet obstacles in their lives.



..staggering technological developments

ar is the Mother of all things, said the Chinese philosopher and strategist Hun Shen in the 7th century. By that he meant that it in time of war that technological development shoots ahead. War creates a need to find that little extra that provides the upper hand over one's opponent. This is at least one area in which the Cold War did not differ from previous wars and conflicts. On the contrary, the Cold War more

than any other period of conflict has worked favourably for technological creativity. It is in the post-war period, the Cold War's epoch, that the world has witnessed a sensational development of technology, but also a development that has a lot to say for our daily lives. How has the Cold War contributed to this technological development then? Here we endeavour to show you examples within some areas. You will no doubt know of others

Military and civilian technology

nvestment in development of new, high-technological weapon systems has been given top priority during the post-war era. A spin off from these investments has been a multitude of new technological advances that have proved as important for society at large as they are to the military. A large proportion of new military technology has been directly transferred to non-military products and



Penguin missile. Photo KDA.

some of the research that has been carried out as well as a number of products that have been developed have been converted for non-military use. At the same time, companies have developed products for non-military purposes that have been converted for military use.

In 1946 Norwegian Defence Research Establishment(FFI) was established at Kjeller near Oslo. The Norwegian Armed Forces saw the need to develop, among others, new high-technology weapon systems themselves. The institute, hereafter Kongsberg Våpenfabrikk, would operate applied research, and Kongsberg Våpenfabrikk would then assume responsibility for any further development and mass production. The other key participant in Norwegian weapon production, Raufoss Ammunisjonsfabrikk has participated in production of weapon parts, ammunition and similar, in co-operation with FFI and Kongsberg.



From military to civilian technology: The Kongsberg Group is also heavily engaged in the European shuttle programme. Photo: KDA.

The Kongsberg Group is an excellent example of a Norwegian company that has been in the forefront with regard to the development of new military and civilian technology. Kongsberg Våpenfabrikk was established 1814 in order to produce small arms for the army. After the Second World War, the company's development literally took off like a rocket, and gradually sales of products for the civilian market amounted to 70% of company turnover. New factories were established across the entire country, and the company produced everything from the new Terne, and later the Penguin surface-to-airand air-to-surface missiles that were developed in collaboration with FFI, to electronic navigational equipment and spare parts for vehicles. Following financial problems, the company was split up in 1987 into several independent companies. The old defence division was eventually called the Kongsberg Group, which includes companies such as Kongsberg Defence & Aerospace. Nowadays they produce both military products such as missiles, command and

guidance systems for various types of weapons and military radio equipment; to civilian products in astronautics (including equipment for the European space shuttle Ariane). Another company in the group, Simrad produces electronic equipment for ships, fishing boats and marine-based operations

Another example of Norwegian investment in military technology with a civilian "spin-off effect" is NAMMO Raufoss, Raufoss Ammunisionsfabrikker was established in 1896. In 1998 the company amalgamated with similar companies in Sweden and Finland and took on the company name of NAMMO Raufoss. It produces ammunition for small arms and guns, as it has done from the start. But also engines for the renowned Sidewinder missiles, plus Terne and Penguin, and civilian products like emergency flares and fireworks. Additionally, the old Raufoss Ammunisjonsfabrikker produced spare parts for motorcars, such as bumpers.



The development of a reliable communication network provided military and civilian benefits. Photo: J & S

Electronic navigational equipment is an extremely good example of products initially produced for military objectives, but as time went by with as great a value for the civilian industry. Mid-1950s the American Defence Department developed a navigation system for its battleships, based on radio navigation, which was called LORAN-C. In 1974 it was exchanged for a new, satellite-based navigation system called GPS. Then all LORAN-C stations that had been installed around the globe were taken over by the respective host countries, and adapted to serve civilian shippina.

Today GPS is also accessible for civilian use (you may well have installed it in your boat), and both LORAN-C and GPS are currently in use as complementary navigation systems for civilian shipping, fishing and pleasure boats.

Photos: Bodø Main Air Station and Tom Melby



Radar and other surveillance systems have been decisive factors in maintaining military superiority, but are just as useful in for instance, civil aviation.



The Computer Age is upon us

The development of computer systems is and has been extremely important for military striking force. But think about what computers mean to the civilian community!





Photo: NL

The Internet was developed by the American Military in the 1970s. There was anxiety that the opponent, in the event of war, would create major difficulties and confusion by bombing communication lines: The usual communication lines like telephone systems were vulnerable. The main power supply could be cut, vital telephone switchboards could be destroyed. How



could one design a system that was not dependent on a few vulnerable junctions: The solution lay in trying to make a system without junctions. A system where a message had many alternative routes (electronic highways) to the recipient, so that if one route was destroyed, the network would automatically find another, or split up the message and let each segment follow different routes. A network of numerous computers inter-actively

connected to each other. An intelligent communication network. An integrated network. Internet. After a period of experimenting more alternatives were found. One of these was given to American universities. Perhaps they could also use it? How big a percentage of Norway's population use Internet daily?

And what about all the computer controlled equipment we never "see"? Modern elevators. Passenger aircraft. Doors. Alarm installations. Booking systems. Lighting systems. Luggage conveyer belts. Power supplies. TV. The car. The train and the microwave. And a myriad others will no doubt spring to mind.? Can you think of areas in our daily lives where computers do NOT play a role? (Many predict that we will experience the true extent of how computers run our lives on or immediately after January 1st 2000).



Intelligence

The Iron Curtain was an effective obstacle for exchange of knowledge between east and west. Lack of knowledge resulted in the mutual increase of the opposing bloc. This could have led to irrational action with catastrophic consequences.

A highly crucial part of defences on both sides was therefore the intelligence service. The intelligence services' task was to fill in gaps in knowledge about the other side so that both parties could plan and act in greater accordance with reality. NATO did not have its own intelligence service, but was dependent on contributions from member countries. Norwegian authorities fulfilled its obligations by Norwegian intelligence yielding information not only for national use, but also for the benefit of the Alliance.

The Northern Regions were especially important for strategic reasons. We will get back to the reason why. But it was often the case that new Soviet weapons technology, submarines, surface vessels, aircraft and land-based weapon systems were introduced first in the Northern Regions . In addition, many crucial Soviet weapon systems were developed and tested here. This placed great challenges and demands on the Norwegian intelligence service to obtain relevant information and knowledge from the other side, as this service was the only one in NATO with a permanent base in the Northern Nordic Region . Norwegian intelligence would sound the alarm on any attack from north western Russia; this was the principal task. In order to achieve this, the intelligence service cooperated with the Royal Norwegian Air Force, which played an important role in gathering in information utilising aircraft such as the Albatross and Orion., The air force also had a number of manned land-based surveillance stations. Every attempt was also made to obtain information on all new Soviet weapon systems.

The intelligence service was therefore an area where technology played a principal role. New technology was constantly introduced. Listening stations were established to monitor Soviet activity. If the Soviets tested a new weapon system, the listening stations endeavoured to pick up all signals that were sent out. By using the laws of physics together with photographs, radar data and all other

relevant information that was available, one could reveal signal characteristics so that it was possible to recognise the weapons system in the future and calculate its capabilities and weaknesses. The weaknesses were exploited to design and construct counteractive means for the protection of own and allied personnel. as well as mobile and permanent installations. Outer space was also exploited. The super-powers had satellites that monitored the oceans and could send information to control stations onshore. for example in Norway. Target data could also be transmitted to aircraft or ships which could assist in guiding missiles to selected targets.

