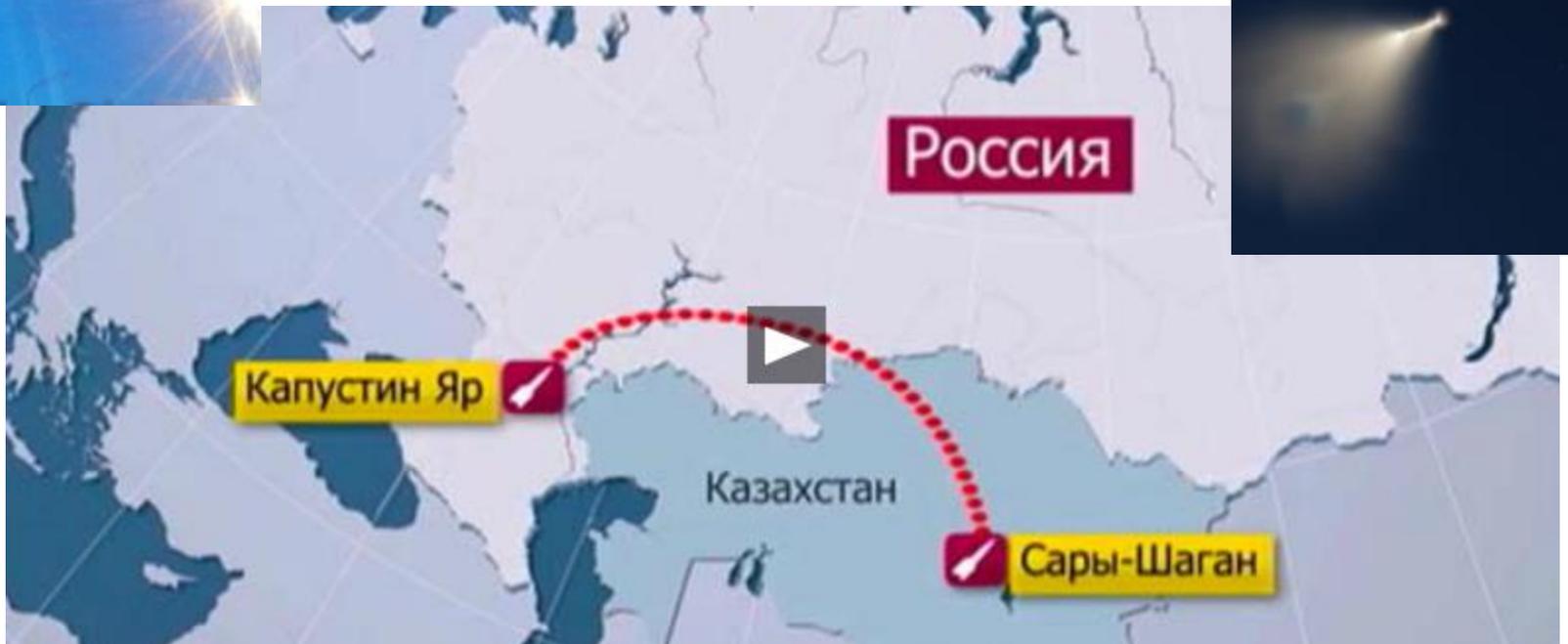
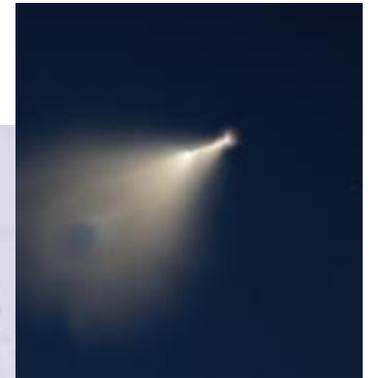


Russia's **KYSS-08** 'Topol' Mystery Missile Mission

[NEW INSIGHTS FROM PRIVATE VIDEOS]

Kapustin Yar to Sary Shagan

Eighth launch -- May 20, 2014



Russia tests RS-12M Topol ICBM - ministry

MOSCOW [[Interfax](#) 1803 GMT 20 May 2014]- A test launch of the RS-12M "Topol" intercontinental ballistic missile (ICBM) was carried out from the Kapustin Yar test site in the Astrakhan region on Tuesday, Russian Strategic Missile Troops spokesman Igor Yegorov told Interfax on Tuesday.

"The Russian Strategic Missile Troops carried out a test launch of the 'Topol' ICBM from the Kapustin Yar state central inter-service test site in the Astrakhan region at 9:08 p.m. Moscow time on May 20, 2014. The purpose of the launch is to test a prospective warhead of intercontinental ballistic missiles," he said.

The training warhead of the missile hit the token target at the Sary-Shagan test site (Kazakhstan) with the set accuracy, he said.

"It should be stressed that the Kapustin Yar test site is unique in testing elements of ballistic missiles' warheads. It is the only one whose test runs and the launch-site data measurements system allow testing prospective warheads across the whole range of possible conditions of their delivery to the targets in the interests of the Russian Strategic Missile Troops and the Navy," he said.

