



**National  
Foreign  
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Center**

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# **Status of Soviet Construction Programs for Major Surface Combatants, December 1980**

**An Imagery Analysis Report**

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**Status of Soviet Construction Programs for  
Major Surface Combatants,  
December 1980 (S)**

Overview

As of late 1980, a total of 17 ships representing eight classes of major surface combatants were either under construction or outfitting at Soviet naval shipyards. These ships consisted of Krivak-I- and Krivak-II-class guided missile frigates, Kiev-class guided missile V/STOL aircraft carriers, a Kirov-class nuclear-powered guided missile cruiser, 445-F-class guided missile cruisers, Sovremennyy- and Udaloy-class guided missile destroyers, and an 820-E-class frigate. Five additional ships--a Krivak-I, Krivak-II, Kirov, Sovremennyy, and an Udaloy--began sea trials during 1980. One of these ships--the Kirov--had completed sea trials and was conducting operational workups, including cruise and surface-to-air missile firings, at the end of 1980. What we believe to be the final units of four of these ship classes--Krivak-I, Krivak-II, Kiev, and Kirov--were either under construction or outfitting at the end of 1980. [REDACTED]

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The information and judgments presented in this publication were derived principally from analysis of imagery. (C)

The authors of this paper are [REDACTED] of the Naval Branch, Technical Systems Division, Office of Imagery Analysis. Comments and queries are welcome and should be directed Chief, Technical Systems Division, OIA on [REDACTED] (C)

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## Introduction

Between 1960 and 1970, the Soviets began construction programs for eight classes of major surface combatants.<sup>1</sup> These consisted of the Kashin-class guided missile destroyer (DDG) and the Kynda-class guided missile cruiser (CG) beginning in 1960, the Moskva-class guided missile aviation cruiser (CHG) beginning in 1963, the Kresta-I-class CG beginning in 1965, the Kresta-II-class CG beginning in 1966, the Kara-class CG beginning in 1968, the Krivak-I-class guided missile frigate (FFG) beginning in 1968, and the Kiev-class guided missile V/STOL aircraft carrier (CVHG) beginning in 1970. [REDACTED]

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In the mid-1970s, four of these construction programs--the Kresta-II- and Kara-class CG, the Krivak-I-class FFG, and the Kiev-class CVHG--were continuing. At the end of 1980, however, only two of these programs--the Krivak-I-class FFG and the Kiev-class CVHG--were continuing. [REDACTED]

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During the 1970s, the Soviets began construction of five new classes of major surface combatants: the Kirov nuclear-powered guided missile cruiser (CGN) beginning in 1973, the Krivak-II FFG beginning in 1974, the Sovremenny DDG beginning in late 1976 or early 1977, the 445-F CG beginning in 1977, and the Udaloy DDG beginning in 1978. Construction of the first 820-E FF(G) began in mid-1980. All six programs were continuing at the end of 1980. [REDACTED]

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Krivak I and Krivak II FFG

A total of 20 Krivak-I-class FFGs have been built at three Soviet shipyards; one more is still under construction. The Krivak-I construction program began in 1968 at Kaliningrad Shipyard State 820 in the Baltic Fleet, where eight of the ships were built (figure 1). The last of these eight became operational in 1975, shortly after the commencement at Kaliningrad of the Krivak-II construction program. Six Krivak-Is were built between 1974 and 1979 at Leningrad Shipyard Zhdanov 190, also in the Baltic Fleet. Construction of the remaining seven Krivak-Is has taken place at Kerch Shipyard Kamysh Burun 532 in the Black Sea Fleet. Krivak-I construction began at Kerch in 1970, but the production rate there has been slower than at the other two shipyards. By the end of 1980 only five Kerch-built Krivak-Is were operational, one was on sea trials, and one--believed to be the last of its class--was still under construction (table 1). Krivak-I-class FFGs are based in all four Soviet fleet areas. [REDACTED]

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<sup>1</sup>For the purpose of this memorandum, major surface combatants are defined as ships with a full load displacement of at least 3,000 tons.  
(U)

The Krivak-II-class FFG construction program replaced the Krivak-I program at Kaliningrad Shipyard in 1974 (figure 2). As of December 1980, nine Krivak-IIs were operational, one was on sea trials, and one was outfitting (table 1). Construction of Krivak-IIs has apparently ceased at Kaliningrad and will be replaced by the construction of the 820-E class, which is believed to be a new class of frigate. The Krivak-IIs are also based in all four Soviet fleet areas. [redacted]