In turn, effective counter –measures against weapon systems led to the opponent modifying its existing weapon systems, or introducing new. Thereby one had a technological "diamond cut diamond" situation that took place during the entire Cold War. Intelligence was therefore an extremely important driving force for technological progress and improvement.

This equipment is typical of Cold War technology for the gathering of technical intelligence, for example signals from the testing of new weapon systems. This is usually called Electronic Intelligence (ELINT). The eauipment can also be used tactically, Electronic Support Measure (ESM), to



identify weapons platforms (aircraft, land stations and vessels) and their weapon systems. Photo: J&S

Technology in the east-west conflict

The Cold War was also a technological race between East and West. It was therefore vital to prevent advanced technology developed in the West from falling into Soviet hands. In 1949 COCOM (CO-ordination COmmittee for Multilateral export control) was established by American initiative in order to prevent the export of strategically vital goods to the Soviet Union, other East Bloc countries and China. Members were all NATO countries, with the exception of Iceland. plus Japan and Australia. COCOM set up a list over high-tech goods that were not to be exported to the East Bloc. The organisation folded in 1994, but up until then it was the arena for yet another area of conflict in the Cold War.



A Soviet submarine propeller ... an example

It created a furore in 1987 when it emerged that Kongsberg Våpenfabrikk and the Japanese company Toshiba had sold equipment to the Soviet Union that enabled the Russians to produce stealth technology submarine propellers. It was definitely a breach of the rules, and the Americans were livid. They looked upon it as an example that Europe, in their opinion, "sold themselves" to the enemy. But the so-called Toshiba/KV scandal was only one of several similar incidents. The Italian computer manufacturer, Olivetti, was accused in 1989 of having sold computer equipment for use in the Soviet aircraft carrier-based fighter plane YAK 41. This affair also led to internal conflicts in NATO, as the Italians maintained that USA used COCOM to place obstacles in the way of troublesome European competitors while American firms sold similar products to the East Bloc without any impediment.

Citius - Altius - Fortius

aster – Higher – Stronger. The Olympic motto can also be used as a description of the development in the skies. The NATO countries used the fighter aircraft you see on the next page in the West. A British Hawker Hunter, followed by a French Mirage, slightly newer. Finally an American F 5. Giving priority to development of advanced fighter and bomber aircraft became a

hallmark of the powerful countries. In many ways the aircraft also illustrate that even if the West was dominated by a super-power, there were also other states that would, and were strong enough to keep up with this costly element of the technological development.

The Soviet Union also invested enormous resources in military-technological

development. The country produced a steady stream of advanced aircraft, and exported them to large areas of the world. development. The country produced a steady stream of advanced aircraft, and exported them to large areas of the world.









Above: MiG-21 is the jet fighter aircraft that is produced in the greatest quantity in the world. An estimated 10 – 13,000 have been produced in Soviet, but also by others with or without a licence. MiG-21 is reckoned as the East Bloc's counterpart to the West's F 104 Starfighter.

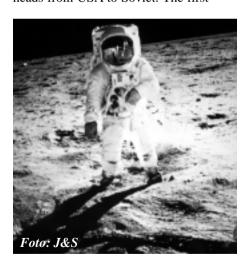
The Hawker Hunter (Top left) is a multirole jet fighter from Great Britain that was produced in great numbers in the 1950s and was exported to several countries, including Switzerland. The Mirage III E is a French 1960s high altitude fighter-bomber, that also has ground attack capability. It has sold world-wide. The F-5 Freedom Fighter is an American fighter aircraft from the 1960s. Norway received several F-5's through NATO's arms aid programme. Photos: J & S

The Space Race

ever since the first person lifted his gaze towards the heavens, the dream has perhaps existed, to one day conquer outer space. In the period before World War II men like Willy Ley and Werner von Braun ventured into rocket research in Germany. It was also in Germany that the first real rocket, the V2, was created.

It is therefore probably true to say that the Cold War did not generate the ambition to conquer the firmament, neither was it the reason for the first tentative attempts. But the Cold War was the reason that space research received such high priority, and developed at such breakneck speed.

The space race was fundamental in the search for that "little extra" that would result in an advantage over the other side as was the constant effort to obtain intelligence on the other side's activities. The ability to put Man or machines in orbit was the most attractive goal imaginable. The space race was also important ideologically. Prestigious. A showcase window for each of the super-powers' technological superiority over the other. In addition, the space race was closely connected with the arms race: if one could achieve the capability of putting men and machines into orbit, a vehicle capable of carrying nuclear warheads from the USA to the Soviet Union would also be available. As often as not development progressed in the reverse direction: Launch vehicles existed that could transport nuclear warheads from the USA to the Soviet Union which could be converted to launch satellites into outer space. Examples of this were: The carrier rocket that sent up Corona, the first spy satellite, Thor/ Agena, was a modified version of the Thor rocket that was constructed to carry nuclear warheads from USA to Soviet. The first





satellite, Sputnik, that the Soviet Union launched in 1957, used the same carrier rocket as the country's first intercontinental ballistic nuclear missile, SSMB-7.

The super-powers' space programmes, and as time went by those of many other countries including Norway, led to the development of communication satellites. These could convey TV and radio signals, telephone conversations etc., in addition to having military uses. Technology was capable of serving a large number of both civilian and military purposes. Weather satellites, medical research ... Through the investments in space research knowledge and the breadth of entertainment available to us has increased tenfold. Would space research have been such a top-priority area of investment without the Cold War?

Mental dilemma?

owadays space research in both the USA and Russia is labouring

under heavy budget cutbacks. ...

A Question of Economy

n many ways it can be said that the Cold War laid the foundations for the for the world's current economic situation. Financial aid

programmes contributed to further division between East and West, but also to increasing an integration on both sides of the Iron Curtain.

The Marshall Plan

n 1947 the American Secretary of State, George Marshall, launched the Marshall Plan to rebuild Europe after the destruction wreaked during World War II. The USA emphasised that it was to be a *European* reconstruction plan. Therefore, the organisation OEEC (Organisation for European Economical Co-operation) was founded in order to co-ordinate the rebuilding of the 17 recipient countries. The significance of this assistance for economic development in Europe cannot be overstated in terms of worth. Meanwhile, Marshall Aid had many effects besides the economic rebuilding: Closer co-operation between the western European countries, the countries' formed closer ties to the USA, the chances of communist take-overs due to depressed economic situations were considerably reduced. The European countries were better able to take care of their own defence. The Marshall Aid plan was however a major factor in the division of Europe.



The Soviet Union refused to accept aid

The Soviet Union said no to Marshall aid and also forced the Soviet-occupied countries in Eastern Europe to turn down the offer. Instead, these countries formed their own economical co-operative organisation

COMECON, in 1949. OEEC became OECD (Organisation for Economical Co-operation and Development) in 1961. The co-operation between the Western European states in OEEC also laid the foundation for what would later

develop into the EU. Similar cooperative organisations have also developed in other parts of the world. Economical integration as a consequence of the Cold War?

It is becoming more and more evident to everyone that the implementation of the Marshall Plan will mean placing European countries under the economic and political control of the United States and direct interference by the latter in the internal affairs of those countries.

