

NASA's LOST BOILERPLATE – THE STORY OF BP-1227

What follows is, to my best knowledge and belief, an accurate description of a bizarre event from 1970 that saw an Apollo boilerplate capsule fall into the hands of the Russians. In preparing this account I must thank two 'old timers' from the former Landing and Recovery Division (LRD) of NASA whose patience with my repeated queries is gratefully acknowledged; former crew members of the USCG Southwind; crew members of various vessels involved with Apollo recoveries and serving members of the US military; and a Russian space enthusiast who eventually uncovered an interesting report of capsule 1227's recovery. All have been unstinting in their help. A failure to resolve exactly what happened over forty years ago is entirely due to my shortcomings, not theirs.

Apollo boilerplate capsule designated BP-1227 was one of a series of about thirty capsules that were designed to simulate the weight and external characteristics of the Apollo Command Module. They were used primarily to train recovery crews of both Navy and ARRS (Aerospace Rescue and Recovery Squadron) units in flotation collar installation and recovery procedures in the Atlantic and Pacific Oceans. There were some exceptions to this though. In addition to these roles, boilerplate BP-1202 was used at the Kennedy Space Centre (KSC) by an ARRS unit and KSC fire-fighters to train for launch site recovery, while BP-1224 was used in a Component Level Flammability Test Program to test for design decisions on selection and application of non-metallic materials following the Apollo 1 accident.

The 1200 series of boilerplates were designed 'in house' and probably started life on the drawing board of Hardie Barr. He was responsible for the early examples, then known as LRD BPs. His particular pride was BP-1102/1102A, a capsule used by the astronauts for water egress training. The 1200 series were manufactured by a firm called Ace Fabrications in Clute, Texas, each costing some \$10 – 15K. This a very good deal according to Hardie Barr. They were made of low-carbon steel, sand blasted and coated with 'Dimetcote', an inorganic zinc primer used for corrosion control, before they were painted. A few were made in the Block 1 configuration, these being converted to Block 2 at a later date. BP-1227 was most likely made sometime about 1967.

Ace Fabrications no longer exists as it went out of business in the early 1990's. It was owned and run by the Self family. Regrettably, when it closed the company records were destroyed. It has to be pointed out that there is not, nor was, any connection with a firm of a similar name that currently operates in the Houston area.



1200 series boilerplate during recovery exercise in Atlantic on 22nd February 1966



BP-1227 on the quayside in Murmansk.

Upon completion, BP-1227 was handed over to the Atlantic Recovery Force CTF-140 at the Naval Air Station, Norfolk, Virginia. Once allocated to this unit the boilerplate came completely under their control and it was CTF-140 that would organise and collaborate with other units needing a boilerplate to practice recovery techniques for a returning Apollo spacecraft. Despite several searches, where and to whom the capsule was sent remain buried deep within the records of the Port Services Department at the Naval Air Station. It has to be recorded also that though the chief of the design section kept a Rolodex file on the BP-1200 series to track their configuration status, this was lost when the LRD was disbanded in 1972.

Apollo boilerplate capsule BP-1227 hit the news media when it was handed back by the Soviets in the early days of September 1970 during a visit by the Coast Guard cutter 'Southwind' to the port of Murmansk. The usual dates for this are given as either 7th or 8th of the month though the private log of one of the 'Southwind's'

helicopter pilots, a Stephen Goldhammer, says it was a day earlier. His entry, timed at 18:00 on Sunday 6th

September, reads, "We took on board a practice NASA capsule that the Russians had found somewhere. It looked like a dummy Gemini capsule. The Russian TV news said that one of the reasons for coming here was to pick up the capsule..". The helicopter pilot was not the only one confused by what exactly was to be handed over. A report in the European Stars and Stripes on 6th September says, "One Embassy spokesman said US officials had viewed the object Friday and could not confirm it was an Apollo program item.". There is support for the 6th as the hand-over date from an article in the New York

Times dated 4th September states "... and would turn it over to a United States Coast Guard cutter in the northern port of Murmansk tomorrow.". At the hand-over were three people from the US Embassy in Moscow. These are reported as being William Harben, Franklin Babbit(t) and Richard M. Rodnia, the latter two being a Naval Attaché and a Military Attaché respectively. Efforts by way of FOIA requests to the US Embassy, Moscow and the Department of the Navy to either confirm their presence or the contents of any report they may have submitted have met with no response.

It has to be noted here that the handover of BP-1227 came as something of a surprise to the 'Southwind'. The report in the European Stars and Stripes mentions that the Embassy had announced that the Coast Guard cutter was staying in Murmansk from "... Saturday through Monday ..." to allow its crew rest and relaxation, adding that it was a goodwill visit and "... nothing more.". It goes on to say, "The Soviets did tell us about two weeks ago they had something of ours that

had fallen from space and that it was in Murmansk but they apparently decided without telling us to take the occasion of the 'Southwind' visit to give the hardware back.". Later, the Embassy added that serial numbers had been sent to Washington for identification and that they would like to put it, "... on this ship which is calling at Murmansk on other business, if it is what it appears to be and if the commanding officer approves."