Topol trajectory – Kapustin Yar to Sary Shagan [from Russian newspaper, 2005]



- 1. Rocket launch and climb-out
- 2. Separation of first stage
- 3. Separation of second stage
- 4. Deployment of maneuverable warhead module
- 5. Warhead altitude maneuver
- 6. Warhead course maneuver
- 7. Warhead dodges enemy missiles
- 8. Sidestep defenses
- 9. Detonation

KY-SS family of Topol launches

- 1960's-1990's – hundreds of warhead tests

1. 2005 Nov 01 1710 gmt [sunset + 4h33m]
2. 2009 Dec 10 1235 gmt [sunset + 34m]
3. 2010 Dec 05 1911 gmt [sunset + 7h09m]
4. 2012 Jun 07 1739 gmt [sunset + 43m]
5. 2013 Oct 10 1339 gmt [sunset - 39m]
6. 2013 Dec 27 1730 gmt [sunset + 4h33m]
7. 2014 Mar 04 1810 gmt [sunset + 3h25m]
8. 2014 May 20 1708 gmt [sunset + 31m]
9. TBD

Why make these flights?

- Kapustin Yar has been military missile test range since 1947 and was early target of US and British aerial reconnaissance
- Sary Shagan impact zone on Lake Balkhash in Kazakhstan was developed as anti-missile test base – radars, cameras, and weapons – since early 1960s.
- Two bases are approx 2000 kilometers apart
- Hundreds of short-range missile launches point to point
- Only known live-fire nuclear warhead launch
- Tested both Russian defenses against foreign missiles AND Russian penetration technologies against foreign defenses
- Use of Topol ICBM for testing began in 2005
- Half of launches appear timed for near-sunset to provide backlighting of plume as viewed from Sary Shagan
- Directly overhead Baykonur launch site, tracking infrastructure
- IRBM-range testing of ICBMs is forbidden by treaty

Two visible phases of flight

Launch on the lower Volga River,
two minute ascent. smoke trail

Three minutes later, Kazakhstan,
fan-shaped cloud grows for 60
seconds, then spits spiral, fades.

**NO VISIBLE CONNECTION BETWEEN
TWO WIDELY-SEPARATED APPARITIONS**



Uniqueness of KYSS plume

- Under post-sunset illumination conditions, pops out suddenly in front of witnesses who have NEVER seen anything remotely like it in their lives
- Seen from side as expanding triangular shape, often with distinct features [e.g, hole in tail]
- Plume is high [1200-1500 km] and already fast [~ 4 km/sec] horizontal, slight DOWNWARD pitch, but at great distances its angular rate is low
- Exhaust velocity approx 2800 m/sec, so during 60-second burn, reaches length of ~ 165 km with fading but still discernable trailing edge
- After relatively slow, level movement, terminates with sudden spiraling 'starburst' or 'splash', and then vanishes within seconds, without a trace

Flight path mostly across semi-desert

BUT

still in sight of many millions of people
with CLEAR skies, and more and more cameras



<http://en.wikipedia.org/wiki/File:ProjectK.png>

Prior to May 20, 2014, three earlier flights had been widely seen and taped

- 2009 Dec 10 1235 gmt, second mission, by coincidence one day AFTER sensational “Norway spiral UFO” freaked out entire world, so the NEW “spiral UFO’ from Russia was widely interpreted in that context.
- 2012 Jun 07 1739 gmt, 4th mission, was seen throughout southern Russia, Caucasus, Iran, as far south as Syria, Israel, and Jordan, and final spiral was particularly clear.
- 2013 Oct 10 1339 gmt, fifth mission, was widely seen in Urals, Volga valley, eastwards into Kazakhstan and Uzbekistan, and most amazingly, by chance, by the crew of the International Space Station, who took photographs of ascent plume and of post-spiral plume dissipation.

Ease of misinterpretation of plume

- Appears suddenly “out of nowhere”
- Twilight sky makes motion tracking harder
- Growing angular size with same shape mimics appearance of object zooming closer
- Relatively sharp outline mimics structure of substantial size in near proximity
- Apparition has features of meteor or comet
- Sudden spiral appearance a stunning surprise
- Fades away quickly in ghost-like style

Главная » Новости » Общество » В небе над Оренбургом засекли НЛО



В ночь на 21 мая жители Оренбургской области могли наблюдать в небе светящийся объект. Первое предположение, которое посетило умы жителей региона, что перед ними космический корабль.

Версии о том, что же пролетало этой ночью в небе, подкидывали и соседи из других областей России и даже из Казахстана. Яркую вспышку видели в ряде городов - Астрахани, Ростове-на-Дону



МК в регионе: 21 мая 2015 года, время 15:00

Экономика

Происшествия



Сегодня, 09:50.

Мельман-ТВ

Образование

Разместил Yigpen (все материалы)

Правосудие

Светская жизнь

Семья

Жители регионов России минувшей ночью массово наблюдали в небе НЛО. ФОТО

Позднее выяснилось, что за корабль пришельцев приняли ракету "Тополь"

Загадочным НЛО, которое встревожило жителей Кыргызстана, оказалась... российская боевая ракета



В ночь на 21 мая многие наши сограждане стали свидетелями необычного явления

По показаниям очевидцев, позвонивших в редакцию «Вести.kg», они наблюдали в пасмурном небе странные цветные всполохи, чуть ли не разрывы. Отдельные,...