Soviet's Deputy Foreign Secretary Andrej Vyshinsky, 1947¹⁰

From another angle...

Towards the end of the 1970's total global spending on military objectives was approximately NOK

seven billion a day. At the same time, 80,000 children died every day through starvation and deficiency diseases.

The Cold War - here, too?

he Cold War in our close surroundings.

– did it affect us, our everyday lives?

Our area

Far North - but not off the beaten track?

We are used to regarding ourselves as being rather out of the way, nestling on the fringe of Europe. Ultima Thule. But in the Cold War we suddenly found ourselves right in the middle of the action – or perhaps in the line of fire – depending on how you looked at it ...

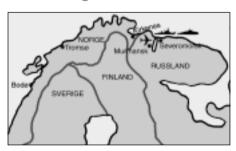
Scandinavia occupied a central position in the Cold War in three ways principally: The shortest way between the two superpowers went and still goes over our heads, we shared a common border with the Soviet Union and the North Atlantic could be monitored and controlled from the Norwegian coast.

Shortest distance



Scandinavia lies directly under the shortest flight path between the two super-powers . It was therefore obvious that any Soviet airborne or missile attack on the USA or vice-versa, would take place directly over our heads.

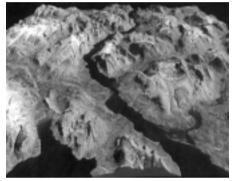
Bordering the East



The Northern Peninsula shares a common border with the Kola Peninsula. Kola gradually became the headquarters for the Soviet's nuclear arms strategy and main base for the world's largest naval force; the Soviet Northern Fleet. The ocean reaches north of Norway was of great importance as the Soviet Unions best passage to the world's oceans was here, resulting in the Soviet build up the world's largest marine base at Kola. Large numbers of Soviet country's submarines were stationed there (they were also stationed there due to the close

proximity to the Polar Ice Cap. By concealing themselves under the ice they were invisible to Western surveillance monitoring). In the vent of war, NATO would attempt to halt the Russian fleet in the Norwegian Sea. .

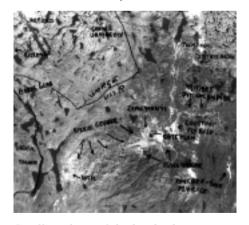
Another matter was that the Soviet Union carried out 94% of its nuclear test programme at Novaya Zemlya, a group of islands north-east of Kola and east of Spitzbergen so we were pretty close there too...



This picture of the nuclear test area at Novaya Zemlya is comprised of several satellite photographs which have been processed by a powerful computer so that it looks like it has been taken from the side instead of directly above. Noone from the west has visited Novava Zemlya since a Norwegian polar expedition visited the archipelago in 1921. The area is completely shut off from the rest of the world, so satellites and spy planes are the only ways we have of obtaining visual evidence and information of Russian activity there. Such information is of particular interest for obtaining in-depth knowledge of the extent of damage that such comprehensive nuclear tests have inflicted on the environment and in particular the Barents Sea, one of the world's richest fishery areas. Photo: Johnny Skorve.



Satellite photo of the Kola fjord, a few miles east of our northernmost county, Finnmark. A chain of major naval bases are sited here, literally one after the other. Photo: Johnny Skorve.



Satellite photo of the border between Russia and Finnmark county. Photo: Johnny Skorve

Our extended coastline ...



The North Atlantic was the central supply route – the lifeline – that bound the USA and Europe together. If a major war broke out in Europe, it would be decisive for the West that this lifeline was intact. Without American armed forces, military data, food etc., Western Europe would not be able to resist the advance of the East Bloc with its superiority in conventional military forces. For the same reason, it would be vital for the Soviets to cut this line.

The Soviet forces would however have to pass the coast of Norway in order to threaten the North Atlantic.

A trick of geography?

Our geographical location heavily restricted the Nordic countries' freedom of action. The Nordic countries had traditional pursued a policy of neutrality or partial neutrality during the conflicts between the great powers that had taken place during the previous 100 years or so. We wished to continue this policy, after World War II. In 1948 Norway, Sweden and Denmark discussed the formation of a Scandinavian defence alliance. This alliance would make the Nordic countries independent of the two

super-power blocks that were emerging. The talks ended without result. Norway and Denmark, despite everything, had a greater fear of the Soviet Union than of the USA and the West and wanted guarantees of military aid from USA, and access to American military equipment. There was no other choice than to join NATO.

The result was that the Nordic countries took separate paths in the quest for a viable defence policy. Norway and Denmark participate in the founding of NATO in 1949. Sweden remains neutral and Finland has to tread especially carefully with regard to the Soviet Union and signs a friendship and aid pact with this super-power immediately after the end of World War II. Finland was thereby seen as neutral, but had to give special consideration to the Soviet Union, even in her domestic politics. (This still colours Finnish politics; even after the end of the Cold War, and several former East Bloc countries have become, or wish to become NATO members. Finland keeps a certain distance from NATO despite having joined the EU.)

What significance has this had for the relationship between the Nordic countries?

Nevertheless – a Nordic balance

Likevel— en nordisk The ties between the countries nevertheless remained strong. The Nordic countries worked together and were able to supported each other in several international connections. The relationship became known as the Nordic Balance.

Thus we oriented ourselves in separate directions...

Norway purchased (and was given) its military equipment mainly from USA, Finland purchased a large quantity of Soviet equipment, while Sweden produced their own equipment.

Sweden invested vast resources in staying neutral, and remaining independent of both NATO and the Warsaw Pact. This led to the country investing heavily in developing its own military equipment. Without extensive -production of military equipment it would have proved to be difficult to stay strictly neutral. Sweden became one of the leading manufacturers of for instance, fighter and bomber aircraft - and designed and produced, among others, the two aircraft types Lansen and Draken. Both aircraft were considered to be among the most advanced in the world at that time. This is even more impressive when one knows that only a few states considered themselves capable of

maintaining production and development of military aircraft. Only the really large countries and the super-powers have managed that. In one period during the 1960s Sweden had in fact the largest fleet of fighter aircraft in the world. But in spite of their neutrality Sweden inclined towards the West, and had in fact clandestine military cooperation with Norway and USA. This had of course to be kept secret from the Soviets in order to avoid upsetting the Nordic balance.



The Saab Draken is a twin delta winged fighter aircraft of the late 1950s. Photo: J&S

Society changes in Northern Norway

Scandinavia's strategic location made Norway, and particularly Northern Norway, a vital area of interest for NATO. Norway's NATO membership led thereby to major changes in many areas.

Northern Norway could be an excellent springboard for offensive operations against the Soviet Union, especially against the bases at Kola. But the region was however also well suited for Soviet operations against NATO. Norway assumed the role as a an important factor in the USA's so-called perimeter strategy – a network of tactical support bases areas around the Soviet perimeter. The result was

massive development of air fields, harbour installations, arsenals, fortifications etc. in Northern Norway.



From a NATO exercise in Northern Norway. Photo: Norw. Armed Forces.



In the event of war Troms County represented a natural barrier, where it would be natural to concentrate Norway's defence. Imposing fortifications and several large military camps were built along the so-called Lyngen Line. Photo: Norwegian Armed Forces

The massive consolidation in Northern Norway changed the lives of many people. Workers, suppliers and service personnel were needed here. Previously a large section of the region's population had worked in a largely trade-dependent economy. Incomes had traditionally fluctuated in step with the availability of fish. The possibility of earning steady fixed incomes suddenly presented itself and many people switched from fishing and agriculture to paid work



NATO exercise in Northern Norway. Photo: Norwegian Armed Forces.