Southwind stuck in the ice where she encountered a polar bear christened Rodney by the crew. Eventually freed herself by rocking the hull to and fro by transferring fuel from port to starboard tanks. Note the boilerplate on the foredeck.

There is a curious footnote to this, In 2016 a rather fanciful suggestion was made that the visit of the 'Southwind' to Murmansk was specifically planned in order to collect the command module of Apollo 13 that had aborted into the Atlantic

during a failed launch attempt, that BP-1227 was this disguised capsule and that the gun on the vessel's foredeck had been removed especially to accommodate the recovered module. Nothing, of course, could be further from the truth. The gun

was removed as the 'Southwind' was being prepared for its participation in Operation Deep Freeze. There was nothing sinister in this at all. The voyage took the 'Southwind' into the waters surrounding the Antarctic continent. In 1959 twelve countries, including the US and Soviet Union, agreed a treaty as part of the International Geophysical Year that would include a ban on weapons and military activity within Antarctic waters, this being defined as being south of latitude sixty degrees. The treaty was ratified in June 1961. The gun on 'Southwind' was removed to conform to the requirements of this treaty and the 'Southwind' remained without a foredeck gun after her return from Deep Freeze in 1969 to the end of her career as a US Coast Guard cutter.

Some damage was reported by the Soviets though there are discrepancies in what might be considered to be official sources. A report attributed to the CDBMB (the Soviet Central Design Bureau of Machine Building) says its experts found little signs of corrosion but that pieces were missing, notably an optical glass lantern and its associated search light beacon. This is at odds with a comment made by A.V. Blagov, a senior designer at CDBMB, in Novosti Kosmonavtiki who wrote, "Specialists from TsKBM travelled to Murmansk to look at this 'gift of fate'. In general, it was metal, very well made of thick galvanized iron with no signs of corrosion, a mass dimension mock-up of the Apollo Command Module. Apparently, the production technology was designed for a small series. Unfortunately, we only got a set of search light beacons with an original optical layout of cockpit glass. Everything [else] was very simple Even the simulated thermal protection was not worth copying. We ourselves would not allow ourselves to build a special series of vehicles for sea trials."



For possible location see text.

Having received the capsule, the 'Southwind' continued her Arctic cruise. Before sailing on to Thule, Greenland to take part in naval exercises she called in at Portsmouth, UK for what was scheduled as a three day visit. In fact she arrived three days early on 24th September, not departing until the 30th September. Contrary to some reports the boilerplate was not off-loaded here for return to the Royal Navy. Somewhere on this last stage of the voyage the capsule was nearly lost at sea for the second time as it began to break loose during a storm. There is a photo taken by a member of the crew showing some

of the ship's company chipping away the ice before making it more secure. Whether this incident took place in the Kara Sea (Encyclopaedia Astronautica) or Baffin Bay (USCG) remains unresolved as a query to the photographer was not answered. Also be aware that the Astronautica web site has been updated since this was noted. However, much of the original page still exists on the All Empires History Forum web site.

The 'Southwind' returned to home waters on 13th November 1970 when she docked at New London, Connecticut. It was here that the Apollo boilerplate was off-loaded for return to CTF-140. Eventually, the 'Southwind' reached her home port of Baltimore, Maryland on 17th November. One crew member who was contacted during research for this piece thinks that a photo taken in Curtis Bay shows the capsule still on board. If this is correct, it means that BP-1227 had not been off-loaded when the ship arrived at Baltimore.

Once off-loaded the capsule was returned to the Port Services Department at Norfolk, Virginia. by what is loosely described as '*... the usual regular supply chain between naval establishments*'. This department was the unit responsible for maintaining the boilerplates allocated to CTF-140. They would have carried out any repairs needed before returning BP-1227 for service with the recovery force. Despite a FOIA request to the Port Services no information was returned as to the extent of the damage or the nature of any repairs. Once repaired, the capsule returned to service with CTF-140.

As the Apollo flights ended with the ASTP mission in July 1975, the boilerplate was returned to the Port Services Department where it was placed in storage at the Naval Air Station. According to a letter dated December 1976 from the Naval Station at Norfolk to the Grand Rapids press it was "*... displayed at several events such as parades and open house activities and most recently during a visit of the American Freedom Train to Norfolk.*". On 4th November 1976 title to the capsule was transferred from NASA to the Smithsonian Institution's National Air and Space Museum. Almost immediately NASM loaned BP-1227 to Grand Rapids, Michigan to serve as a time capsule. The boilerplate went straight from Norfolk, Virginia to its new home. Ownership of the capsule was transferred from NASM to the Grand Rapids Museum on 28th March 1986.