НЛО в тюменском небе оказался ракетой



Жители Тюмени наблюдали необычное явление в небе над городом, оставшиеся жители приняли за странный свет

Тайна явления, которое произошло в Тюмени, объект оказался ракетой, запущенной с территории области

НЛО!!

Russian 'NLO' means "UFO"





May 20, 2014 - Proliferation of personal video cameras and auto dashcams plus hi-speed Internet access has opened an entirely new window on Russian missile test flights.

- <http://www.kp.ru/online/news/1740661/>

Rapid postings on youtube, rutube, elsewhere



0:00 / 0:37

Полёт межконтинентальной баллистической ракеты РС-12...

Ilya Petrov · 1 video

574 views

Subscribe 0

Like 11 Dislike 1

About Share Add to

Published on May 20, 2014
20.05.2014.
Время - 21:00.

https://www.youtube.com/watch?v=ebuyFT_0VEs

Earliest ascent views
showed plume rising
out of ruddy twilight



<https://www.youtube.com/watch?v=Pz0tzLPKEVg>

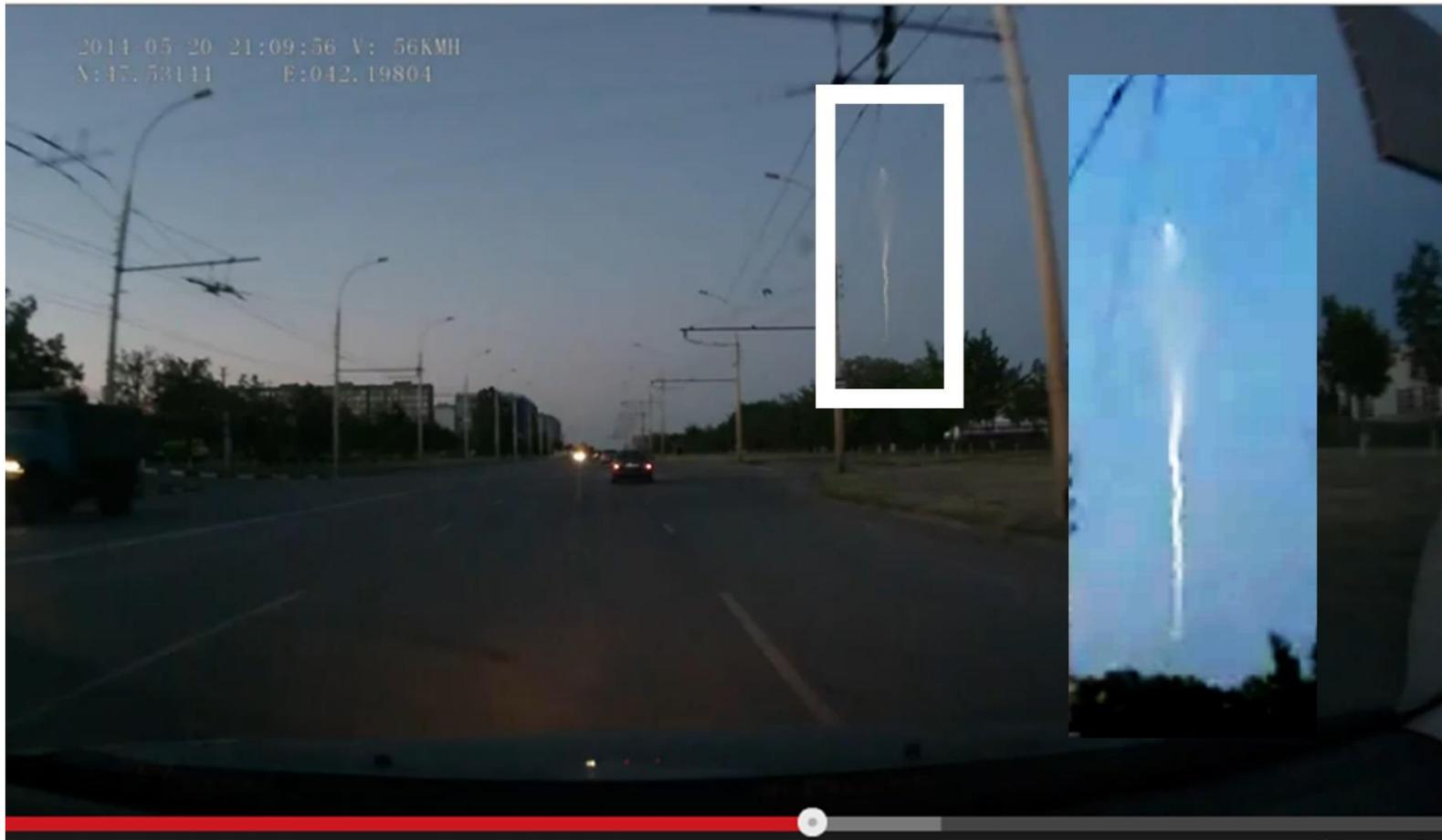


“Марс атакует” MARS ATTACKS!!