An American aircraft carrier arrives with a new contingent of aircraft. Photo: Norwegian Armed Forces

Not always as important

In the first post-war years, even after Norway had joined the Atlantic Treaty in 1949, Northern Norway was practically a military vacuum... It was expected that the main force of an attack on Norway would come from the south as a part of a broader attack on Western Europe. In the meantime, it was the expansion of the Kola area, and the growing strategic significance of the Norwegian Sea that was the main reason for increased allied, and especially American interest i Northern Norway. 11



Could we afford this?

Norway could not fund all the investments necessary on its own. Developments were in the main funded by NATO and the USA, through the military defence aid programme (MDAP) and NATO's infrastructure programme.



Armaments aid

Norway received armaments aid from USA for considerable - and by Norwegian standards fantastic amounts. All branches of the armed forces received tremendous quantities of materials. For example, in the course of a few years, the air force acquired a massive and effective air force, with a huge number of modern and state-of-the-art fighter aircraft. The American armaments s aid started in 1950 and continued until the end of the 1960s. For the Norwegian Air Force's part, the programme covered first and foremost aircraft - including hand books and other literature, spare parts, instruments, test equipment and ground equipment - as well as great quantities of arms, motor vehicles, radio & radar stations and Nike anti-aircraft batteries. The aid package also included the training of personnel in the USA.



Advertising poster for arms aid.

The Royal Norwegian Air Force received the following aircraft as arms aid from USA:¹²

- 1950 10 x C-47A Douglas Dakota (Skytrain transport aircraft)
- 1951 6 x F-84E Republic Thunderjet fighter aircraft
- 1952 200 F-84G Republic Thunderjet fighter aircraft
- 1953 22 x T-33A Lockheed Shooting Star (T-Bird) training aircraft
- 1954 6 x PBY-5A Consolidated Catalina amphibian aircraft
- 1955 64 x F-86K North American Sabre all-weather fighter aircraft
- 1955 16 x L-18C Piper Super Cub observation aircraft
- 1956 35 x RF 84F Republic Thunderflash reconnaissance aircraft
- 1956 8 x C-119G Fairchild Flying Boxcar transport aircraft
- 1957 115 x F-86F North American Sabre fighter aircraft
- 1958 4 x H-19Dsikorsky Chickasaw helicopters
- 1960 27 x O-1A Cessna Bird Dog observation aircraft
- 1961 18 x HU-16B Grumman Albatross amphibian aircraft
- 1961 23 x F-104G / TF-104G Lockheed Starfighter fighter aircraft
- 1963 13 x UH-1B Bell Iroquois helicopters
- 1966 64 x F-5A / F-5B Northrop Freedom Fighter aircraft

Infrastructure aid

The Norwegian Armed Forces – and especially the Royal Norwegian Air Force received extensive assistance in the developing of air bases, radio stations and radio lines and fuel installations.

The following indicates some of the larger joint-financed building projects that have benefited the Air Force Stations under the infrastructure programme:¹³

- 1952 Extension of Bardufoss air station (runway 2715 x 45 m.)
- 1952 Extension of Bodø air station (runway 2440 x 45 m.)
- 1952 Gardemoen air station (runway 2528 x 45 m.)
- 1952 Development of Lista air station (runway 3440 x 45 m.)
- 1952 Construction of Rygge air station (runway 2990 x 45 m.)
- 1952 Construction of Torp air station (runway 2440 x 45 m.)
- 1952 Extension of Ørland air station (runway 2700 x 45 m.)
- 1953 Construction of Andøya air station
- 1954 Construction of Flesland air station (runway 2440 x 45 m.)
- 1956 Extension of Værnes air station (runway 2847 x 45 m.)
- 1956 Construction of mountain hangars at air stations
- 1957 Reinforcing and extension of runway at Bodø air force station
- 1957 Extension of runway at Flesland air station
- 1957 Extension of runway at Lista air station

- 1959 Extension of runways at Bardufoss and Ørland air station
- 1959 Extension of runways at Gardermoen, Rygge and Torp air stations
- 1960 Development of Banak air station (runway 2000 x 45 m.)
- 1962 Construction of aircraft stands at Bardufoss air station
- 1963 Improvement of runway at Ørland air station
- 1965 Construction of crossing runway at Andøya air station
- 1966 Extension of runway at Andøya air station
- 1968 Extension of runway at Bodø air station
- 1971 Building of blast -proof hangers hangars at air stations
- 1973 Development of Evenes air station
- 1975 Extension of runway at Evenes air station
- 1986 Building of contingency storage facilities at air stations
- 1986 Building of new blast-proof hangars at Andøya air station
- 1988 Building of new blast-proof hangars at air stations



Photo: Norwegian Armed Forces.



Below: The construction of Bodø Main Air Station.

Photo: Air Force Museum.





Were we "bought and paid for"?

Norway was never completely comfortable with its role in the Cold War. The dream had originally been to be a bridge builder between East and West. The country therefore set some clear limits in the military arena:

- 1 No nuclear arms on Norwegian soil in peacetime.
- 2 No permanent stationing of foreign forces on Norwegian soil in peacetime.
- 3 Strict restrictions on allied exercises in the counties of Troms and Finnmark.

Intelligence and surveillance

In many ways Northern Norway became USA's frontline defence against a possible Soviet attack. Surveillance and early warning facilities were Installed all along the coastline and the sub-sea continental shelf.

The intelligence service was therefore a highly important factor in our defence strategy. It was unobtrusive, but was perhaps the most important and most active branch of our defence in peacetime.



During the Cold War, interception of Soviet aircraft was a daily phenomenon. Photo: Bodø Main Air Station.

The local community of Bodø

An airport on the Bodø peninsula would not have any major military significance as it lies strategically exposed...¹⁴

any towns and communities were changed as a consequence of the Cold War, but few to the same degree as Bodø. The city had was ideally located strategically: Not too close to the front in the event of war, but neither too far away. There were good communications to the south, the potential for building valuable harbour and air base installations, and the city was sited conveniently near enough the Soviet Union and the Kola Peninsula. Here one could receive large-scale reinforcements, start offensive operations against the Soviet bases on Kola and communicate with air and naval combat services. Bodø was without a doubt a propitious site for the establishment of military headquarters in Northern Norway.

In fact, it was not obvious at the start that Bodø should be the headquarters. The army wanted a location nearer the most likely war arena in Troms County. The Royal Norwegian Navy targeted Harstad primarily, while the Air Force wanted Bodø. But the strategic advantages mentioned above resulted in resulted in Bodø being chosen as the headquarters for all branches of armed forces. Seen from a NATO Alliance perspective, which was particularly interested in Northern Norway's role in the total NATO arrangement and not simply in the defence of Northern Norway, Bodø was the obvious choice.



Bodø in the 1930s. Photo: Nordlandsmuseet.