It is worth setting the background to a recovery exercise before dealing with how BP-1227 came to be in the hands of the Russians. Training exercises, particularly full ones, included the ships attached to CTF-140 for a specific Apollo mission. A recovery exercise would have the ship place the boilerplate in the selected location and then stand-off at about twenty miles distance whilst the ARRS unit homed in on the capsule using a SARAH unit. There is a clue that it was a ship that lost BP-1227 in the press accounts from 1970 when the London Times reported, "*... the Americans said it was probably only a dummy blown off a United States ship ...*". This is repeated in the Kingsport News as "*....but the U.S. space agency said it probably is an old dummy Apollo moonship that blew off a Navy ship two years ago .*". Though the vessels attached to CTF-140 are known, thus far requests for information have produced no confirmation though several vessels have been eliminated. Nevertheless, it is worth noting that these exercises were also conducted at times other than for a specific Apollo mission and these ships remain unidentified despite requests to the Department of the Navy for the names of ships stationed at locations where such exercises were likely to have taken place.

One should note also that there were undoubtedly exercises conducted by units that could be called upon in the event of an aborted mission outside of recognised mission time-lines. ARRS units at both Rota, Spain and Lajes, Azores had a boilerplate capsule assigned to them as is detailed later. They would have rehearsed recovery procedures fairly frequently outside of actual mission obligations.

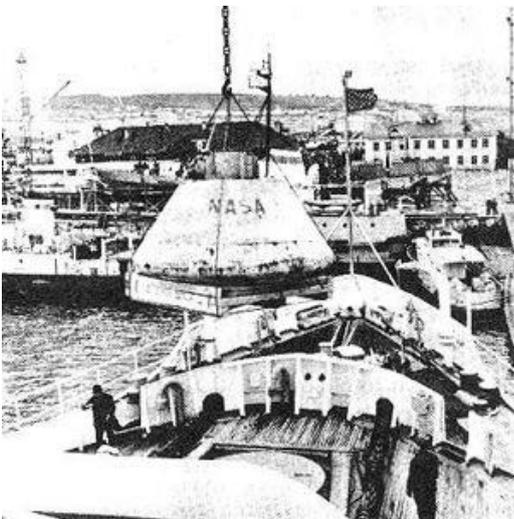
Before trying to answer the question as to how BP-1227 was mislaid at sea let's clear up when the west came to hear about it. If one reads the web sites mentioned previously one gets the impression that the loss of this capsule was not known about until some ten years after it was returned at Murmansk. A photo found by Tamas Feher in 1981 in a Hungarian Space History book is labelled '*The photo that clinched it*', whilst one found by Nandor Schuminczki (a collector of space photos, books and articles) bears the title '*The photo that started it all*'. Both are Hungarian and one wonders if this is the source of an unconfirmed report that negotiations for the return of the boilerplate were conducted through the US Embassy in Hungary. Contact with this Embassy failed to turn up any hint that this might be the case. However, this aside, the hand-over was widely reported by the western press at the time. The first reference to the event is to be found in the Modesto Bee newspaper dated 3rd September 1970. The New York Times followed it on 4th September as did the Deseret News and then the London Times and the Kingsport News on the 5th whilst the European Stars and Stripes followed with an article on Sunday 6th September. There are others for those prepared to search but all are based on a UPI release to a greater or lesser extent. Al Rossiter, who was the correspondent at UPI dealing with space matters at the time was most likely to have filed this release. The full text of this release, possibly posted in Washington sometime just before the earliest newspaper references, reads –

"WASHINGTON (UPI) — The Russians said Friday they were returning an "experimental U.S. space capsule" they had found, but the U.S. space agency said it probably is an old dummy Apollo moonship that blew off a Navy ship two years ago. Tass, the official Soviet news agency, said the capsule that was discovered by Russian fishermen in the Bay of Biscayne off the coasts of Spain and France would be transferred to a U.S. icebreaker Saturday. While the National Aeronautics and Space Administration said it was glad to get the thing back, a spokesman said as far as NASA could determine, the object was a dummy Apollo capsule that the Navy lost two years ago while practicing the pickup of astronauts returning from the moon. "It was later reported by several ships off the coast of Spain as a hazard to navigation, but we never could find it," the spokesman said. He added that Russians recently asked in a telegram if the United States wanted the capsule back, and information was sent to the U.S. embassy in Moscow to help positively identify it. "We haven't heard from the embassy yet, but we're sure that is what it was," the spokesman said. Tass said the capsule had been launched into space and would be picked up by the icebreaker Southwind, but the space agency if it was the dummy capsule as it believed, it was never launched anywhere. "The experimental space capsule which was launched under the Apollo program and was found in the Bay of Biscay by Soviet fishermen will be transferred to U.S. representatives," Tass said. "The U.S. icebreaker Southwind will come to Murmansk to take the capsule on Saturday." The report did not say when the fishermen found the capsule in the Atlantic Ocean bay, which is cradled by the coasts of Spain and France. It did not describe the capsule. Tass said William Harben, a U.S. embassy official; Franklin Babbitt (Babbitt), a naval attaché, and Richard M. Rodnia, a deputy military attaché, had arrived at Murmansk Friday. A U.S. Embassy spokesman in Moscow