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**Figure 1**

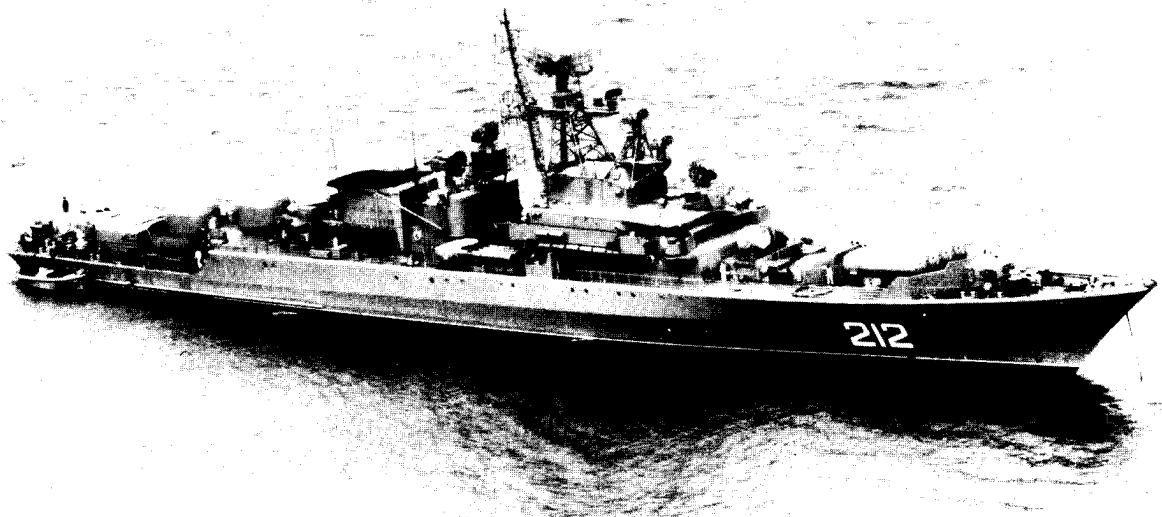
**Krivak-I-Class FFG**



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**Figure 2**

**Krivak-II-Class FFG**

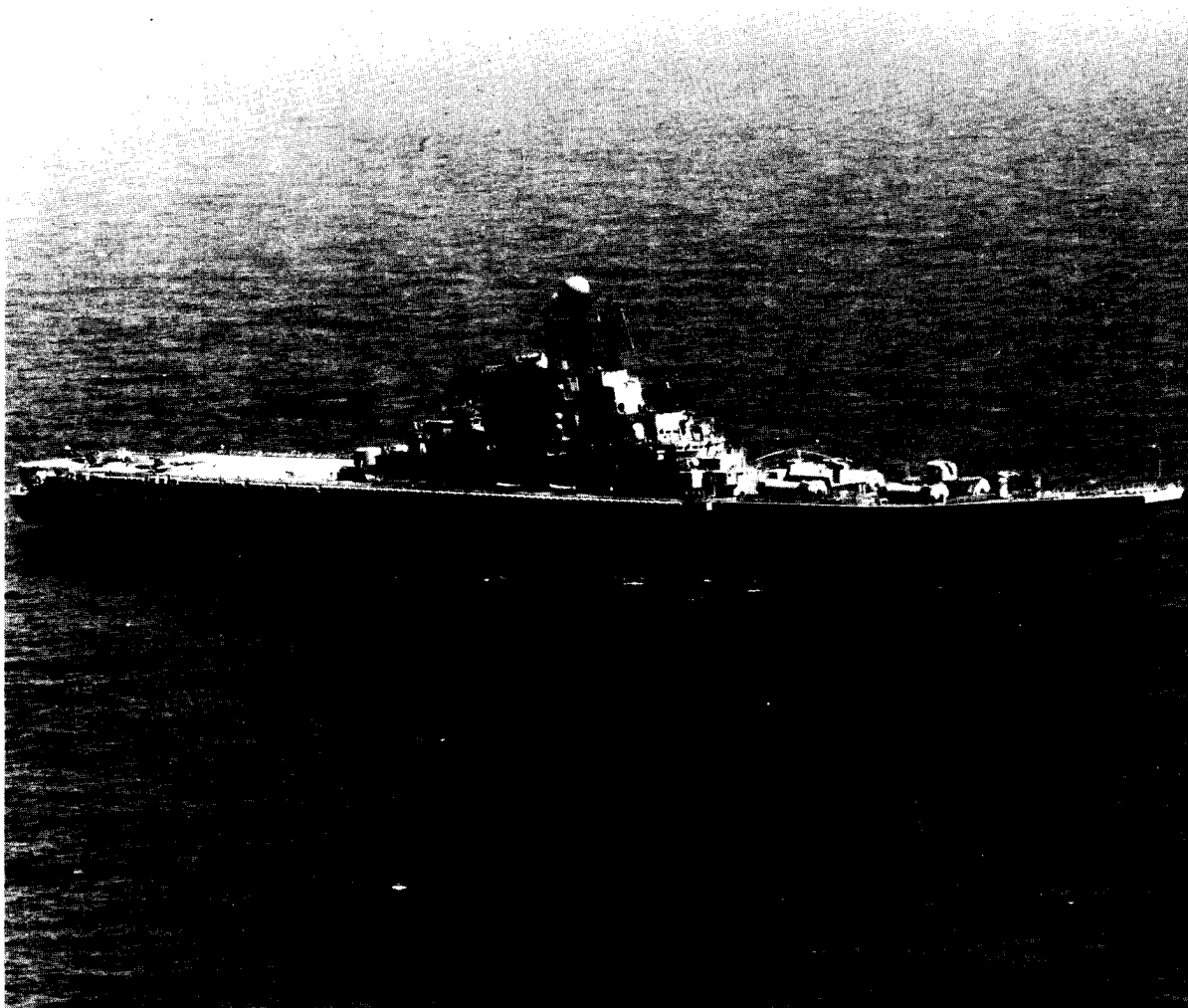


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Kiev CVHG

The Kiev-class CVHG construction program began in mid-1970 at Nikolayev Shipyard Nosenko 444 in the Black Sea. At the end of December 1980, two ships, the Kiev (based in the Northern Fleet at Severomorsk) and the Minsk (based in the Pacific Fleet near Dunay), were operational (figure 3). A third ship--the Novorossiysk--will probably commence sea trials in 1981 and a fourth--believed to be the last unit of its class--will probably be launched in 1981 (table 1). Based on activity seen at several Soviet naval facilities, we believe that construction of a new aircraft carrier class, larger than the Kiev and equipped with catapults and arresting gear, will begin at Nikolayev sometime after the launch of the fourth Kiev.

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**Figure 3****Kiev-Class CVHG**

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IS 81-10015

Kirov CGN