Satellite photo of Bodø at the close of the 1960s, taken by the American spy satellite Corona. The city has expanded a little. The air base alone covers a large section of the city's populated area. In addition, there is Bodin Camp, Defence Headquarters North Norway at Reitan along the fjord and a number of smaller installations and residential areas around the city. In a purely physical sense, the Armed Forces have left their mark on the city. If you count the thousands of people that work in connection with armed forces, the service functions that are established in

the city as a result of the needs of the Armed Forces and the defence staff, and add to this the increase in population during certain periods of the year when NATO exercises are held (the so-called article 5 exercises), it's obvious that the armed forces are in fact Bodø's cornerstone enterprise. Photo: Johnny Skorve.

There is a saying about Bodø that we live by cutting each other's hair, in other words Bodø is purely a service and administration city. The level of income has been high and the overseas influence – especially from the USA - considerable, Bodø being possibly the most americanized city in Norway?

The Cold War brought growth to Bodø. But on the other hand: who knows where the first bombs would have fallen if the Cold War had turned hot ...?



Air pageant in Bodø. Photo: Luftforsvarsmuseet. (Air Defence Museum)



From a hairdresser's salon. Photo: NL.



The Armed Forces on "Open Day". Photo: Tom Melby.



The armed forces have also left their mark on the surroundings of the city: Exercises in Bodømarka, with military roads and positions; artillery training at Mjelle Beach, antennae at Løp ...

Photo: NI.

The quest for information

When Bodø made its entry on the world map

n May 1st 1960, an American spy plane was shot down over Soviet. The aircraft, a U2, was on its way to Bodø. The pilot managed to eject and survived, but was taken prisoner by Soviet authorities. This deliberate border violation led to an even cooler relationship between USA and Soviet. The Norwegian government was also put firmly in its place, for allowing the USA run anti- Soviet activities from Norway. The government stated that it had never given its permission for this.





Francis G. Powers at the U2 base in Adana, Turkey, 1959. Photo: Oddmund Bjørnaali.

The Deuce or The Black Lady



The pilots called it The Deuce (in so far as they had a nickname for it; many others called it The Black Lady. The aircraft that chief engineer Kelly Johnson at Lockheed Skunk Works had designed in 1954, to meet the American Air Force's requirement for a reconnaissance aircraft that could fly at extremely high altitudes and long distances. In many ways the aircraft is an F-104

Starfighter with glider wings. It only has one engine and otherwise almost none of the equipment that you normally find in advanced military aircraft, like a ejection seat or armour plating. The aircraft was required to be LIGHT and fly HIGH, at 90,000 feet. The best protection against Soviet fighter aircraft that would try to shoot it down, would be the altitude.

U2 (short for utility) was supposed to be top secret and operated by the CIA, not the Air Force. It went into service for the first time in 1956. But in 1960, after Francis Powers was shot down, one no longer dared to fly U2s over the Soviet Union. Instead the aircraft was used other places in the world such as Cuba and China, where the expectation was that advanced anti-aircraft artillery such as that used in the Soviet Union did not exist. The Air Force gradually took over the aircraft, and it is still in service today as a supplement to satellites over for instance, Iraq, Bosnia and Kosovo.



Carmine Vito as a young man. Photo: Åge Stenersen.

Carmine Vito The first batch of U2 pilots: 6 men. were ready for action in 1956. One of them was Carmine Vito. He had previously been a fighter



among others, he had flown an F-86 Sabre in the Korean War. Now he was transferred to the CIA, which was responsible for the U2 programme. Wiesbaden in Germany was the base for the first assignments. One started cautiously, with a short trip over East Germany and Poland. Then came the trip to the Soviet Union, with a flight over Poland to Leningrad, via Belo-Russia, Carmine was assigned the third trip. He was set to go right to the heart of the main antagonist: Moscow. He achieved this, and returned with the only photos taken by a U2 of Moscow. In addition he took photos of the missile factory in Kaliningrad, the rocket engine factory in Khimski, Fili aircraft works, where the Bison bomber aircraft were built, etc., on his flight over Moscow. The Russians sent several fighter aircraft up to try and shoot him down. But none of the aircraft, MiG 15 and MiG 17, managed to reach U2's altitude. In fact, the Russians were so desperate to destroy him. that they took tremendous chances and 5 Soviet aircraft crashed in the attempt. This resulted in Vito later trying to be awarded status as an ace pilot. But since he was in the CIA and not in the air force, he didn't succeed. Vito flew the U2 over Cuba in 1962, and was part of the missions that detected the Soviet missile installations which caused the Cuba crisis.



The pilot suit that Carmine Vito used on his U2 flight to Moscow in 1956. Photo: J&S

Lockheed SR-71

It soon became clear that it was just a question of time before Soviet developed an air defence system that could attain the U2's cruising altitudes. The CIA therefore commenced on the development of a successor already in 1958. The new aircraft would rely on both altitude AND speed in order to avoid Soviet anti-aircraft artillery fire, and had to have a cruising speed of Mach 3, three times the speed of sound, in addition to a cruising altitude of 90,000 feet and lower radar cross-section (be less visible to radar) than the U2. Parallel with the CIA, the American Air Force also developed such an aircraft and the CIA chose finally to concentrate on the air force's SR-71. From 1965 to the beginning of the 1990s the SR-71 flew from its home base at Beale, California over the whole world. One of the theatres of operation was the Polar zones north of Norway and the Soviet Union.

The aircraft refuelled in the air, and every effort was made to avoid landing in Norway. Nevertheless, the aircraft has landed a total of 5 times in Bodø and Andøya due to technical problems.



Photo of Fili bomber aircraft works, taken by Carmine Vito over Moscow in 1956. Photo: CIA



SR-71 takes off from Bodø Main Air Station in 1981. Photo: Olav F. Aamoth

Both the U2 and SR-71 can be regarded as proof of the urgent need for information that emerged when the Iron Curtain fell over Europe. Only a minimum of information was exchanged between East and West. The political tension created the necessity of obtaining a full picture of what the other side was doing . But instead of knowledge, fear and lack of information reigned supreme. In 1949, when the Soviets tested its first nuclear device, the myth of "the Bomber Gap" - the bomber aircraft gap was born. the belief that the Soviets were superior to the West with regard to numbers of bombers carrying nuclear devices . "The Missile Gap" myth was

born after the launch of Sputnik 1957: the Soviets had a greater number of nuclear missiles. Both myths led to increases in Western armaments, which in turn led to the Soviet Union increasing its arsenal of nuclear weapons.

This lack of information had to be rectified and intelligence was an important factor. One had to take to the skies to be able to obtain a closer look at Soviet activities. In 1956 a group of Americans came to Gardermoen to send up 33 gigantic balloons. The balloons were fitted out with cameras and equipment for sound recordings, and were meant to hover over the Soviet Union while taking photographs and monitoring Soviet radio transmissions. When their missions were completed they were to be retrieved from the Pacific having flown out of Soviet Union air space.

The balloon project was not particularly successful. Flying in Soviet airspace was a risky business, a fact proved by the U2 Affair. The solution was to get into space.



The level of apprehension was just as high in the East, as was the need and desire for knowledge. The Soviet Union had several spies in Norway, both Norwegians and Russians. One of them was Selmer Nilsen, who spied for the Soviets during the period from 1950 until his arrest in 1967. Selmer Nilsen lived and worked as a spy in Bodø for several years, and obtained information about the U2 for his employers. He photographed, among other things, the U2 in Bodø in 1958. This radio was used while he monitored the U2 at Bodø in 1960. He staved in an old German bunker at Rønvika and kept watch on the air station, and sent his information in code with this radio to Murmansk, Photo: J&S

Satellites

We've spent between thirty-five and forty billion dollars on space...but if nothing else had come from that program except the knowledge that we get from our satellite photography, it would be worth ten times to us what the whole program has cost. Because tonight I know how many missiles the enemyhas and...our guesses were way off. And we were doing things that we didn't need to do. We were building things that we didn't need to build. We were harbouring fears that we didn't need to have US President Lyndon B. Johnson, 1967.15



A Corona satellite in orbit around the earth. Illustration: NASM



A Corona satellite is launched. Photo: NASM.