Handover of BP-1227 in Murmansk at beginning of September 1970
[see text for discussion on actual date]

had announced earlier that the Southwind, a 268-foot icebreaker sailing northern waters, would call at Murmansk Saturday through Monday to give its crew shore leave. He did not mention the capsule. "The purpose of the first American icebreaker to call at Murmansk is to provide an opportunity for rest and relaxation for the crew," the embassy said. Capt. Edward D. Cassidy, commander of the Southwind, will be received by a deputy commander of the Soviet northern fleet. Intourist, the Soviet travel organization, has arranged a sightseeing tour for the ship's 23 officers, 172 men, and 7 oceanographers, which includes visits to a fish-factory ship and a reindeer herd."



Loading 1227 onto 'Southwind's' foredeck.

It is interesting to compare the above with another UPI release, this time in Moscow, possibly a day later —

"MOSCOW (UPI) — The Soviets have plucked from the ocean a U.S. space capsule they describe as part of the Apollo moonshot program and plan to return it to American officials this weekend, the official Tass news agency said. Checks with U.S. Embassy officials indicated the Soviets have had at least two weeks to examine the space hardware and U.S. officials knew it, but their decision to return it at this time came as a surprise. One embassy spokesman said U.S. officials had viewed the object Friday and could not confirm it was an Apollo program item. But he added "it was my impression from their report it is a whole piece of equipment" and not a fragment. The Soviets said bluntly they intended to put the capsule aboard the U.S. icebreaker Southwind, which was putting into the Bering Sea port of Murmansk Saturday for three days. U.S. officials said subsequently they had asked Washington for permission to make the transfer. A three-paragraph announcement by Tass Friday afternoon gave the first inkling the Russians had any U.S. space gear. An "experimental space capsule which was launched under the Apollo program and was

found in the Bay of Biscay by Soviet fishermen will be transferred to U.S. representatives," it said. "The U.S. icebreaker Southwind will come to Murmansk to take the capsule on Saturday." Prior to the Tass announcement, the embassy had announced the Southwind would stop at Murmansk from Saturday through Monday to afford its crew "rest and relaxation." It described goodwill aspects of the visit and nothing more. When queried on the Tass report an embassy spokesman said the Soviets had taken the decision without notifying U.S. officials. "The Southwind is going to Murmansk for the reasons stated, rest and relaxation, and I think it's a pretty good guess the commanding officer of the ship doesn't know anything about this," he said. 'Fallen From Space' "The Soviets did tell us about two weeks ago they had something of ours that had fallen from space and that it was in Murmansk, but they apparently decided without telling us to take the occasion of the

Southwind visit to give the hardware back." Another embassy spokesman added later that U.S. officials who had gone to Murmansk to greet the Southwind had seen the space equipment and taken serial numbers, which had been wired to Washington for identification. "We have told Washington," he said, "that we would like to put it on this ship, which is calling at Murmansk on other business, if it is what it appears to be and if the commanding officer approves."

It is clear that all the quotes from various sources as mentioned above come from these two UPI releases, except for the original entry in the Encyclopaedia Astronautica. To discover the possible source for this one has to turn elsewhere as the following discusses.

At the start it contained these entries. From W. David Edwards and Dwayne A. Day was an entry that read, "*The boilerplate CM lost by the Royal Navy and recovered by the Soviet Union was SN BP-1227.*". Repeated attempts to contact Dwayne Day for clarification went unanswered. Also Adam Bootle contributed this, "*I seem to remember a story that one of the UK based recovery forces lost an Apollo boilerplate*". In October 2013, Bootle's entry appears to form the basis of the Astronautica posting as comments about who lost the capsule have been reduced to "*... UK based naval units*".