Video https://www.youtube.com/watch?feature=player_embedded&v=4aqyQqzAPUE#t=6
And <http://tjournal.ru/paper/russian-ufo>

Volgodonsk dashcam view of early ascent



ВОЛГОДОНСК 20.05.2014 [200 km] [Leon F.](#) ([1 video](#))

[https://www.youtube.com/watch?feature=player_embedded
&v=PuMQBZGTJPU#t=0](https://www.youtube.com/watch?feature=player_embedded&v=PuMQBZGTJPU#t=0)

Blast-off was only the opening act – more was to come

Thrusting stopped after two minutes, but many observers continued recording the ascent plume as it was rapidly “zigzagged” by high-altitude wind shear – a common effect with rocket launches

The following three videos from the Astrakhan region on the lower Volga show different angles on what is clearly the same-shaped cloud, still lit by the western sun which has already set as viewed from the ground.

Note all three posters registered and uploaded this video with no earlier youtube activity (“1 video”). None had any doubt it was a rocket launch.

But none of them were watching an entirely different section of the sky when, three minutes later, the rocket flared into action again.

The fourth poster was one of a very few observers who saw and recorded BOTH visible phases of the missile flight.

20.05.2014 Астрахань РС-12М "Тополь"

[Кирилл Михеев·1 video](#)

Astrakhan, Kirill Mikheyev



<https://www.youtube.com/watch?v=WCGXaGZ-bro>

АСТРАХАНЬ 20.05.14

СЛЕД ОТ РАКЕТЫ "ТОПОЛЬ"

[николай к](#) [1 video]

Trail of the rocket 'Topol' – Nikolay K



<https://www.youtube.com/watch?v=YhsauypR-Fw>

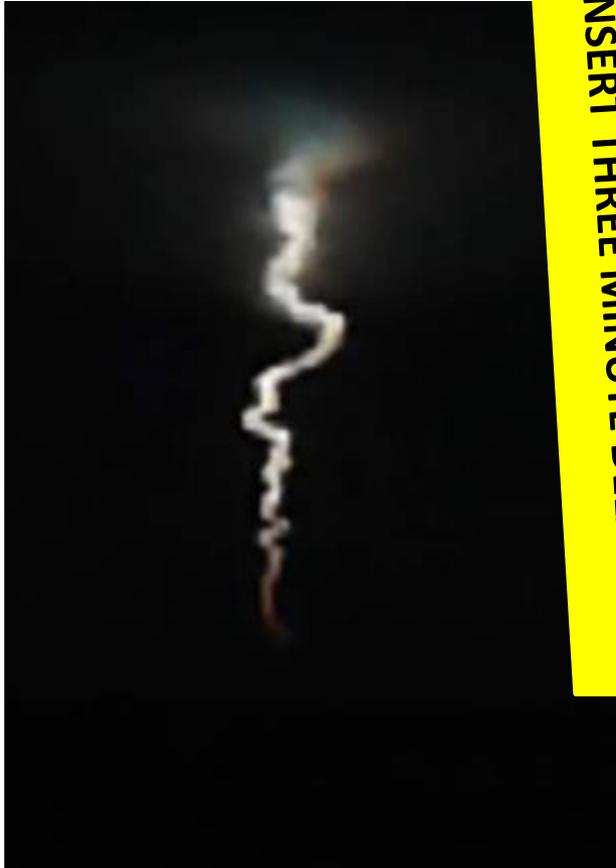
Следы ракеты на небе над Атырау 20 май 22 16 //

[Raimbek Adai·1 video](#)

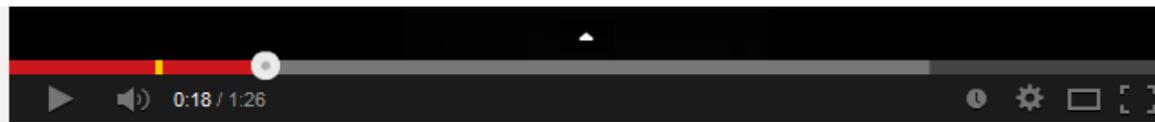


- Сегодня 20 мая 22.16 над городом Атырау на небе появилась пятно растянутое с запада на восток, похожа на следы ракеты "Тополь".
- “Over the city of Atyrau in the sky appeared a spot stretched from west to east, like the traces of a Topol missile “.
- <https://www.youtube.com/watch?v=O1P-zDuvTZ0>