The dream of placing secret eyes and ears in outer space was there early in the piece. The same applied to the conviction that this would be possible one day. But in the meantime one had to be satisfied with balloons and aircraft. In the 1950s when it became technically possible to send machines into outer space, intelligence had top priority.

In 1958, a few months after the Soviets had shot Sputnik up, the USA's President Eisenhower ordered that toppriority surveillance satellite project under the joint auspices of the CIA and the American Air Force. The objective was to place a camera carrying satellite in orbit around the earth.

The secret spy satellite was given the name Corona. But in order to conceal the true intention, the project was given the alias of Discoverer and described as a scientific research programme. If you followed the space race in the 1960s you would perhaps remember Discoverer. Many rockets were sent up, but for a long time one was plagued by mishaps. The rockets exploded upon launching or suffered other malfunctions. The thirteenth however went off without a hitch, and returned in August 1960 with a number of photos of Soviet territory.

From 1960 until 1972 over one hundred satellites were shot up, which took over 800,000 photos. In fact some of the satellites also contained apparatus and other devices to carry out scientific experiments, in order to make the cover story more plausible. By accident, one of the satellites crash-landed in the Soviet Union, but luckily, all it in fact contained was some innocent measuring equipment.

By 1972 Corona had been replaced by more advanced satellites that are still classified.



In order to get the satellite into orbit one needed a powerful rocket. This is a model of the rocket, a Thor/Agena (a converted variant of the Thor rocket that was also used as an intercontinental ballistic missile carrying nuclear warheads). Most of the rocket is comprised of fuel tanks that are released in sequence as the fuel is burned. When it reaches the correct altitude only the tip of the rocket is left: i.e. the actual satellite. Photo: J&S



This is a 1: 4 scale model of the segment of the satellite that returns to earth with the photographs. When the film is used up it is gathered in this so-called "bucket" and shot out from the satellite. While the rest of the satellite remained in space as junk, the bucket returned to earth where aircraft waited ready to catch it mid-air with a special hook. Photo: J&S.

The race to place a spy satellite in outer space in order to find out *what was happening on the other side*, is a good illustration of the misgivings that reigned on both sides during the Cold War. How the Cold War also ensconced itself in our minds, pervaded our thoughts. How the Cold War to a great degree was concerned with how the two sides perceived their own version of reality.

How did the Cold War concern you and me?

hat has the Cold War done to us? Has it affected the manner in which we regard and have regarded the world around us? The values we hold? The way we perceive ourselves?

The Berlin Wall. And a barrier in our minds?

Photo: The German Embassy.



Grey but frightening at the same time

- Our view of Them?

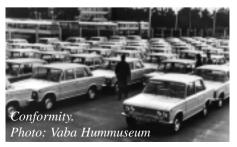


East Berlin. Photo: German Embassy.





From the film "A Day in the Life of Ivan Denisovitsj", adapted from Solsjenitsyn's book. It deals with life in a Soviet Gulag (labour camp). Photo: Filminstituttet.



Enticing and frightening at the same time

- Their view of Us?



From the American TV series Dynasty. Photo: Norsk Ukeblad



Homeless in New York. Photo: J&S



McDonald's hamburger restaurant. Photo: McDonald's Norway

The division of the world into power blocs influenced the way reality was presented. This also placed limitations on the individual's ability to form his own opinion of the world.

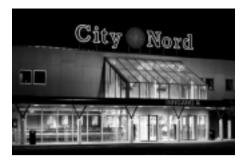
Cultural influence - Americanisation?

A great number of influences have contributed to shaping our culture as we experience it today. One of the frameworks that contributed most was the Cold War. The division of the world into two blocs resulted in heavier influence from the West than from the East.

Simultaneously, the USA was the dominate factor in the West after World War II. As we have seen, Europe was

ravaged by the war and undergoing redevelopment. The Americans supplied massive amounts of aid, and impacted heavily on our culture. Some elements were very foreign to our eyes, while others have been assimilated and have become commonplace and a part of our culture.

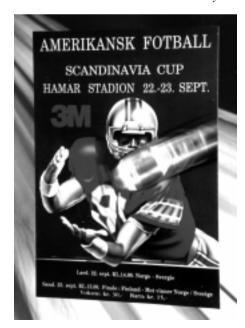
A period of globalisation and internationalisation. We became a part of the world community – through the Cold War.



Shopping malls, shops and night-clubs with English names made their entrance in this period. Photo: NL



Two cultures meet. Photo: Tom Melby.





Clothes – a new youth generation emerges. Photo J&S



Left: Even though American football is not widespread in Norway, the sport has nevertheless left its mark on language, clothes and culture. From the Norwegian American Football Association.





Cold War - films, books, art, music

The theme from the Cold War – as James Bond. The world has become an arena for action movies with scenes from the Cold War - terror scenarios – 3rd World War. Patriotic films with emphasis on our own qualities, and films with criticism of this division and the social systems on each side of the Curtain.



From the movie: "The Hunt for Red October", a Soviet submarine that "defected" to the USA. Photo: Filminstituttet.





Spies, moles, agents ...

any novels and books collected inspiration and themes from the situation we found ourselves in during the Cold War ... Action literature had a bottomless treasure chest; and perhaps best of all —the themes interested us, and were a part of our reality ...



Photo: J&S.

Art

any artists were critical of society and politically engaged in the period 1945 until the present day. Several were refused acceptance by galleries in the West on account of their political opinions (not that it was any easier in the East).

Among others, they posed questions to American imperialism, to Pol Pot and the Vietnam War, to the nuclear threat and the division of the world.

Photo: Musee d'Histoire Contemporaine



The fear

ave we forgotten the fear? Did we ignore it, push it away from us? Fear of the bomb, of war, of espionage, of potential agents, of Siberia, of the enemy. Of Ragnarok ...

"Could be the human race is run?" Roger Waters



From the movie "The Day After", which dealt with what could happen to us ordinary people if the atom bomb start falling. Photo: Filminstituttet.

"Duck and Cover!"
An expression repeated in
American public information films
from the 1950s about what we
must do if the atom bombs fall



Not just science fiction: As a neighbour of the enemy we had to be prepared for the possibility of Soviet defectors and prisoners of war. All major Norwegian military air bases had therefore a so-called "interrogation kit", or "contingency kit for interrogation personnel" as it was actually called, with directions on how one should behave, and what equipment may prove be useful when interrogating defectors or prisoners of war.



Left: Power in the dark rooms ... From the movie "Dr. Strangelove". Photo: Filminstituttet.



The Israeli nuclear technician Mordechai Vanunu was imprisoned for having revealed that Israel attempted to produce nuclear arms.

Photo: Amnesty International.



The fear of the spread of nuclear arms. Source: Journal of Atomic Scientist.