However, there are a couple of possible sources where this information may have come from. Both are Russian websites – kolamap.ru and astronaut.ru. The first of these places the loss early in 1970 when it was lost during sea trials off the coast of Britain. It goes on to say that the circumstances surrounding this event are not clear but that American intelligence agencies have undertaken special measures to keep it from prying eyes. The second is rather more explicit in its reporting, though there is some divergence in detail but it is closer to the original Day entry in Astronautica. With apologies for the translation it states that "*Officially it lost in the fog the British Royal Navy sailors during a workout on rescue emergency.*" It diverges when it comes to the location. This it places in the Bay of Biscay where it was picked up by a Soviet fishing vessel. From here matters get somewhat bizarre, the article going on to say, "*Currently most of them [i.e. the boilerplate capsules?] are in American museums, but virtually no data on where they were used before (they) were the exhibits. However, we know that the Americans have tried to ensure secrecy of their workouts. Even the models, not to mention the actual product, trying to protect it from outside and, more importantly, the Soviet view. Nevertheless, the capsule with the number VR-1227 was in the USSR. Maybe it is to blame for all the fog Most experts exclude any chance of loss of the capsule. They believe that these events were the result of successfully conducted special operation. Therefore, it is likely that driving the monitor they are interested in the subject, the scouts took advantage of the fog or oversight of the Royal Navy sailors. Or maybe they were forced to lose the capsule. Apparently until the last moment they were confident that BP-1227 rests on the bottom of the Bay of Biscay. Only shortly before the arrival of 'Saunvayda' in Murmansk, through diplomatic channels, they were told the truth.*" As a parting shot it adds, "*The scandal in Washington was grand.*" before suggesting that this was one of the reasons that the then NASA Administrator, Thomas Paine, decided to resign. Make of this what you will, but it might be advisable to have a pinch of salt close to hand!



Secured on the foredeck of 'Southwind'.

Despite the above, it has to be categorically stated that there is no evidence to suggest that the Royal Navy was involved. A FOIA request to the Royal Navy Archives failed to find any record of involvement with this episode, the only reference to the Apollo programme being an offer to help at the time of the Apollo 13 flight.

If not the Royal Navy, then which 'UK based' units? There was an ARRS unit based in the UK at RAF Woodbridge, Suffolk. From January 1970 this was the 67th having transferred in that month from Moron, Spain. At Woodbridge they would have had their own boilerplate to play with – BP-1206. Any recovery exercises from here were co-ordinated from Ramstein, Germany and they have no record of any loss. So, it seems most unlikely that those responsible for the loss were UK based.

This then leaves us with CTF-140 units as being the most likely culprits. As we will see later, there is strong evidence when one considers other aspects of this enquiry that the answer lays here. There were ARRS units based at Moron, Spain and at Lajes in the Azores. However, a NASA listing indicates that boilerplates were allocated to these locations – BP-1204 to Rota, Spain and BP-1223 to Lajes in the Azores. This does not entirely preclude BP-1227 also being on the eastern side of the Atlantic. In fact, the 1976 letter to Grand Rapids hints at an ARRS unit when it says "*.... towards the end of the Apollo program when the Airforce was using it to train their ARRS aircraft.*". However, this is somewhat countered by a FOIA request to ARRS records that produced this response, "*After combing the unit histories of the 67th ARRS and 40th ARRW, I could not locate anything regarding the loss of Apollo boilerplates. The histories only mention support of actual Apollo missions ... basically listing how many helicopters, personnel and equipment were on alert. Training for Apollo rescues is briefly mentioned, but locations and equipment used is not listed.*"

Now let's turn to where BP-1227 was lost. One can rule out any suggestion that this event took place in the North Sea. The original Encyclopaedia Astronautica entry from Adam Bootle which stated that " recovery forces lost an Apollo boilerplate in the North Sea." has been deleted from the current version of the web page. Equally unlikely is the rather vague location of the loss as mentioned in the 1976 letter to Grand Rapids that says, " were operating off the coast of England when somehow during the exercise it was lost at sea." This statement is repeated on the plaque attached to the capsule as it serves as a time capsule.

The US Coast Guard History web site places the loss much further south. To quote, " Apparently the US Air Force Aerospace Rescue and Recovery personnel who were using the 9500 pound capsule for training but lost it at sea near the Azores ". If this were indeed the location, it would have to be placed some distance from the Azores for the prevailing winds and currents to carry the boilerplate anywhere near where it was recovered.

This said, the weight of evidence places the loss in the Bay of Biscay or in a location in the immediate vicinity where winds and currents would have the opportunity to blow the capsule to where it was recovered. It's worth noting here that the prevailing wind and current in the Bay run south to north from October to March (i.e. the winter months) and from north to south during the summer months. Both US and Russian sources favour the Bay of Biscay as being the location of where the capsule was found and it is logical to assume that it was lost here too. The Kingsport News article has this to say about the location, " Tass, the official Soviet news agency, said the capsule that was discovered by Russian fishermen in the Bay of Biscayne off the coasts of Spain and France ". There is one other piece of evidence to suggest that this indeed was the place. To again quote from the London Times, " It was later reported by several ships off the coast of Spain as a hazard to navigation ". This information is repeated word for word in the Kingsport News but with the addition of a cryptic " but we never could find it." Requests to the Spanish and French Coast Guard authorities for clarification have gone unanswered. Bearing in mind that the Apollo capsules had a drift rate of about 10% of the wind speed and given the possible length of time BP-1227 was adrift before it was recovered then the Bay becomes the favoured place.