The Kirov-class CGN construction program began during the late summer of 1973 at Leningrad Shipyard Baltic Ordzhonikid 189 in the Baltic Fleet. The lead ship--the Kirov--arrived in Northern Fleet waters in early October 1980 and is currently based at Severomorsk (figure 4). In late 1980 this ship was conducting operational workups, including cruise and surface-to-air missile firings. A second Kirov, believed to be the last ship in this class, will be launched in 1981 (table 1). [REDACTED]

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25X1**Figure 4****Kirov-Class CGN**

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Sovremennyy DDG

The Sovremennyy-class DDG construction program began between late 1976 and early 1977 at Leningrad Shipyard Zhdanov 190 in the Baltic Fleet.<sup>2</sup> The first Sovremennyy is currently on sea trials and the second is outfitting (figure 5). Two more Sovremennyy's are under construction in the construction hall at the Zhdanov shipyard and components for another are being staged on an open building ways (table 1). [REDACTED]

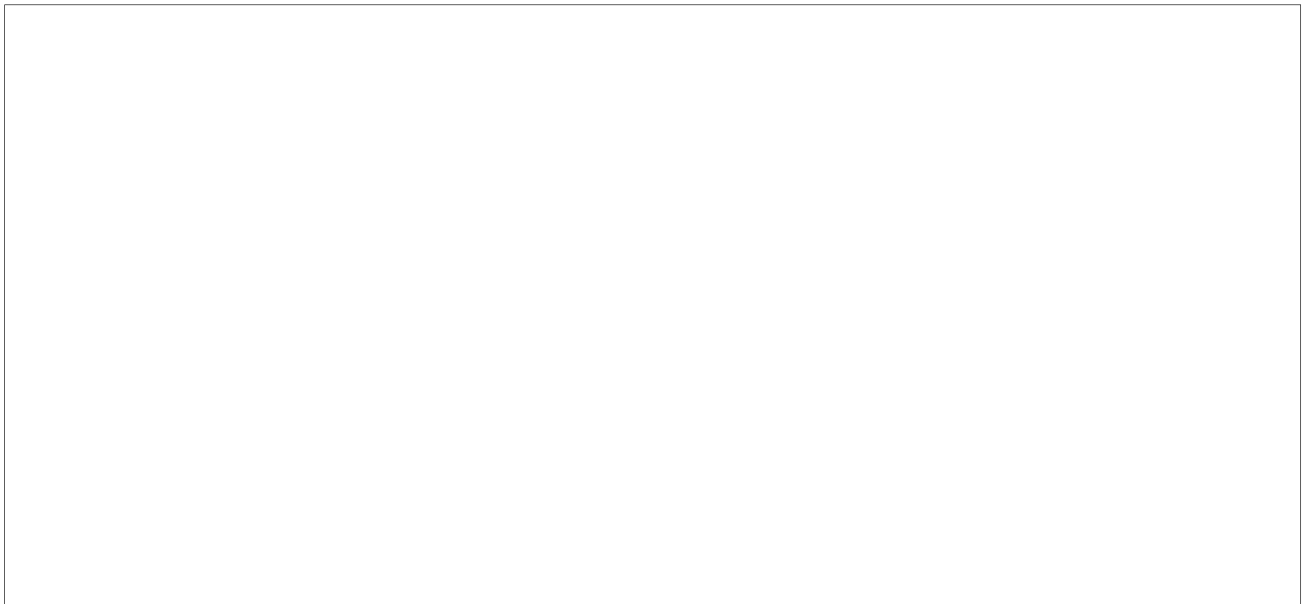
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<sup>2</sup>The Sovremennyy's, now classified as "guided missile destroyers", were formerly known as the 190-A-class CGs. The Sovremennyy's are roughly comparable in basic dimensions, displacement, and weaponry to the US Navy's Kidd-class guided missile destroyers. Both Sovremennyy and Kidd, in terms of basic dimensions and displacement, are comparable to a World War II light cruiser. (S)