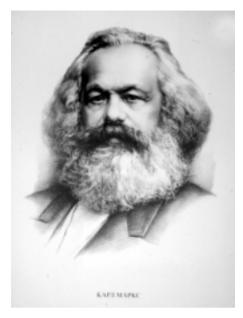
Propaganda

Propaganda for the different social systems was conducted on both sides of the Iron Curtain. Each in their own fashion.

For sale across the entire East Bloc for a small sum of money: Small busts in heavy cast iron of Vladimir Illjitsj Uljanov "Lenin", Father of the Soviet state.

Photo J&S





Also for sale everywhere in the East Bloc for next to nothing: Karl Marx, the Father of Communism. Photo: J&S



The KaDeWe Department store
West Berlin – The West's showcase
window to the East. As the West's
hallmark was capitalism, it was natural
that Berlin's largest department store,
that had always marketed itself as
having "everything", remained as
perhaps the most pronounced symbol of
West Berlin. KaDeWe also stood for
"Kaufhaus des Westens" – The West's
department store. Photo: KaDeWe

Voice of America / Radio Free Europe

An element of ideological warfare consisted of sending radio programmes aimed especially at citizens on the other side of the Iron Curtain. On the eastern side, they tried to stop this by jamming broadcasts with the aid of special static senders, "jammers".



Mao's Little Red Book
The Cultural Revolution in China
attempted to revive the fervour of
revolution in a society that had become
more and more complacent. At the same
time, the little red book is an example of
how communist ideas were spread
across the globe. The book was also
published in Norwegian.

Opponents and protest movements against the Cold War's way of thinking gathered inspiration from societies like China, which were seen as standing apart from the divisional blocs after the country split with the Soviet Union in the 1950s.

Photo: J&S

Countercultures

As time went by and the Cold War proved to be long-term, various protest movements emerged in both East and West.



Anti-A bomb demonstration. Photo: J&S



Homemade Soviet underground periodical – samizdat.



In the East the church represented an dissident culture. Religious services were forbidden in some countries except in a few approved religious communities. Illegal religious services were therefore held in secret, as with this Baptist service in the Soviet Union. Take note of the surveillance officer from the KGB, behind the fence.

Photo: Amnesty International.



After the service the KGB demolished the provisional church. The fate of the people attending the service, is unknown Photo: Amnesty International



The Catholic Church was particularly strong in Poland, and functioned as an alternative gathering place for communist-controlled organisations. In 1948 the secret police in Poland assassinated the priest Jerzy Popieluscu. Popieluscu was an active opponent of the communist regime. His death became the object for extensive gatherings to mark the occasion, and reinforced the resistance to the regime.

Photo: Stanislaw Czartoryski





Just like the prisoners in the concentration camps in Norway during World War II, imprisoned Polish dissidents produced different small objects in prison to show their opposition and show that their spirits could not be broken. These were smuggled out and spread to others. For instance, we see here letterheads and Christmas cards with slogans for Solidarity, and jacket badges made of linoleum from the cell floors. Photo: J&S

Left: Adversaries of the communist regimes often displayed their opposition through such home-made "newspapers". The independent union movement Solidarity, in Poland issued this one. Photo: J&S

The Wall is falling

erestroika, Glasnost, disarmament agreements. In Autumn 1989 (09 November to be exact) the Berlin Wall fell. The

Photo: J&S

Soviet Union dissolved. The Velvet Revolution in Czechoslovakia. Germany was reunited. Are the walls falling?

One day in December 1989, work-mates of Jiri Dienstbier; a Czech dissident who had been working as a stoker, became anxious when he didn't turn up for work. They were afraid for his safety. They stopped worrying when soon after being notified that he had become the new Foreign Secretary of Czechoslovakia.¹⁶

What is happening?

The Cold War ended almost overnight. The first real disarmament agreements were entered between West and East. Eastern Europe tore itself free from Soviet supremacy. Yes, even the Soviet Union dissolved. It all happened with stupefying speed. The Cold War had gradually become a part of life that was "taken for granted". It seemed as if the world had always been divided in two, and would remain divided.

Mikhail Gorbachev came to power in the Soviet Union and new tones of détente were heard. Ronald Reagan sat as President in USA. Previously known as a hard-line anti-Communist, he had gradually altered his opinion; and the two state leaders soon made friends. Genuine disarmament agreements like the INF and FFE agreements were signed at the end of the 1980s. Soviet



The Berlin Wall falls and people stream through the opening. Photo: NATO

forces withdrew from Afghanistan after several years of futile war. Waves of strikes in Poland in 1988 did not lead to bloody street fights, but on the contrary to sensational round table talks between Solidarity and the military government in Spring 1989 and free elections in the Summer of 1989.

Solidarity formed a government and Gorbachev congratulates them on the result! In Hungary the reform-inclined Carol Grosz came to power in the communist party. He permitted the founding of new political parties and settles grievances for former sins through the funeral for Imre Nagy, the communist who was deposed and killed in 1956. In August 1989 people from East Germany fled en masse to the West via Hungary. In October, there were demonstrations in several East German cities that resulted in the old party leader Honecker's departure. On 09 November, crowds broke through the Wall in Berlin - and the guards joined in instead of opening fire! In the space of a short time East Germany had dissolved, and the two Germanys were re-united as a single state. In December, the communists stepped down in Czechoslovakia and relinquished power to dissidents such as Vaclay Havel and Jiri Dienstbier. Demonstrations in Timisoara, Romania, led to a short and bloody civil war where the former autocratic dictator Nicolau Ceausescu was executed.

The old world picture folded before our eyes. Why?

It would take too long to go into the reasons here. But some important events can be mentioned: Economic crisis in the East; colossal military overheads and ill-advised economic policies ("We act like we are working, they – the State – act like they are paying", one said with grim humour in Soviet). Mikhail Gorbachev as the new party leader in Soviet set on reforming a system in crisis. Internal reform was not possible without disarmament – abolishment of the economically destructive arms race.

The computer age led to an increased flow of information – the prosperity gap between East and West became more obvious for the common man. Nationalistic rebellions in Soviet due to tighter economic conditions. Increasing discontent with the communist regimes in Eastern Europe. The Soviet Union indicated that it would no longer automatically support its vassals in the region – which drove several reform politicians into power. The authorities' massacre of students at the Tiananmen Square in China and the consequent massive international outcry - dare one match might with might anymore? The green movement – increasing awareness that massive areas in Eastern Europe and Soviet were ecological catastrophes. The list could certainly be made longer. In the end, the dykes broke...



From the Velvet Revolution in Prague. A new Spring with Vaclav Havel at the wheel? Photo: Bodil Nyaas.





Election in Poland in 1989. A poster that encourages people to vote for Solidarity. Photo: NL.



EXPERT ON THE COLD WAR

Left: Visiting Russian Peddlers. Photo: John Skogøy.

Towards an uncertain future?

With the admittance of the Czech Republic, Poland and Hungary as new members of NATO this year, the classic division of Europe in politicalsecurity zones has definitely ended.

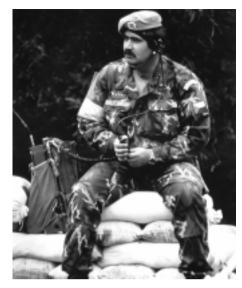
The Warsaw Pact has died a natural death, and as early as in 1991 NATO voted for a new so-called strategic concept for a life after the Cold War. How shall an alliance established with its background in a static political security situation exist when this situation is totally changed? When a supposedly "simple" and predictable situation is replaced with one that is incalculable and unpredictable. When all the old conflicts, held more or less on a leash by the divisive blocs, are suddenly given free scope.