Delayed third stage burn



INSERT THREE MINUTE DELAY HERE



Кульсары 20.05.14 Тополь



Play Theme Gump · 2 videos

Subscribe 0

191 views

2 0

Like

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Add to

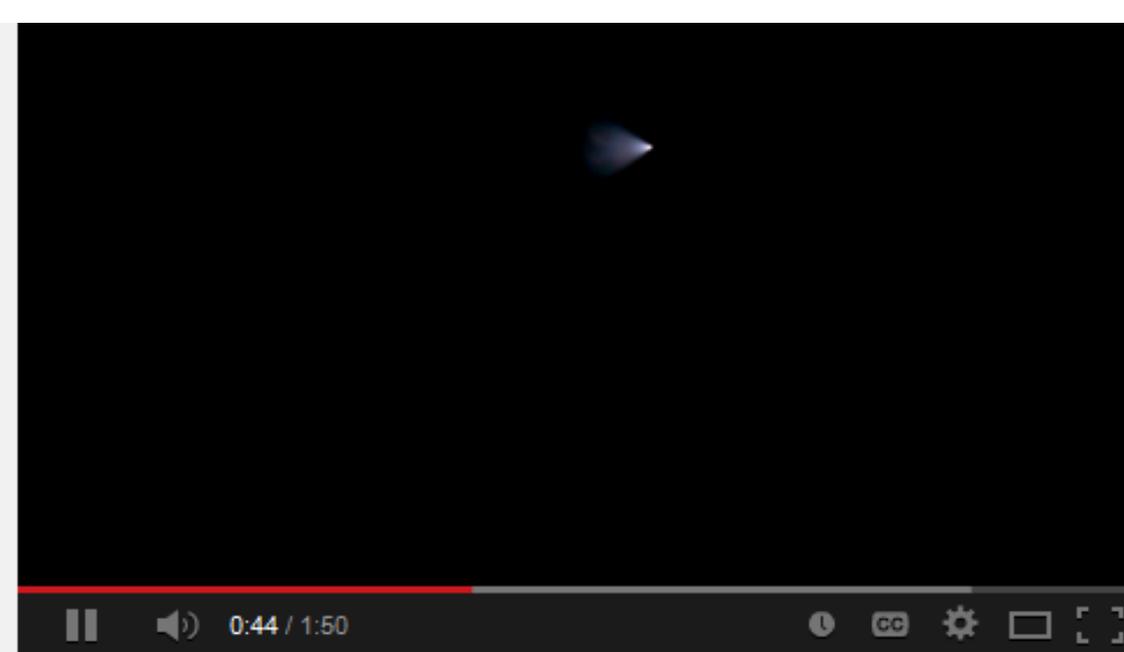


Published on May 20, 2014

No description available.

Burn-3 from Aktau

Many downrange observers were too far east to have seen the ascent plume at all. The sudden mid-sky appearance of the expanding triangular cloud was all they noticed or recorded.



Ракета Тополь город Актау



Нурсултан Смагулов · 2 videos

24

Subscribe



Like



About

Share

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...

Published on May 20, 2014

Баллистическое ракета Тополь

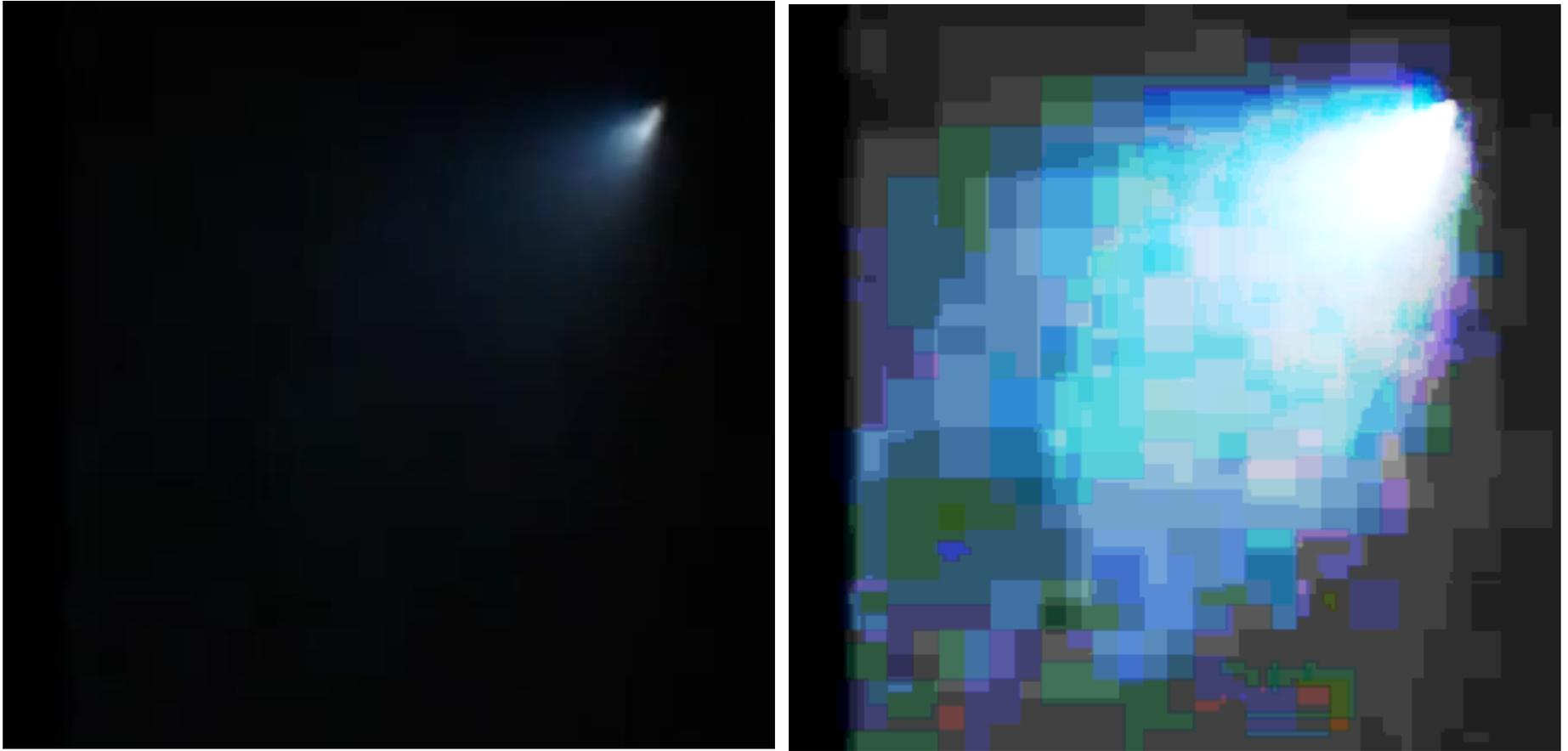
Category People & Blogs

License Standard YouTube License



<https://www.youtube.com/watch?v=D9pCxGmuzUE>

Overbrightening brings out plume details



Same photo at same scale, with artificial over-brightening

Plume typical view from south side



Motion viewed from north would be right-to-left, from near launch area would be high to low in east [see next video]. Orientation of hand-held cameras is often very difficult to judge without landmarks.