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Figure 6



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445-F CG

The 445-F-class CG construction program began in early 1977 at Nikolayev Shipyard Northern 61 Kommuna 445 in the Black Sea Fleet area (figure 6). Although this construction program succeeds the Kara-class CG program, the 445-F is not the successor to the Kara. The primary mission of the Kara is ASW, and while the 445-F will have an ASW capability, its primary mission probably will be anti-surface warfare (ASuW). The first 445-F may begin sea trials by the end of 1981; two additional units are under construction (table 1). [redacted]

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Udaloy DDG

The Udaloy-class DDG construction program began in early 1978.<sup>3</sup> These ships are being constructed at two Baltic Fleet shipyards--Kaliningrad Shipyard State 820 and Leningrad Shipyard Zhdanov 190 (figures 7 and 8). The first Kaliningrad-built Udaloy recently began sea trials. A second Udaloy is under construction at that yard. The first Zhdanov-built Udaloy is outfitting and will begin sea trials in 1981. One additional Udaloy is under construction on an open building ways at Zhdanov and photographic evidence indicates that another may be in the construction hall (table 1). [redacted]

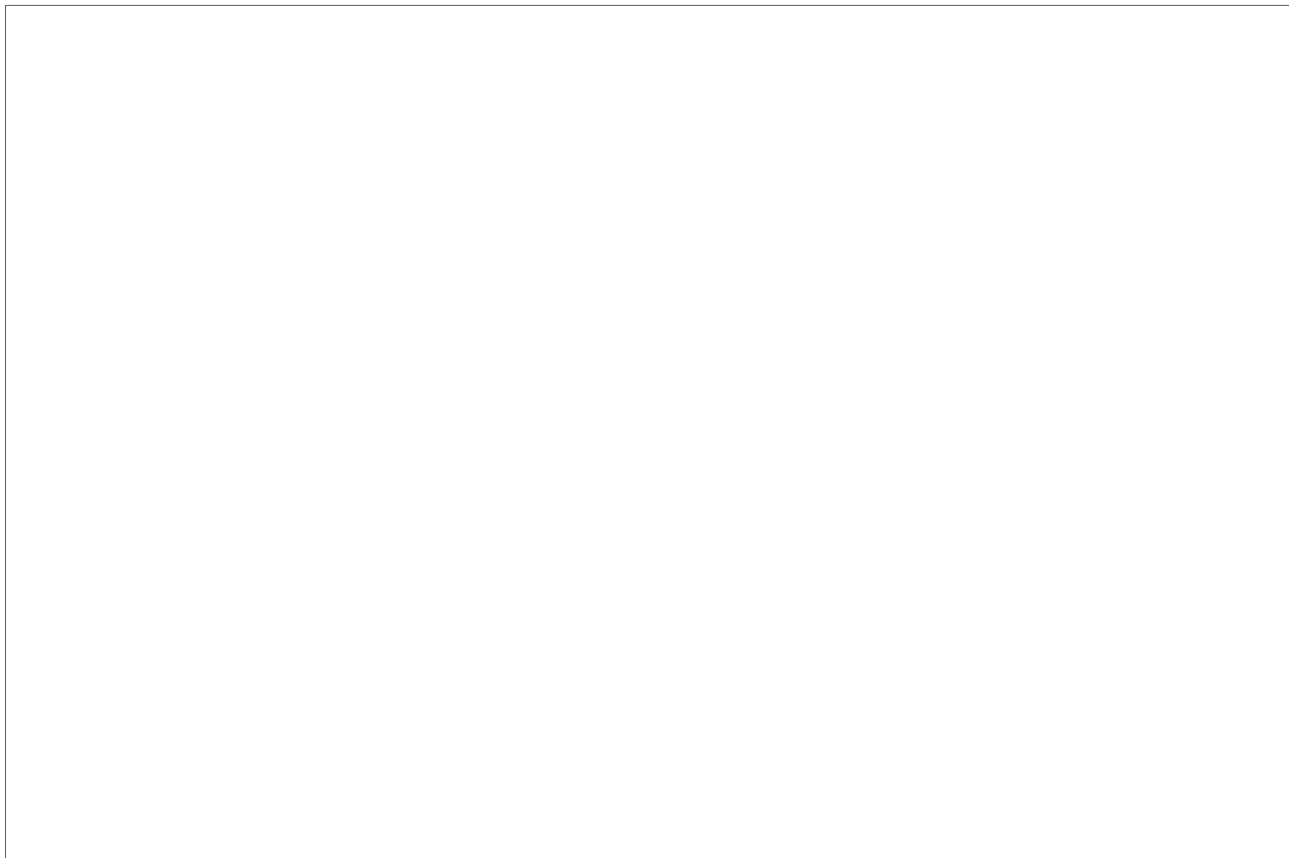
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<sup>3</sup>The Udaloy, also classified as "guided missile destroyers", were formerly known as the 820-D-class CGs. The Udaloy is comparable in basic dimensions, displacement, and weaponry to the US Navy's Spruance-class destroyers. Both Udaloy and Spruance, in terms of basic dimensions and displacement, are comparable to a World War II light cruiser. [redacted]