The three former East Bloc countries entry into NATO can

symbolise the potential for a more peaceful future. The same can be said about the attempts to enter tighter political co-operative security arrangements like the PfP co-operation (Partnership for Peace: an agreement between NATO and the old Warsaw Pact countries on political security cooperation and joint military exercises). In fact the old Article 5 exercises are being phased out, to the benefit of exercises under the PfP Agreement. Article 5 exercises are military exercises designed to co-ordinate NATO countries' military forces and keeping them on the alert to defend any area that NATO believes is under threat, more clearly the interests, territory and integrity of its members. PfP exercises are joint exercises carried out in cooperation between former antagonists.

Both NATO and the old Warsaw Pact countries have also expressed a strong desire to create an All-European security organ in order to secure peace in the formerly so unstable Europe. For this objective, the old CSCE (The Conference for Security and Co-operation in Europe) was made a permanent organisation under the name of OSCE – Organisation for security and Co-operation in Europe. Norway in fact holds the Chair in the organisation this year.

On a level a little closer to home: 22 March 1999, a direct telephone line was established between the Commander-in-Chief in Northern Norway and his counterpart in Russia, the Northern Fleet's commandant at Severomorsk on the Kola Peninsula.



No longer an enemy. From a PfP exercise. Photo: NATO Media Library.





Berlin as a symbol for the new optimistic times. The Wall divided this street for 29 years. Photo: German Embassy

The bizarre paradox

ecades with the Cold War did not create any wars in Europe. NATO was never called into action for the ultimate objective that it was created for. The two main opponents during the Cold War never waged war with each

other. Despite 40 years of fear, it never happened. The development of the Cold War actually bore tidings of peace and a safer future.

But underlying grievances soon began to rise to the surface. Old

conflicts emerged again.

The Soviet Union dissolved; relatively peacefully in the beginning; becoming bloodier as time went on: Armenia and Aserbajdsjan, Georgia, Moldavia, Tadsjikistan, Czechnya, Czechoslovakia split in two but peacefully. And finally: Yugoslavia ... We quickly realised that Yugoslavia was not as united as we had thought. Weren't all communist states alike in reality? It did not start so badly. Slovenia broke away; a bit of an uproar, but war? No,

not in civilised Europe. Then it was Croatia, and no sooner was that conflict over, than the nightmare of Bosnia-Herzegovina started.

While these lines are being written, NATO is at war for the first time. In Kosovo. In defence of the Albanian minority against Serb attacks. Who would have believed it, when the Cold War finally expired in 1989?

We are approaching the Third Millennium. Into an uncertain future ...

Notes:

- Czechoslovakia's Foreign Secretary Jan Masaryk, Spring 1945. Quoted in Kleve, Marie
 L. Den kalde krigen årsaker og virkninger. Lårdal 1999.
- 2 Winston Churchill's speech at Westminster College, Fulton, Missouri, 05 March 1946. Quoted in Spor i Tid, Oslo 1995.
- 3 Interview with Stalin in Pravda, 14 March 1946. Quoted on www.cnn.com/specials/ cold.war.
- 4 National Security Estimate, 1950.
- 5 Citation taken from Holmes R. World Atlas of Warfare. London 1988.
- 6 Hansen, Svein Roald. Atombomber for alle? Utvalget for Rustningskontroll og nedrustning. Oslo 1980.
- 7 President Truman addresses the Congress on 12 March 1947. Quoted in Spor and Tid, Oslo 1995.
- 8 Vyshinsky sketches Soviet's comprehension of the Truman doctrine and the Marshall Aid in a speech to the UN in September 1947. Quoted in www.cnn.com/specials/cold.war.
- 9 Quoted in Kort om NATO, The Norwegian Atlantic Ocean Committee, Oslo 1999.
- 10 See note no. 8.
- 11 Taken from Skogrand, Kjetil. Bodø og forsvaret av Nord-Norge 1945 1967. Address at seminar at Norwegian Aviation Museum in Bodø, 27 May 1998.
- 12 Information gathered from Kinne, Knut. NATO 50 år våpenhjelp fra USA. Kjeller 1999. And the brochure Luftforsvaret 50 år. Kjeller 1994.
- 13 Information gathered from the brochure Luftforsvaret 50 år. Kjeller 1994.
- 14 "Planlegging og arrondering av Bodø flyplass." Report of District engineer DKN, dept. Bodø, A. Børdahl. Quoted in Luftposten, organ for Bodø Luftfartshistoriske Forening. March issue, 1999.
- 15 Quoted on http://www.nasm.edu/GALLERIES/GALI14/SpaceRace/sec400.htm, National Air & Space Museum's home pages on satellite surveillance.
- 16 Seim, Jardar. Øst-Europas historie. Oslo 1994.

Exhibition organisers

Karl L. Kleve, Bodil Nyaas, Birger Larsen, Morten Jensen with assistance from the rest of the staff at the Norwegian Aviation Museum

We would like to thank all who have contributed with objects, pictures, information, technical contribution, practical support and other invaluable aid

Amnesty International, John Bekkevold, Bergen Kunstmuseum / Musée d'Histoire Contemporaine in Paris, Bodø Main Air Base, Bodø Luftshistoriske Forening, Coca Cola Norge, Stanislaw Czartoryski, The Flygvapenmusèet in Linköping, The UN, The People's Republic Germany's Embassy, The Armed Forces Supreme Command/I. Staff, Defence Command North Norway, Einar Furre, KaDeWe in Berlin, Kjeller Flyhistoriske forening w/ Knut Kinne, Levis Store Bodø, Luftforsvarsmusèet, National Air and Space Museum, Jan Roger Nilsen, Norges Amerikansk Fotball Forbund, Norsk Filminstitutt, Norsk Telemuseum, Armoured Division Indre Troms, Norwegian Police Surveillance Service, Royal Air Force Museum, Kjetil Skogrand, John Skogøy, Johnny Skorve, United Pictures Int., Vaba Hummuseum (Estonian Open Air Museum, Tallinn), Carmine Vito, Olav Aamoth and Knut Aasberg

The exhibition has been made possible through the financial and practical support of the following:

The Norwegian Ministry of Defence NATO HQ Brussels Norwegian Cultural Council Braathens Kongsberg Defence & Aerospace NAMMO Raufoss Eurofighter

Illustration front page: Einar Furre

Photo: Johnson & Schjesvold (J&S), Christer Holst (NL), and others

Graphic Design and Lay-out: Linda Furre

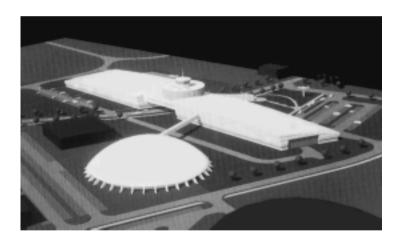
Printed by: K-Trykk A/S

Lockheed Martin

© NORWEGIAN AVIATION MUSEUM

The Cold War Globe

In many ways, "The Many Faces of the Cold War" can be regarded as a "dress rehearsal" for a project Norwegian Aviation Museum has worked on for some time to establish: a museum dedicated to the Cold War.

















ISBN-number: 82-91837-02-3