Запуски ракет Тополь-М над Волгоградом. 20.05.2014г.

[LastKentos·5 videos](#) Published on May 20, 2014

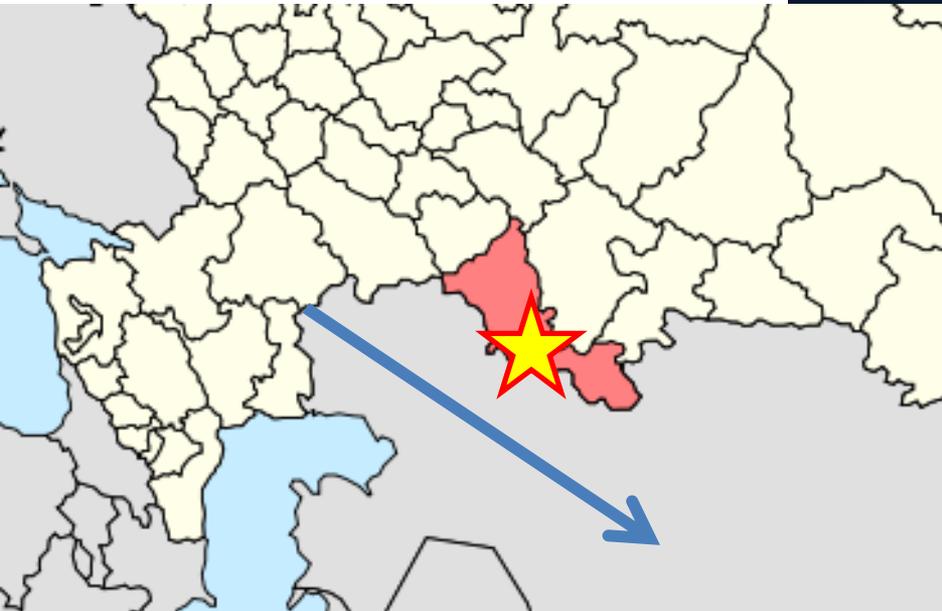


Observer was up-range,
“behind” missile as it
moved directly away,
angular motion looked
straight downwards.

<https://www.youtube.com/watch?v=68FbMDui5us>

View from Orenburg

Viewing angle would be from the front off to one side as the missile passed to the south



<http://www.oren.ru/upload/iblock/cb7/cb7d8f54934e9af39edf09b3bc7f35fe.jpg>

Big finish – sudden spiral and fade

- 60-second burn duration measured from dashcams of videos from 2012 & 2013
- Spinning spiral appears at tip of plume
- Spiral vanishes as plume also fades
- Likely ICBM warhead spinup motors
- Wild public speculation of exotic causes