In dealing with when BP-1227 was lost it's worth mentioning who recovered it. There is almost universal agreement that it was a Russian vessel, though reports vary on what kind of ship this was. Most say it was a fishing boat. However, there are suggestions it was a Soviet spy ship that was monitoring the recovery exercise. An intriguing exception to this is one Finnish web site that claims that the capsule was picked up by a Hungarian trawler and handed over to the Russians. One wonders if this is the source of a Wikipedia entry that says " BP-1227 - This was lost in the North Sea in early 1970, recovered by a Hungarian vessel, transferred to the Soviet Union, and returned to the US in September 1970 by the USCGC Southwind". As has been pointed out previously, the location quoted goes against the majority of the reports that clearly state the capsule was recovered in the Bay of Biscay. It needs a huge leap of imagination to think that a boilerplate could drift from the North Sea to " ... off the coast of Spain."

Now let's return to when the capsule may have been lost and when and where it was possibly recovered. It must be stressed that what follows excluded any practice exercises carried out by the ARRS units based at Rota and Lajes. These cannot be ruled out entirely as records were either not kept or, if they were, have long since been lost or destroyed. However, it is most unlikely that a simple training exercise would be carried out in unfavourable weather conditions. This leaves two occasions when CTF-140 recovery forces were engaged in recovery exercises in support of Apollo missions when conditions were conducive to mislaying a boilerplate capsule. To take this a little further one has to consider Apollo missions



Claimed to be the USS New rehearsing an Apollo recovery

that fit as an acceptable time frame for this incident. These are Apollos 8 to 13. One may rule out Apollos 8, 10, 11 and 12.

For Apollo 8 the Atlantic support recovery ship was the USS Francis Marion. She did have a boilerplate on board and that is where it stayed, not moving from its cradle for the whole voyage. Perhaps the only anomaly was that the boilerplate was given a coat of white paint to make it more photogenic whilst in Rio. The same can be said for the boilerplate onboard the USS Chilton for Apollo 10 duties. That too was never removed from its cradle during the assignment. The CTF reports on '10' say that the weather for recovery operations was favourable throughout as it was for '11' except for the last day of the mission in the Pacific. Unfortunately, the report for '12' has not been found so far. So, it seems, one has to look at '9' and '13' to provide a possible solution. In doing so and particularly in the case of '13' it cannot be too strongly stressed that what follows is very much circumstantial and is based on snippets of evidence that are often contradictory.

To deal with '13' first and examine those reports that would seem to point to this mission. It has to be said from the outset

that consideration of Jim Lovell's ill-fated flight has the flimsiest of the evidence. The Encyclopaedia Astronautica places the time of the loss, to quote " In early 1970" as does the entry in Wikipedia. This would appear to be in agreement with a reply from the Department of the Navy that is rather ambiguous but says, " Researching in our office we determined that the capsule was lost at sea and recovered by the Soviets some time in 1970." Whether 'early' extends to April 1970 isn't

clear, but this is the month when Russian reports claim the capsule went missing. In fact, according to one newspaper report an exact date may be placed on the event. On the night of 11/12th April, because of the weather conditions at the time, the recovery forces of the US Navy lost sight of the boilerplate. A Russian spy ship was shadowing these forces as the Navy had declared it a restricted area and it was this vessel that nipped in and picked it up.

There are three things to note about this. First, it was common practice for a restricted zone to be placed round recovery exercises, though this was for safety reasons not secrecy. Second, the weather on the night in question was described as 'squalls and snow'. This has been confirmed by a meteorologist as a reasonable description of the weather prevailing at that time. Third, these dates correspond to the date of a Soviet exercise 'Ocean 70' when the Russian nuclear submarine K-8 got into difficulties and eventually sank. The location of where K-8 sank is given as 480kms northwest of Spain. This puts it some distance from any likely recovery positions for either an Apollo recovery or from any exercises that may have been undertaken from Rota. So, it is most unlikely that the two events are connected, but it is strange that discovering answers relating to who, when and where have proved so fraught. Further, eliminating Apollo 13 has proved to be especially difficult as all attempts to contact crew members of the USS New, the vessel assigned for Atlantic contingency recovery duty, have met with no response even though there are photos of a recovery exercise taken by a crew member available for those caring to search for them.

So, to turn to Apollo 9 and the activities of CTF-140 as it prepared for this mission. Before looking in detail, it's worth noting an anomaly associated with these retrieval operations. The Apollo Chronology, in the only mention of retrieval exercises that have been found, says that between January 24 – 29, "... recovery training exercises were conducted aboard the U.S.S. Guadalcanal, the prime recovery ship for Apollo 9.". This would seem to be at odds with the CTF report which states that Guadalcanal conducted two training retrievals and day and night helicopter operations on January 16 – 17, with the USS Chilton making two training retrievals on January 29th. The report has no mention of exercises between these dates.