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**Figure 9**

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820-E FF(G)

Construction of what is apparently a new class of frigate began in mid-1980 at Kaliningrad Shipyard State 820 in the Baltic Fleet. This ship--the 820-E FF(G)--is probably the successor to the Krivak-II-class FFGs built at this yard.<sup>4</sup> When seen in the early stages of construction in late December 1980, the 820-E had a beam and projected waterline length similar to that of a Krivak-II (figure 9). It is, however, structurally different from the Krivak-II. The arrangement of major structural bulkheads in the 820-E and the machinery access openings do not match those observed in Krivak hulls constructed at this yard. Another indicator of a new ship class is that the ways on which the 820-E is being assembled had been unoccupied for more than a year and a half after the launch of a Krivak-II. A ways remaining unoccupied for this length of time is unprecedented at Kaliningrad. Throughout the 19-unit Krivak-I/II construction program at Kaliningrad, this ways was unoccupied for an average of only about nine months, even during the transition from Krivak-I to Krivak-II production in 1974.

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<sup>4</sup>The designation FF(G) means that the ship may or may not be equipped with a missile system, either surface-to-surface or surface-to-air. (U)

Table 1. Status of Soviet Construction Programs for Major Surface Combatants, December 1980 (S)

<u>Class</u>	<u>Unit</u>	<u>Status</u>	<u>Remarks</u>
Krivak-I FFG (Kerch)	Hull 6	Sea Trials	
	Hull 7	Under Construction	
Krivak-II FFG	Hull 10	Sea Trials	
	Hull 11	Outfitting	
Kiev CVHG	Hull 3	Outfitting	
	Hull 4	Under Construction	Launch probably in 1981.
Kirov CGN	Hull 1	Operational Workups	Based at Severomorsk.
	Hull 2	Under Construction	Launch in 1981.
Sovremennyy DDG	Hull 1	Sea Trials	
	Hull 2	Outfitting	
	Hull 3	Under Construction	In construction hall.
	Hull 4	Under Construction	In construction hall.
	Hull 5	Staging	Components on ways.
445-F CG	Hull 1	Outfitting	
	Hull 2	Under Construction	Launch impending.
	Hull 3	Under Construction	
Udaloy DDG (Kaliningrad)	Hull 1	Sea Trials	
	Hull 2	Under Construction	
(Leningrad/Zhdanov)	Hull 1	Outfitting	
	Hull 2	Under Construction	
	Hull 3	Under Construction	Believed to be in construction hall.
820-E FF(G)	Hull 1	Under Construction	Believed to be Krivak successor.

This table is classified SECRET



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References

Requirement

C-SR8-80,731

OIA Project Number and Status

4A0078 (Continuing)

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