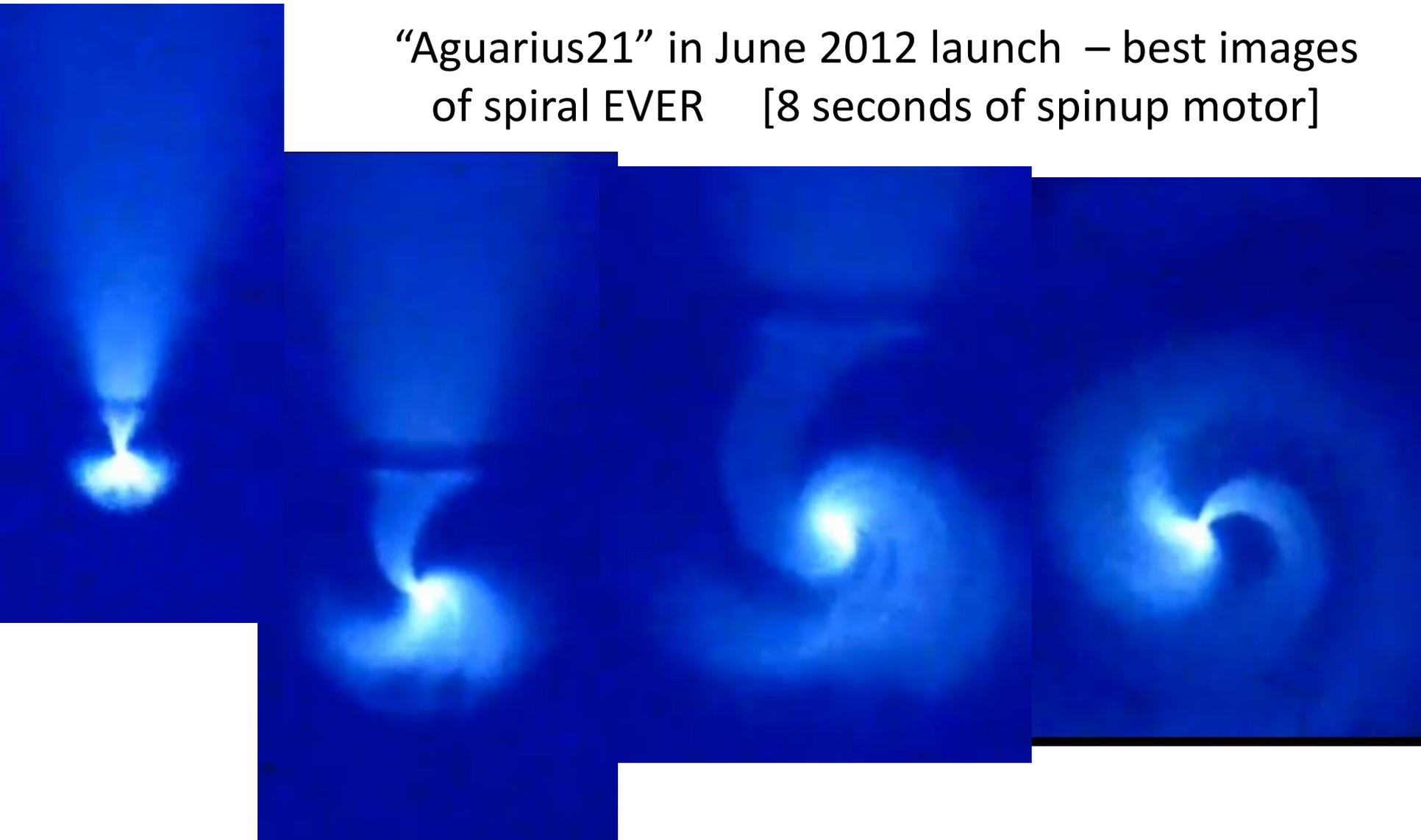
MX warhead bus spinup

<http://www.youtube.com/watch?v=3wdjgL40wc4>

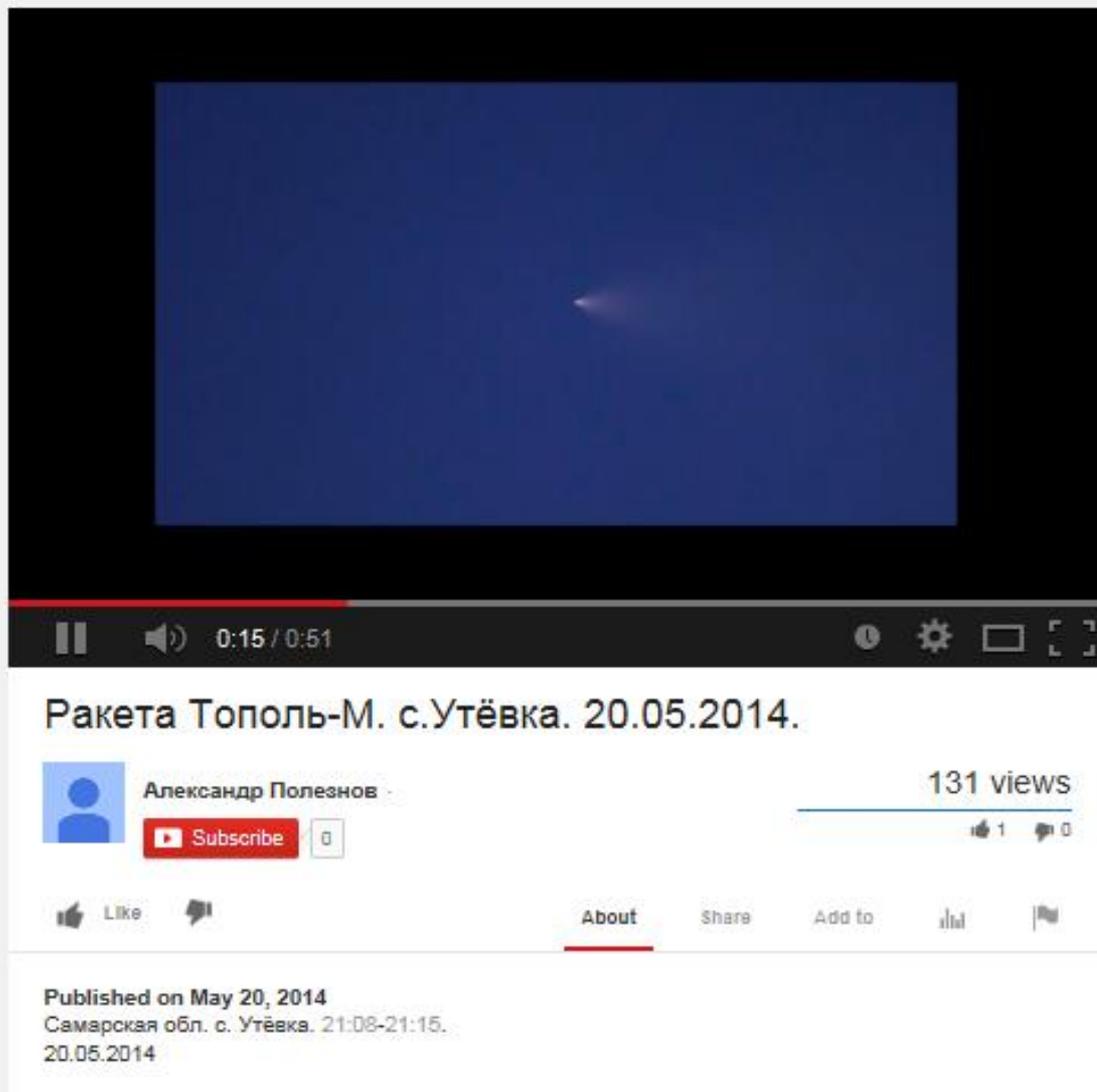


SPIN GAS GENERATORS (FIR)

“Aguarius21” in June 2012 launch – best images
of spiral EVER [8 seconds of spinup motor]



Triple plume completes about one full rev prior to fade-out
<https://www.youtube.com/watch?v=AHX6IU7NcO0>



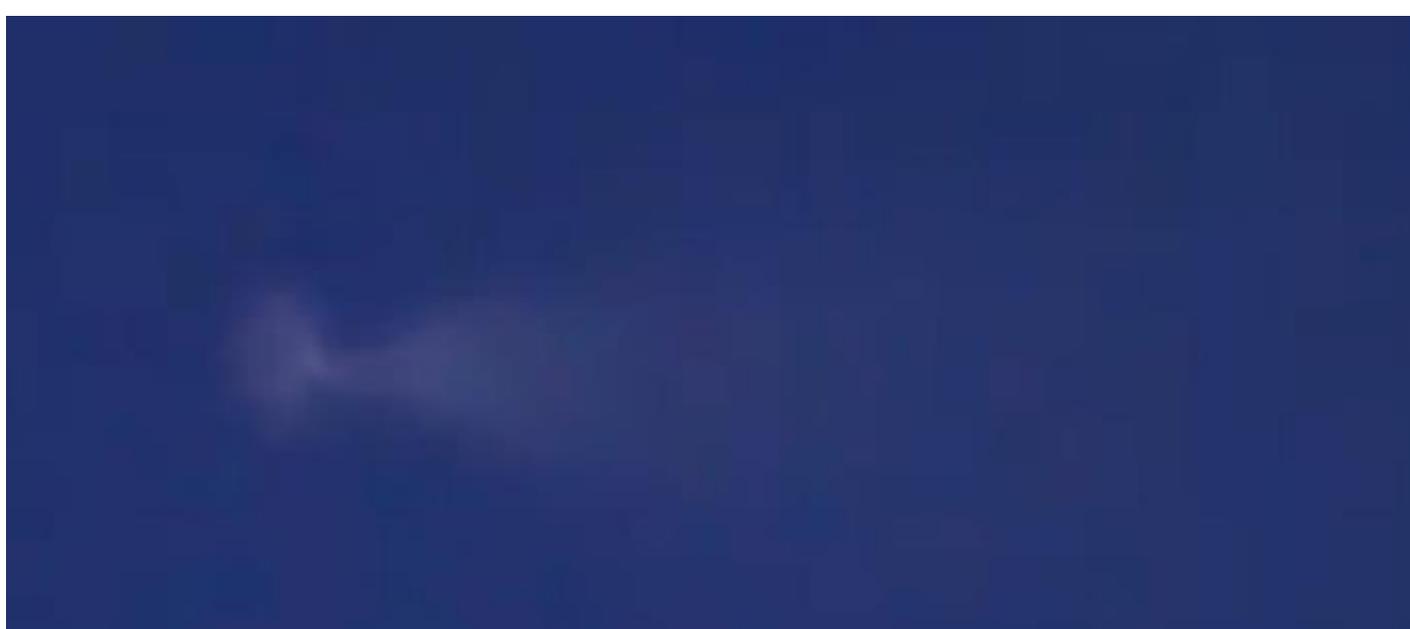
May 20, 2014
spiral from
Utyovka
[Утёвка],

Самарская обл.

21:08-21:15.

Александр
Полезнов.

<https://www.youtube.com/watch?v=zpJrRNovXdQ>



Utyovka video
of spiral at
end of 60-
second third
stage burn.



TOP -- Raw
screen grab
enlargement;
BOTTOM ==
Image with
brightness
and contrast
enhanced.

<https://www.youtube.com/watch?v=zpJrRNovXdQ>

Spiral also observed from Azerbaijan in Caucasus



<http://vesti.az/news/204365>

Also <http://1news.az/society/20140521031715306.html>

Discussion

- Expect test flights to continue as part of nuclear weapons buildup, for defense-proof warheads
- Expect about half to be near sunset and thus widely visible to millions of witnesses
- Quality videos can help characterize timing & flight path of missile, which can determine engine efficiency and power
- Visual anomalies, or absence of 'normal' events, can be first public clues for missile secret malfunctions
- Similar reports elsewhere in the world can be reliable evidence of unannounced missile test activity
- Mass misinterpretations of startling sky apparitions will continue to thrill UFO buffs on Internet and cable TV.
- Careful study of eyewitness accounts versus known characteristics of missile can help calibrate range of potential garble factor in similar reports elsewhere