There is one other incident in the preparations for the recovery of Apollo 9 that is worth recording. The CTF report records an incident when a capsule broke free. The CM was being raised by the Guadalcanal and was some three feet clear of the water when the crane lifting it failed, dropping it back into the water. Though still attached at this point, the swell caused the full weight of the capsule to jerk against the swivel holding it allowing it to disconnect. Might this have happened to a boilerplate as a vessel involved in recovery operations rehearsed retrievals?

To turn to the involvement of the USS Algol. In January 1969 she conducted two training exercises in retrieving an Apollo command module with UDT-22 (Underwater Demolition Team) personnel who were deployed from the boat. On 14th February she completed loading of Apollo recovery equipment before setting off to her designated abort recovery



Divers from the UDT (Underwater Demolition Team) rehearse a recovery from the USS Guadalcanal.

station on 17th February. This is referred to as Station 3. By the 26th the Algol was in position to conduct a SIMEX (simulation exercise) with RCCA (Recovery Control Centre Atlantic) and ARRS aircraft. Three

days later she carried out what is referred to as an 'in house' SIMEX. The report records this as happening on the 29th February in what is clearly a typing error. That this is the case is borne out by the NASA rep on the 'Algol' – Ron Epps. His personal log records that on the 1st March the boilerplate was launched into rough seas but was recovered successfully. It's worth noting also at this point that on the 8th March the prime recovery ship, the Guadalcanal, also conducted an 'in house' SIMEX and this entry in the CTF-140 report specifically mentions that a boilerplate capsule was involved. This would seem to tie in with a report in the London Times recording that according to a statement by NASA a capsule was washed overboard during a storm whilst in transit to an exercise off the coast of Spain. Clearly this was not the capsule on the 'Algol' but might well have been one involved in an exercise out of Lajes in the Azores. On 3rd March, some sixty seven minutes before Apollo 9 left the pad at the Kennedy Space Centre the Algol reported a surface contact within fifty miles and twelve minutes after lift-off she was released from her launch abort station to cover what is referred to as TP 13-2A. The Algol on was finally released from ship Station 3 on 12th March. In these manoeuvres the Algol steamed some 1650 miles to cover twenty two target points. The weather throughout this time was poor with high winds and seas as a result of a chain of low pressure cells and frontal passages moving slowly across the Atlantic. This is confirmed by contact with a crew member who recalls that the weather was just as bad and he remembers seas being between 20 to 25 feet with winds of 50 mph, just the conditions where a capsule might be washed overboard especially as he says also that the ship was being tossed about quite a bit. Strangely, he does not remember the recovery exercises that quite clearly took place.

That the date of the loss of BP-1227 might have occurred in early 1969 and thus have a possible connection with Apollo 9 is to be found in a recently uncovered series of articles in the Russian press. What follows is uncorroborated and must therefore be treated with some caution.

On 19th October 2007 there was first published an account of the recovery of BP-1227 by the Russian trawler Apatit(e). The memoirs of the chief engineer of this vessel – Alexander Andreev – were recorded by author Dmitry Ermolaev and printed in the Murmansk Komsomolskaya Pravda. The account was republished on 29th November 2014 in the Murmansk Gazette and for a third time on 28th February 2015 in the Murmansk Bulletin. The relevant passage from these articles reads, “Close to the device an orange container was floating, attached there by a steel cable”, says Alexander Andreev. “Our captain decided to take it on board. It was risky! The bow hoists can lift up to 3 tons and we didn’t know the weight of the floating structure. Fortunately, all went well, and the spacecraft boilerplate was fixed on the bow deck. In the container, which was attached to the boilerplate, we found a life raft, half-rotted blanket, and fishing gear. There was nothing inside of the boilerplate. Apparently, it served for rescue training operations of American astronauts and it was lost. We sent a cable to Murmansk about this unusual discovery.” Andreev goes on to claim that the captain of the Apatit, Ivan Shankov, was given a hunting rifle by the KGB as a reward for finding and recovering what the authorities said was “... interesting and important.” The date when this is alleged to have happened is June 1969 off the coast of Spain near Gibraltar.



Captain of the Apatit, Ivan Shankov

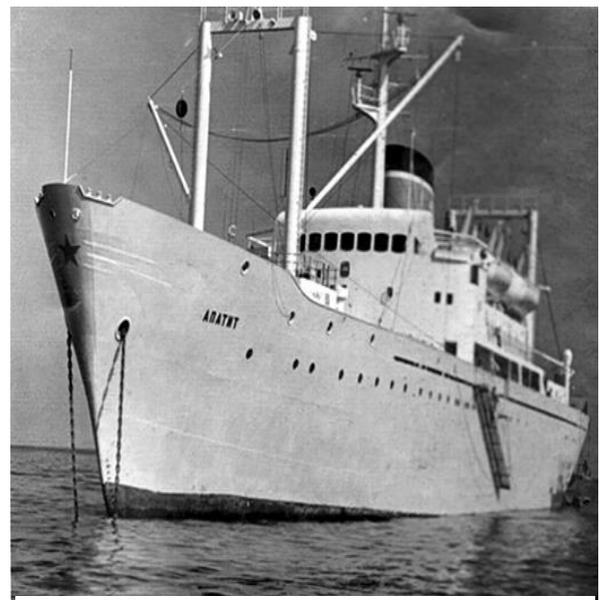
days USSR fleet activities were never taking place without radio reconnaissance ships. In the referred time there was a group of reconnaissance ships, based in Goriachie Kluchi (Hot Brooks) village. Ships had survey vessels cover and they went to sea as civilians. The crew was dressed in civilian clothes. The ships themselves were built in Poland and GDR, but they had forced diesel engines. Hull design is as a typical fisherman. I think it was them. At least this version explains the information void on our side.”

Casting aside the doubts expressed above as to whether a humble fishing vessel would have had the audacity to recover something quite clearly marked as US property, there are other concerns that need to be addressed. Why was there a delay of nearly thirty years before Andreev came forward with his story? The handover in September 1970 was well publicised in the western press and we have seen that UPI issued a press release in Moscow at the time. Also one has to consider why there was nearly a year’s delay in the Russians informing US authorities that they had recovered the capsule. Why was it necessary to repeat the account of 1227’s recovery in 2014 and again in 2015? Lastly, why was it necessary to embellish the account of the appearance of the boilerplate with items – rotting blankets and fishing lines – that were most unlikely to be present during any recovery exercise? They might have been mistaken for the remains of a floatation collar and its attachments though.

So, should one accept Andreev’s testimony as a true recollection of the finding of BP-1227 or are there sufficient doubts to raise concerns about its accuracy and therefore have to consider that there might be an ulterior motive behind it?

Assuming for a moment that there is some truth in Alexander Andreev’s version of how the capsule was found, it is hard to equate how it became a ‘hazard at sea’ in stormy conditions sometime towards the end of February 1969 as it is clear that the boilerplate on the ‘Algol’ was safely returned to port. This being the case one has to look for other explanations that go some way to matching the often contradictory statements regarding the loss.

This is made very difficult as there is no hard evidence despite FOIA requests to all the relevant bodies concerned. They claim either to have no records or that no records exist. There is, however, one case in particular where an answer might be found. This concerns the logs of the ‘Southwind’. They are held at NARA, 14700 Townsend Road, Philadelphia, Pennsylvania



The ‘Apatit’ that is alleged to have recovered BP-1227 off Gibraltar in June 1969

19154-1096. The Accession/Locator numbers are F-03-16-05-5 through F-03-16-06-1. Despite three FOIA requests neither acknowledgement nor answer was received.

To round off this account, some odd related facts that may have, or most probably have not, a bearing on the case. In May 1970, NASA Administrator Tom Paine met with Soviet Academy member Anatoli Blagonavov in New York. They discussed a possibility of a joint programme and the Russian felt that " ... *some new signal was in the works*". Is this a coded reference that the Soviets had the Apollo boilerplate and were preparing to return it? This may not be as far fetched as it sounds. Returning again to the Kingsport News, it has this to say. "[The] Russians recently asked in a telegram if the United States wanted the capsule back and information was sent to the US Embassy in Moscow to help positively identify it."

Later, in 1971 the CIA in a report on a National Intelligence Estimate of the Soviet Space Programme stated that "*Nearly all past efforts by the US to induce the Soviets to engage in cooperative or joint space programmes have met with limited success*". The report goes on the record that in October 1970, a month after the return of BP-1227, talks began on the desirability of compatible Soviet and US rendezvous and docking systems.

It is very apparent that trying to resolve how and when BP-1227 was mislaid – for want of a better word – the investigation is full of 'maybes' and 'what ifs'. Nevertheless, despite this it is possible to eliminate some scenarios without coming any closer to actually resolving an answer to the question of exactly how the boilerplate came to be in the hands of the Russians. Perhaps the answer really does lay in the archives of the many unanswered queries and FOI requests made to the various military departments and such establishments as the facilities at Rota, Spain and Lajes, Azores. In the meantime one can only hope that one day the fascinating story of just one Apollo boilerplate capsule can be finally concluded.

Finally a personal note. It may be that I'm on the wrong side of the Atlantic to unlock the doors that might lead to providing a definitive answer to the circumstances surrounding the loss and recovery of BP-1227. I'm more than happy to turn over this investigation with the hope that whoever takes it up has more success than I have had.



The USCG Southwind rides at anchor at Base Berkley in New London, Ct. on 13th November 1970 at the conclusion of her Arctic East 70 cruise. Note that Apollo boilerplate BP-1227 is still on the foredeck waiting to be off-loaded and returned to CFT-140.